PGEC S3 02
Exam Code: IIE

Issues in Indian Economy

SEMESTER-III

ECONOMICS

BLOCK- 1

KRISHNA KANTA HANDIQUI STATE OPEN UNIVERSITY

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July, 2021

ISBN: 978-93-91026-32-5

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Printed and published by Registrar on behalf of the Krishna Kanta Handiqui State Open University

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The University acknowledges with thanks the financial support provided by the **Distance Education Bureau, UGC** for preparation of this material.

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COURSE INTRODUCTION

This course entitled *'Issues in Indian Economy'* is one of the third semester courses of MA in Economics programme offered by this University. The course deals with certain issues relating to the Indian economy. This course comprises 14 units and has been divided into two blocks. The first block consists of seven units from Units 1 to 7, while the second block consists of the rest of the units from Units 8 to 14.

BLOCK INTRODUCTION

The first unit of the course introduces India as a global emerging economy. Here, trends in national income and per capita income, sectoral composition of national income has been discussed. Finally, the role of India in the current global economy has been discussed. In the second unit, issues relaing to growth and policy of India's populaiton has been discussed. Unit 3 deliberates on issues relating to human resource development in India. The next unit is on the Agricultural Sector of India. Here, the role of agricultural sector and the various issues the secor faces has been discussed. The fifth Unit is on the changing dynamics in the agricultural sector. In this unit, recent issues like diversification of agriculture, contract farming as well as the subsidy issue relating to agriculture have been discussed. The sixth unit is on Indian industry. Here, the growth pattern of Indian industry, as well as some of the issues the sector is facing, have been discussed. The seventh unit is on social sector. Here, the performance of different social sectors, social infrastructure have been discussed.

The next block shall begin with the Service sector in Unit 8 and will finally conclude with the discussion of India's external sector in Unit 14.

While going through a unit, you will notice some along-sode boxes, which have been included to help you know some of the difficult, unseen terms. Some 'ACTIVITY' (s) has been included to help you apply your own thoughts. Again, we have included some relevant concepts in 'LET US KNOW' along with the text. At the end of sections, you will get 'CHECK YOUR PROGRESS' questions. These have been designed to self-check your progress of study. It will be better if you solve the problems put in these boxes immediately after you go through the sections of the units and then match your answers with 'ANSWERS TO CHECK YOUR PROGRESS' given at the end of each unit.

UNIT- I : INDIA AS AN EMERGING GLOBAL ECONOMY

UNIT STRUCTURE

1.1 LearningObjectives

1.2 Introduction

1.3 Trends in National Income and Per Capita Income

- 1.3.1 National Income
- 1.3.2 Per Capita Income
- 1.3.3 Current and Constant Prices
- 1.3.4 World Ranking of India in terms GDP
- 1.3.5 Estimates of National income in India

1.4 Sectoral Composition of National Income

- 1.4.1 Brief Description of Three Broad Sectors
- 1.4.2 Concept of Structural Transformation
- 1.4.3 Sectoral Composition of GDP/GVA
- 1.4.4 Sectoral Growth of GDP/GVA

1.5 Role of India in the Current Global Economy

- 1.5.1 Rising India: A Bright Global Spot
- 1.5.2 The Outlook Ahead for India

1.6 Let Us Sum Up

1.7 Further Reading

1.8 Answers to Check Your Progress

1.9 Model Questions

1.1 LEARNING OBJECTIVES

After going through this unit, you will be able to –

- identify the trends in national income and per capita income
- examine the sectoral composition and growth of the national income
- assess the position of India in the current global economy

1.2 INTRODUCTION

Dear learners, as this is the very first unit of your Course on Issues in Indian economy, the basic foundation of this whole course starts with this present unit. As you know that the globalisation of Indian economy has opened up many new opportunities, but has also brought with it new challenges and responsibilities at the same time. Since the economic reforms of the early 1990s, when India abandoned the components of its closed economy and state controlled policies of the past, the Indian economy has seenrapid growth and progress. The country has come a long way from decades of stalled economic growth, exchange rate fluctuations, and a negative balance of payments.

The Indian economy today is more integrated than ever before. It has emerged as a large and important economy on the global stage. It enjoys the unique advantage of having many economic indicators to its advantage, particularly a large domestic market, robust investment-to-GDP ratio, and demographic advantage. Given its size of population and its portrait in the global economy, India will certainly need to play an active role at the global level.

At the same time, India needs to address its internal challenges as well which include the long-standing problem of poverty, unemployment, low per capita Income and the development of its basic infrastructure. India also needs to renew its commitment to reforms and better exploit the benefits of global integration. Despite its many challenges, India has enormous potential to unleash.

Against this backdrop, we will go further to explore the trends in national as well as per capita income of India. As sectors have an important role to play to determine the overall growth of an economy, we shall also discuss the sectoral composition of national income. Lastly, we will be examining the current position and importance of India in the global economy.

1.3 TRENDS IN NATIONAL INCOME AND PER CAPITA INCOME

1.3.1 National Income

According to Marshall: "The labour and capital of a country acting on its natural resources produce annually a certain net aggregate of commodities, material and immaterial including services of all kinds. This is the true net annual income or revenue of the country or national dividend."

In this definition, the word 'net' refers to deductions from the gross national income in respect of depreciation and wearing out of machines.

In the words of A.C. Pigou, "National income is that part of objective income of the community, including of course income derived from abroad which can be measured in money."

So after you read these two sets of definitions about the national income you will get to know that in a typical economy a large number of economic transactions occur. National income accounting is an attempt to classify these transactions in a way that is economically meaningful. National income is a measure over a period of time of the value of goods and services becoming available to the country, of the money incomes arising to residents and of the money expenditure on final goods. To avoid an erroneous impression of the size of the national income, we distinguish between intermediate goods which are used in the production process, and final goods which are sold to the public.

In simple words, National income of a country can be defined as the total market value of goods and services produced in the economy over a period of time, i.e. generally of a year. The three-important measure of calculating National Income of a country is:

- The sum of the value of all final goods and services produced.
- The sum of all incomes accruing to factors of production, i.e., Rent, Interest, Profit and Wages.

- The sum of consumer's expenditure, net investment, and government expenditure on various goods and services.

1.3.2 Per Capita Income

Per capita income counts each and every individual; let it be, man, woman, and child, even newborn babies, as a member of the population. It is a measure of the amount of money earned per person in a particular geographical area. Per capita income can be used to determine the average per-person income for an area and to evaluate the standard of living and quality of life of the population. Per capita income for a nation is calculated by dividing the country's national income by its population.

The rate of growth of national income when compared withthe rate of growth of population indicates whether the economy is declining,stagnant or developing. It is only when the national income grows at a ratefaster than the rate of growth of population that the per capita income depictsa rising trend; the community is able to improve its living standards and add to economic development of the country.

1.3.3 Current and Constant prices

It is very much essential to study the trend of the national income in India to attain a clear understanding about nature of the Indian economy. The trends in national income generally depict the standard of living of the people of India. Both the national income and per capita income are first collected at current prices and then expressed at constant prices for eliminating the effect of any change of price level during that period. Thus, the national income at current prices is influenced by both the increase in production of goods and services and the rise in prices. In order to make the national income figures comparable, these figures are deflated at constant prices just to adjust it for the price change during the period. To deflate the data, WPI (Wholesale Price Indices) and CPI (Consumer Price Indices) are used.



LET US KNOW

CPI: Itis a comprehensive measure used for estimation of price changes in a basket of goods and services, representative of consumption expenditure in an economy. The CPI is based on retail prices and this index is used to calculate the Dearness Allowance (DA) for government employees.The change in index over a period of time is called as CPI inflation. CPI figures are released by the Central Statistics Office (CSO), Ministry of Statistics and Program Implementation.

WPI: It is a price index representing the wholesale prices of a basket of goods. In several countries such as India it is used to measure the inflation, the general rise in the prices of goods. It is released on a weekly basis on every Thursday to measure the change in the wholesale prices of a set of goods. As the name suggests it does not take into account the price at which consumers buy goods but on the wholesale basis. The rationale of having WPI is to know the demand and supply condition of goods included in the economy.

1.3.4 World Ranking of India in terms of GDP

Before studying the trends in national income at aggregate and per capita level, you need to understand the position of India's national income at the global front. As per the latest report of World Economic Outlook, October 2019, India's economy has become the fifth largest in the world, measured using GDP at current US$ prices. The size of the economy is estimated at US$ 2.9 trillion in 2019 (Table1.1).

So, being at the fifth place in terms of GDP seems good, but, we would like to use a phrase here that as book in not judged by its cover similarly this table is not showing the sad scenario about the Indian economy. Despite its strong economic growth, the country still faces its share of challenges. According to the World Bank,

access to development and new opportunities has been uneven, varying by geographic location.This economic growth has actually come at the cost of rising income inequalities, unemployment and poverty levels. Furthermore, India remains home to one quarter of the world's poor. Just 39% of its rural residents can access sanitation facilities. About these problems pertaining to Indian economy you will be reading in your subsequent units.

Table 1.1: Top 10 Economies in the world in terms of GDP at current US$ trillion

Sl No.	Country	2017	2018	2019
1	United States	19.5	20.6	21.4
2	China	12.1	13.4	14.1
3	Japan	4.9	5	5.2
4	Germany	3.7	4	3.9
5	India	2.7	2.7	2.9
6	United Kingdom	2.6	2.8	2.7
7	France	2.6	2.8	2.7
8	Italy	2	2.1	2
9	Brazil	2.1	1.9	1.8
10	Korea	1.6	1.7	1.6

Sources: World Economic Outlook, October 2019

1.3.5 Estimates of National income in India

In India, the first attempt to estimate national income and per capita income was made in the year 1867-68 byDadabhaiNaoroji. This was followed by several intermittent efforts by individuals, officials as well as non-officials. Scholars attempting to estimate national income statistics for pre-independence India have confronted innumerable difficulties in finding reliable data. Whatever estimates they make, they were forced to rely on macro level data to make numerous assumptions. Only for the period after India became independent in 1947 was it possible to find reliable official statistics.

In 1949, soon after the independence, the National Income Committee (NIC) was formed to compile statistics and estimate national income. The committee was headed by P.C. Mahalanobis

and included D.R. Gadgil and V.K.R.V. Rao. Assisting the NIC was the National Income Unit (NIU), directed to prepare estimates of national income every year. The First Report of the Committee was published in 1951, and the Final Report in 1954. The NIU was under the jurisdiction of the Ministry of Finance, later changed to the Central Statistical Organisation.

Now the task of preparing national income estimates has been totally under the Central Statistical Organisation (CSO). The CSO has been producing annual official estimates of national income of India since 1955 and publishing the same in its annual report *National Accounts Statistics*. It is with the help of these data that we shall examine the trends in national and per capita income.

Let us now look into the trends in the national income figures and per capita income figures of India both at current prices and at constant prices obtained through C.S.O.'s new series with 2011-12 as base year.

Table 1.2: Trends in National Income and Per Capita Income at Current Prices

Year	Gross Domestic Product (GDP)	Gross National Income (GNI)	Per Capita GDP	Per Capita GNI
2019-20	20339849	20118353	151677	150025
2018-19	18971237	18768912	142963	141439
2017-18	17098304	16913491	130124	128718
2016-17	15391669	15215269	118489	117131
2015-16	13771874	13612095	107341	106096
2014-15	12467959	12320529	98405	97242
2013-14	11233522	11093638	89796	88678
2012-13	9944013	9827250	80518	79573
2011-12	8736329	8659505	71609	70980
2010-11	7634472	7552665	64372	63682
2009-10	6366407	6328407	54414	54089
2008-09	5514152	5481229	47783	47498
2007-08	4898662	4878150	43046	42866
2006-07	4254629	4221395	37920	37624
2005-06	3632125	3606009	32840	32604
2004-05	3186332	3163957	29259	29054

Source: Latest Central Statistical Office estimates

Table1.3:Trends in National Income and Per Capita Income at Constant Prices

Year	Gross Domestic Product (GDP)	Gross National Income (GNI)	Per Capita GDP	Per Capita GNI
2019-20	14565951	14405339	108620	107422
2018-19	13981426	13829068	105361	104213
2017-18	13175160	13029307	100268	99158
2016-17	12308193	12163619	95106	94751
2015-16	11369493	11234571	88616	87565
2014-15	10527674	10402987	83091	82107
2013-14	9801370	9679027	78348	77370
2012-13	9213017	9104662	74599	73722
2011-12	8736329	8659505	71609	70980
2010-11	8301235	8211816	69994	63682
2009-10	7651078	7606319	65394	54089
2008-09	7093403	7052191	61468	47498
2007-08	6881007	6852740	60466	42866
2006-07	6391375	6342389	56964	37624
2005-06	5914614	5872936	53478	32604
2004-05	5480380	5442938	50325	29054

Source: Latest Central Statistical Office estimates

It would be seen from Table 2 and Table 3 that India's GDP and GNI (both at current prices and constant prices)have got multiplied during the period beginning with 2004-05 to 2011-12. During the same period, per capita GDP and Per capita GNI have also been increasing. The difference in the growth between the national income and the per capita income is accounted for by the growth in population. However, the fact that the per capita income in the economy has been increasing proves that the rate of growth of national income has been more than the rate of growth of population.



CHECK YOUR PROGRESS

Q 1: What are the three important measures of calculating national income?

.....

.....

Q 2: Differentiate between the current and constant prices?

.....

.....

Q 3: Which factor account for the difference between the national income and Per Capita income?

.....

.....

1.4 SECTORAL COMPOSITION OF NATIONAL INCOME

Let's move forward now to understand the concept of national income from sectoral point of view. Broadly speaking, the gross national income comes from the three sectors viz. primary sector, secondary sector and tertiary sector.

1.4.1 Brief Description of Three Broad Sectors

Primary sector: In this sector, activities are undertaken by directly using natural resources. Agriculture, Mining, Fishing, Forestry, Dairy etc. are some examples of this sector. It forms the base for all other products. Since most of the natural products we get are from agriculture, dairy, forestry, fishing, it is also called Agriculture and allied sector. People engaged in primary activities are called red-collar workers due to the outdoor nature of their work.

Secondary Sector: It includes the industries where finished products are made from natural materials produced in the primary sector. Industrial production, cotton fabric, sugar cane production etc. activities comes under this sector.So it's the part of a country's economy that manufactures goods, rather than producing raw materials. Since this sector is associated with different kinds of industries, it is also called industrial sector. People engaged in secondary activities are called blue collar workers.

Tertiary/Service Sector: This sector's activities help in the development of the primary and secondary sectors. By itself,

economic activities in tertiary sector do not produce goods but they are an aid or a support for the production.Goods transported by trucks or trains, banking, insurance, finance etc. come under this sector. It provides the value addition to a product same as the secondary sector.This sector jobs are called white collar jobs.



LET US KNOW

Sub-Sectors of Indian Economy

CSO has classified Indian economy into the following 13 sub-sectors divided into 9 groups. The sectors are grouped as follows:

1) **Agriculture, forestry and fishing**
   - a) *Agriculture*
   - b) *Forestry and logging*
   - c) *Fishing*
2) **Mining and quarrying**
3) **Manufacturing**
   - a) *Registered*
   - b) *Unregistered*
4) **Electricity, gas and water supply**
5) **Construction**
6) **Trade, hotels and restaurants**
   - a) *Trade*
   - b) *Hotels and restaurants*
7) **Transport, storage and communication**
   - a) *Railways*
   - b) *Transport by other means*
   - c) *Storage*
   - d) *Communication*
8) **Financing, insurance, real estate and business services**
   - a) *Banking and insurance*
   - b) *Real estate, ownership of dwellings and business services*

9) Community, social and personal services

a) *Public administration and defence*

b) Other services

1.4.2 Concept of Structural Transformation

The sectoral composition of an economy is the proportionate contribution of different sectors to the total Gross Domestic Product (GDP) of an economy during a year. It gives the share of agricultural sector, industrial sector and service sector in GDP. When an economy grows, a process occurs which is called structural transformation. As development proceeds, the proportionate contribution of primary sector tends to decrease while that of the secondary and tertiary sector tends to increase. Thus, the level of productive activity tends to improve in the secondary and tertiary sectors of the economy in relation to the primary sector.

This implies that the economy's dependence on the agricultural sector will tend to decrease gradually and the share of the industrial and service sectors in the total GDP will increase over the years. This structural transformation together with the economic growth is also termed as economic development.It implies that the proportional contributions of different sectors tend to change with the process of growth. In the developing countries, the bulk of income is generated in the primary sector of the economy. On the other hand, the growth in the performance of the service sector with higher contribution to the total GDP is considered as an indication of economic development.

The introduction of economic reforms in 1991 has marked a significant change in the India's growth story. The growth of service sector has started playing a crucial role in the overall economic growth scenario in the country. The service sector led growth has given Indian economy the status of 'one of the fastest growing economies' of the world. However, this has also given rise to the challenge of sustaining the economic growth for a longer period of time.

1.4.3 Sectoral Composition of GDP/GVA

Now it is time to go through the empirical data which will let you understand more about the sectoral composition of national income. Different sectors of the economy usually grow at different rates. A high growth of GDP does not attract much attention to sectoral contribution to growth as much as low growth of GDP does. Yet, at all levels of growth, structural change is imminent and it is the pace of change that becomes a matter of interest (Table 1.4).

Share of agriculture and allied sectors in the total Gross Value Added (GVA) i.e. the total contribution to GDP by a sector or an industryin a given year has declined from 2009-14 to 2014-19 mainly on account of relatively higher growth performance of tertiary sectors. This is a natural outcome of the development process. That leads to faster growth of non-agricultural sectors.

The contribution of industrial activities to GVA has also declined from 2009-14 to 2014-19. Manufacturing sector, which contributes more than 50 per cent of industrial GVA, has driven the decline while the share of construction sector has also moderated.

Services sector has moved ahead faster, distancing itself further from agriculture and industry. Financial, real estate and professional services has driven the increase in the contribution of service sector followed by public administration. Even globally, the services sector has supported global growth partly offsetting the decline in manufacturing activity.

Table 1.4 : Sectoral shares in GVA (per cent)

	2009-10 to 2013-14	2014-15 to 2018-19	2018-19	First half: 2019-20
Agriculture, forestry & fishing	18.3	17.4	16.1	13.9
Industry	32.3	29.6	29.6	28.3
Mining & Quarrying	3.2	2.4	2.4	2.1
Manufacturing	17.5	16.6	16.4	15.4
Electricity, Gas, Water supply & other utility services	2.4	2.6	2.8	2.9
Construction	9.2	8.0	8.0	8.0
Services	49.4	52.9	54.3	57.8
Trade, Hotel, Transport, Storage, Communication and services related to broadcasting	17.5	18.3	18.3	18.1
Financial, Real estate & Professional services	19.2	20.9	21.3	24.5
Public Administration, Defence and other services	12.7	13.7	14.7	15.2

Source: CSO estimates



LET US KNOW

Difference between Gross Value Added and Gross Domestic Product

GROSS VALUE ADDED: It is a measure of total output and income in the economy. It provides the rupee value for the amount of goods and services produced in an economy after deducting the cost of inputs and raw materials that have gone into the production of those goods and services. It also gives sector-specific picture like what is the growth in an area, industry or sector of an economy.

GROSS DOMESTIC PRODUCT: It gives the economic output from the consumers' side. It is the sum of private consumption, gross investment in the economy, government investment,

government spending and net foreign trade (difference between exports and imports).

DIFFERNCE: While GVA gives a picture of the state of economic activity from the producers' side or supply side, the GDP gives the picture from the consumers' side or demand perspective. Both measures need not match because of the difference in treatment of net taxes.

1.4.4 Sectoral Growth of GDP/GVA

In the last subsection, we analysed the composition(in per cent) of different sub sectors of the economy. Here in this section we will be examining the growth of GVA and GDP in recent period (Table: 1.5)

The year 2019 was a difficult year for the global economy with world output growthestimated to grow at its slowest pace of 2.9 per cent since the global financial crisisof 2008-09. Amidst a weakenvironment for global manufacturing, trade and demand, the Indian economywas also down with GDP figures. The National Statistical Office (NSO) has estimated India's GDP to have grown at 4.8 per cent [(5+4.5)/2]in the first half (H1) (April- September) of 2019-20, lower than 6.2 per cent recorded in the second half (H2) (October-March) of 2018-19.

Table 1.5: Quarter wise growth of real Gross Value Added (GVA) and GDP (per cent)

	2018-19				2019-20	
	Q1	Q2	Q3	Q4	Q1	Q2
GVA	7.7	6.9	6.3	5.7	4.9	4.3
Agriculture	5.1	4.9	2.8	–0.1	2	2.1
Industry	9.8	6.7	7	4.2	2.7	0.5
Services	7.1	7.3	7.2	8.4	6.9	6.8
GDP	8	7	6.6	5.8	5	4.5

Source: Adapted from Economic Survey 2019-20



CHECK YOUR PROGRESS

Q 4: What do you understand by the term Structural Transformation?

.....

.....

Q.5: Explain the change that you noticed in the sectoral shares in Gross Value Added from 2013-14 to 2019-20.

.....

.....

Q 6: The economic growth of Indian economy is service led growth – Comment on this.

.....

.....

1.5 ROLE OF INDIA IN CURRENT GLOBAL ECONOMY

The fast growth rate that India has experienced since the mid1990s was introduced through policy of first generation economic reforms. These reforms implemented in the early 1990s denoted India's appearance on the global economic map and made India a favourite destination for foreign investors and companies. India has gained huge ground over the recent decades and is presently tallied among the world's emerging developing markets. This development has led to a rise in India's worldwide standing and has fundamentally improved the country's socio-economic indicators. This development has also raised expectations for government and policy makers for Indian economy to usher more at the global front. The burgeoning middle class also expects more growth from the economy and is eager to see even more improvement particularly in socio economic indicators. So, for India, this is a daunting challenge, especially at a time when it has yet to realize its full capacity in order to lead the global economy.

1.5.1 Rising India : A Bright Global Spot

The Indian economy today is progressively incorporated and more reliant on the worldwide economy than any other time in recent memory. The nation has made considerable progress from many years of slower economic growth, prolonged negative balance of payments, and frequent fluctuations in exchange rate and intermittent crises. India needs to recharge its pledge to become a leader at global level and utilise the advantages of global integration.

The increase of the Indian white collar class and fall in poverty levels in the course of the most recent decade is a result of these changes and their orderly development. To spike more economic growth, India increased focus on exports, IT sector and other related services. The share of merchandise trade has risen since 1991 and a dramatic transformation of services trade has happened. This resulted into increased capital inflows and foreign direct investment (FDI). As per the World Investment Report 2020 by theUNCTAD (United Nations Conference On Trade And Development), India is the 9th largest recipient of FDI in 2019, with 51 billion dollars of inflows during the year, an increase from the 42 billion dollars of FDI received in 2018, when India ranked 12 among the top 20 host economies in the world. India rose as one of the most appealing goals for FDI, as well as an important source of FDI outflows. Presently it is the favourite destination for FDI because of higher return compared with other developing countries. There is still a great deal of potential for expansion in the economy and various opportunities are yet to be completely tapped. The nation was acknowledged globally for its reduction and rationalization of tariffs and removal of non-tariff barriers. With all these developments Indian economy became deeply integrated with the global economy.

The economic reforms initiated in the year 1991 led to many years of above average growth rate of around 8-10 percent. As India's economy prospered, financial specialists, policymakers, and people

of India started to take it for granted that such high paces of development would be the norm. But the slowing down of reforms resulted in loss of this momentum. In the wake of being scrutinised by financial analysts for low development, India has at last earned a spot among the world's driving developing markets. Further opening up could lead India to achieve further success among the BRICS– Brazil, Russia, India, China, and South Africa and even beyond.

1.5.2 The Outlook Ahead for India

India has the second largest population in the world with more than 1.3 billion people. Of India's 29 states and 7 union territories, 18 are home to more people than Australia. By 2035, the United Nations projects that India's population will reach almost 1.6 billion, on its way to a peak of almost 1.7 billion by the early 2060s.

India's economy is of worldwide significance. It has a large and young population and an open and democratic political system. It is as of now the third biggest economy and supporter of worldwide financial development, yet there is massive undiscovered potential. With more than a sixth of the world's population, India produces only 7 per cent of the world's output. India's economic progress will not be linear. It will be subject to many structural shifts and will be shaped by technological and environmental disruptions.

It is, therefore, imperative to pause for a minute to help ourselves to remember of this country's extraordinary achievements. Some are notable in the emergence of a world class IT industry, the quick development of exports, and the development of a sophisticated financial sector. India has a solid voice in the global discussion of many key issues, including trade and climate change.

Recently, due the Covid-19 pandemic, a report by Goldman Sachs expect global economy to sink into recession in 2020 it is also expected that world gross domestic product could turn into negative 1.8 per cent in the year 2020. For India the same research agency has lowered its real GDP forecast to 1.6 per cent in financial

year 2020-21 from 3.3 per cent predicted earlier. This, however, is still higher than United States, which it now sees contracting to -6.2 per cent in 2020. India's development will be driven by how viably it tackles and rewards the endeavours of its most noteworthy resources – its people.



CHECK YOUR PROGRESS

Q 7: What does the middle class expect from the growing and progressing Indian economy?

.....

.....

Q 8: How much of the total world output is produced in India?

.....

.....

Q 9: Comment on the changes at FDI front that Indian economy witnessed recently.

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1.6 LET US SUM UP

- National income estimates are the most reliable macroeconomic indicators ofan economy.
- Changes in national income measure the rate of growth of the economy
- In India national income, as also per capita income, has been continuously increasing.
- Changes in the structure of national income of aneconomy reflect the changing significance of different sectors.
- In more recent years, the rate of growth of national income hasaccelerated. It indicates that the economy has been growing at a faster rate inrecent years than in the past

- The structure of national incomehas also undergone a change; the tertiary sector has emerged as the dominantsector of the economy.



1.7 FURTHER READING

1. Datt, G. & Mahajan, A. (2020). *Datt & Sundharam's Indian Economy*. New Delhi: S. Chand & Co. Ltd.
2. Kapila, U. (Ed.) (2020). *Indian Economy: Performance and Policies*. New Delhi: Academic Foundation
3. Mishra, P. K. & Puri, V. K. (2020). *Indian Economy*. New Delhi: Himalaya Publishing House.



1.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: The three-important measure of calculating National Income of a country are

(i) The sum of the value of all final goods and services produced.

(ii) The sum of all incomes accruing to factors of production

(iii) The sum of consumer's expenditure, net investment, and government expenditure on various goods and services.

Ans to Q No 2: The national income at current prices is influenced by both the increase in production of goods and services and the rise in prices. In order to make the national income figures comparable, these figures are deflated at constant prices just for adjusting it for a price change during the period.

Ans to Q No 3: The growth of service sector has started playing a crucial role in the overall economic growth scenario. The service-sector-led growth has given the status to Indian economy as 'one of the fast growing economies', but it would give rise to challenges related to retaining the growth rates attained.

Ans to Q No 4: As development proceeds, the proportionate contribution of primary sector tends to decrease while that of the secondary and

tertiary sector tends to increase. This is termed as structural transformation.

Ans to Q No 5: Share of agriculture and allied sectors in the total GVA of the country has declined from 2009-14 to 2014-19 The contribution of industrial activities to GVA has also declined from 2009-14 to 2014-19. Manufacturing sector, which contributes more than 50 per cent of industrial GVA, has driven the decline while the share of construction sector has also moderated. Services sector has moved ahead faster, distancing itself further from agriculture and industry.

Ans to Q No 6: The growth of service sector has started playing a crucial role in the overall economic growth scenario. The service-sector-led growth has given the status to Indian economy as 'one of the fast growing economies', but it would give rise to challenges related to retaining the growth rates attained.

Ans to Q No 7: The burgeoning middle class also expects more growth from the economy and is eager to see even more improvement particularly at socio economic indicators level.

Ans to Q No 8: India produces only 7 per cent of the world's output.

Ans to Q No 9: India is the 9th largest recipient of FDI in 2019, with 51 billion dollars of inflows during the year, an increase from the 42 billion dollars of FDI received in 2018, when India ranked 12 among the top 20 host economies in the world.



1.9 MODEL QUESTIONS

Q.1: Suggest measures to accelerate the rate of growth in the Indian economy.

Q.2: The rate of growth in the Indian economy hasbeen relatively slow.Do you agree? Give arguments to justify your views on this statement.

Q.3: Write a detailed note on the sectoral composition of national Income.

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UNIT 2: INDIA'S POPULATION: GROWTH AND POLICY

UNIT STRUCTURE

2.1 Learning Objectives

2.2 Introduction

2.3 Population Growth

- 2.3.1 Population Growth in India
- 2.3.2 Birth Rate and Death Rate
- 2.3.3 Infant Mortality Rate
- 2.3.4 Total Fertility Rate

2.4 Age and Sex Composition of Population

- 2.4.1 Age Composition
- 2.4.2 Sex Composition

2.5 Population Policy

- 2.5.1 National Population Policy, 2000

2.6 Let Us Sum Up

2.7 Further Reading

2.8 Answers to Check Your Progress

2.9 Model Questions

2.1 LEARNING OBJECTIVES

After going through this unit, you will be able to –

- discuss the concept of population growth
- comprehend the trend of population growth in India
- figure out the age and sex composition of population in India
- appreciate theNational Population Policy, 2000

2.2 INTRODUCTION

This unit discusses the concept of population growth in India. Besides, the factors affecting population growth and the age-sex composition of populationin India have also been discussed. The unit further

describes the National Population Policy, 2000 andhighlights its salient features.

2.3 POPULATION GROWTH

The ever-increasingglobal populationhas been a major concern over the past several decades.Population growth, simply defined as an increase innumber of individuals in a population at a specific time and space, had been slower until the occurrence of industrial revolution.After that the world population jumped from a million to billions in a much less time.With the incredible healthcare advancement in the recent hundred years, a worldwide fall in mortality rate, increased rate of fertility and higher life expectancy are among the reported factorsof rapidgrowth of population in many countries. Migration, both inward and outward (immigration and emigration) too affects the growth rate of population to a great extent. The highest population growth in the world occurred during the 20th century, which resulted in the increase of total population from 1.65 billion to6 billion.During the years 1955 and 1975, the world population recorded a significant burst with 1.8 percent growth rate per year, peaking at 2.1 percent between 1965 and 1970. The current global population, as per the United Nations' (UN) recentestimates stands at 7.8 billion in December 2020. Asia alone occupies 4.7 billion people ranking top in the list followed by Africa with 1.3 billion populations along with the highest growth rate. India is projected to surpass China as the world's most populous country around 2027; China's population is expected to decrease by 2.2 percent until 2050. The Department of Economic and Social Affairs of the UN confirms the population growth is still being continued in an upward graph though in a slower pace.

2.3.1 Population Growth in India

India shares 2.4 percent of world's total land area. But, it is the second most populous country in the world with 16.9percent of total global population. This discouraging land-man ratio with a minimal national income (amounting to 1.2 percent of total world income) has significantlydistressed India's economy and development.The

UN population prospects 2019 reveals that population count in India shows a continuous increase till today.

In India, the first modern census was held during 1865 to 1872. However, the first synchronous census was conducted in1881. Census data of 1891 recorded 287,223,431persons in India with a growth rate of 13.1 percent, which composed one fifth of the total world population at that time. During the period 1891 to 1921, Indian population increased by 1.5 crore. The annual compound growth rate during these years was 0.19 percent per annum. The next thirty years experienced a huge expansion of 11 crores, from 25.1 crores in 1921 to 36.1 crores in 1951having 1.22 percent annual compound growth rate. In 1951, India's population grew by13.31percent more than the previous census data of 1941 having 42,427,510 persons. This number further increased to 838,583,988 in 1991and reached the 100 crores marks in 1998. The 2001 census marked an increase of 18.06crorespeople from 1991.In 2011, India's population count stood at 121crores with 17.70 percent decadal growth against 21.5 percent in the previous decade. According to the census data, more than 18.1 crore populations had increased during this decade. This has reached 136 crores in 2019 as per UN Projections. The yearly growth rate population in India increased continuously since 1951 (1.61 percent) reaching its peak in 1974 (2.36 percent). From 1975 onwards a declining growth rate has been recorded which stood at 1.02 percent in 2019 and 0.99 percent in the year 2020.

2.3.2 Birth Rate and Death Rate

Therate of population growth of a country depends on the birth rate and death rate. If the birth rate stands at replacement level with the death rate, the number of population remain constant. But as the birth rate exceeds the later, the population starts growing.

Birth Rate: The average number of births occurring per thousand populationsevery year implies the birth rate of that population. The rate of birth in a population depends on fertility i.e. the number of children born to women within the period of child

bearing age, which, in turn, is linked to the mean age at the marriage. In India the mean ages of marriage have been very much lower than other countries. However, it has been in a constant upward trend owing to factors likeimprovement in women'seducation, economic independence etc. In 1891 the mean age of marriage was as low as 12.5 years in females that increased to 15.6 years in 1951. Later, in 1981 it improved to 18.3 years, further reaching 21.2 years in 2011 as per the census. It has now been improved to 22.3 years as revealed by Sample Registration System (SRS) data, 2018**.** This increasing mean age of getting married reduces the span of fertility resulting in a lower birth rate and eventually,contributing to lower growth rate of population.According to National Sample Survey, live birth per educated women is less than that of women with minimal education.

Table 2.1 Annual average Birth and Death Rates in India

Decade /Years	Birth Rate (per thousand)	Death Rate (per thousand)
1891-1900	45.8	44.4
1901-1910	48.1	42.6
1911-1920	49.2	48.6
1921-1930	46.4	36.3
1931-1940	45.2	31.2
1941-1950	39.9	27.4
1951-1960	40.0	18.0
1961-1970	41.2	19.2
1971-1980	37.2	15.0
1985-1986	32.6	11.1
1989*	30.5	10.2
1991	28.9	10.0
1996*	27.4	9.0
2005*	23.8	7.6
2011*	21.8	7.1
2013*	21.4	7.0

Source: Census of India 1971, Census of India 1981; Series I, Paper I of 1984 and 2011.
Ministry of Health and Family Welfare GOI and Economic Survey, 2015-16.

*Office of the Registrar General, Vital Statistics Division.

From Table 2.1we can see that the birth rate in India was very high during the early years of the previous decades. The annual average rate of birth in 1911-1920 reached peak with 49.2 per 1000 and it gradually decreased to 21.4 per 1000 persons in 2013. Notwithstanding, the SRS data 2020 puts the birth rate of India at 20 (rural 21.6, urban 16.7) per 1000.

Death Rate: The average number of deaths per 1000 populations is termed as death rate. This demographic indicator has been significantly high during the pre-independent decades in India. The highest death rate was recorded as 48.6 per thousand during 1911-1920 which was 44.4 per thousand during 1891-1900. This rate further declined to 7.1 in 2011 and 7.0 in 2013. According to SRS data 2020, the death rate in India is 6.2 (rural 6.7 and urban 5.1) per thousand. This gradual decrease in death rate resulted from multiple factors like fall in infant mortality, fall in women mortality, immunisation in babies, improved medical facilities, better diet, pure drinking water, enhanced sanitation, eradication of epidemics etc.

From the discussion we can understand that birth and death rates in India are declining continuously. But the pace at which death rate is falling is not attained by birth rate resulting in huge population growth. Again the death rate in India has reached a point where no further sharp decrease can be attained. Therefore, until the fall in the rate of birthmatches the pace with the fall in death rate, it is not possible to stall the growth rate of the population.

2.3.3 Infant Mortality Rate

Infant mortality rate (IMR) is one of the major indicators of health. It is counted as the number of deaths of children in less than one year of ageper thousand live births. India is considered as a 'high infant mortality' region by the World Health Organisation. Various factors like poor health facilities, unhygienic environment etc contributes to higher mortality rate in infants which was as high as 218 infant deaths per thousand live births during the years 1916-20 in India. In 1981, a total of 110 infants died out of every 1000 live births. This number

came down to 80 in 1991 and 71 in 2001. A sharp fall in IMR has been recorded in the year2011 showing 44 infant deaths per 1000 live births. Infant mortality rate has always been higher in the rural areas in comparison to the urban areas. As per 2011 census, 48 infant deaths per 1000 live births in rural areas were recorded while it was 29 in the urban areas. As per SRS data 2020, the Infant Mortality Rate in India has further declined to 32, which is a significant achievement. The gap between rural and urban areas, though reduced considerably (IMR in rural areas is 36 and in urban areas 23), still continues to prevail as evident from the data.

2.3.4 Total Fertility Rate

Fertility rate or the average number of live births per thousand woman of reproductive age (15-49 years) is one of the major factorsresponsible for population growth. The Census of India 2011 shows that2.4 children were born to every thousand women aged 15-49 yearsat the national level. It was2.7 in urban areas and 1.9 in rural areas.Bihar and Uttar Pradesh showed higher rates of fertility compared to other Indian states, with total fertility rates of 3.6 and3.4 respectively.The total fertility rate has declined from 5.2 to 4.5 during 1971 to 1981 and further from 3.6 to 2.3 during 1991 to 2013 and remained stable up to 2016. The Sample Registration System of India's government conducted in 22 states yields a falling rate of fertility in 2017, recorded at 2.2.Oncethe downward fertility rate reaches the replacement level, i.e. the number of children required to substitute their parents, the population starts todecline.



CHECK YOUR PROGRESS

Q 1: What is meant by Birth Rate and Death Rate?

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Q 2: Define IMR and TFR?

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2.4 AGE AND SEX COMPOSITION OF POPULATION

2.4.1 Age Composition

The statistics on age distribution is another important factor while studying a population. Let us see why and how. If we look at the structure of age composition in a specific population, we can determine the ratio of labour force in the total population and also the dependency ratio. Dependency ratio is the ratio of net consumers to net producers.In India, child population within age group 0-14 years has increased from 37.4 percent in 1951 to 41.4 in 1971. It again started dropping to reach 30.7 in 2011. Higher birth rate compared to infant mortality rates is a key factor affecting the children population count in the country. The proportion of working age population which is calculated at 15-60 age groups shows a decline from 57.1 percent in 1951 to 53.4 percent in 1971. It then continued to move upwards and reached 60.3 percent in 2011. The other age group of persons aged above 60 years has been increasing since 1971. It was 5.2 in that year and stands at 8.6 in 2011 as per latest census data.

Table 2.2 Percentage Distribution of India's Population by Age Groups

Years	0-14 years	15-60 years	60 years and above
1911	38.8	60.2	1.0
1921	39.2	59.6	1.2
1931	38.3	60.2	1.5
1951	37.4	57.1	5.5
1961	41.0	53.3	5.7
1971	41.4	53.4	5.2
1981	39.5	54.1	6.4
1991	36.5	57.1	6.4
2001	35.6	58.2	6.3
2011	30.7	60.3	8.6

Source: IAMR, Fact Book on Manpower, Census of India 2011

Table 2.2 reveals that in 2001 and 2011, the percentage of population in the working age group is higher than the child and aged population. But, the work participation rate i.e. percentage of total workers in the population of India was 39.1 in 2001. This shows the scenario of dependency ratio in the last few years. If the number of unproductive consumers outnumbers the number of productive consumers, the population experiences a higher dependency ratio which adversely affects the economy of the country.

2.4.2 Sex Composition

Sex composition is another factor while studying a population.Sex ratio is calculated as the number of females per 1000 males. The overall sex ratio in a population is a composite outcome of several indicators viz. sex ratio at birth, sex differentials in mortality, sex selective migration, natural sex selective life expectancy etc.The world scenario regarding sex ratio indicates the existence of a greater number of female populations than the malesin many countries. But the average ratio, as estimated by the United Nations was 986 females per 1000 males in 2000. In addition, a little biased natural ratio towards male births is observed globally, estimated to be about 1.05 by World Health Organization.But this natural ratio changes with age owing to lower life expectancy of males than females. In countries like USA, Japan, Indonesia, Belarus, Ukraine Russia, Estonia etc. females outnumber males.But the Arabian, North African and Asian countries exhibit more males in relation to females. The difference of global sex ratio of the ten most populous countries in the world during 2001 and 2011 is providedin Table 2.3.

Table 2.3 Sex Ratio of Selected Countries

Serial number	Country	Sex Ratio (females per thousand males)	
		2001	2011
	World	**986**	**984**
1	China	944	926
2	India	933	940
3	USA	1029	1025
4	Indonesia	1004	988
5	Brazil	1025	1042
6	Pakistan	938	943
7	Russian Fed.	1140	1167
8	Bangladesh	953	978
9	Japan	1041	1055
10	Nigeria	1016	987

Source: 1. 2001 -World Population Prospects, 1998Revision, UN.

2. 2011- World Population Prospects, 2008 Revision, UN

From Table 2.3 we can see that India is also one among the countries having lesser number of females per thousand males. Lower and declining sex ratio has been a cause of concern in India for quite long time. It was 972 in 1901 and then declined gradually in the subsequent years.

Table 2.4 Sex Ratio in India 1901-2011

Serial Numbers	Census Years	Sex Ratio
1	1901	972
2	1911	964
3	1921	955
4	1931	950
5	1941	945
6	1951	946
7	1961	941
8	1971	930
9	1981	934
10	1991	927
11	2001	933
12	2011	940

Source: Census of India

In 1951 sex ratio in India was higher by one point than the previous year but again dropped by five points in 1961. In 1971 a shocking fall had been noticed by eleven points, from 941 in 1961 to 930. However, in 2011 the proportion of females rose up seven points higher than 2001 and reaching a 940 mark after hovering around 930 for several decades (Table 2.4).

During 1951, altogether 11 states had sex ratio of 1000 or more. But this number decreased to 9 in 1961, 3 in 1971, 2 in 1981 and 1 in 1991. Kerala and Puducherry reported a sex ratio of 1058 and 1001 respectively in 2001. Both further showed remarkable increase in 2011. Kerala reports a sex ratio of 1084 while Puducherry records 1038. The trend of sex ratio in Assam has been upward since 1951. In 2011 the ratio was reported to be 954, aremarkable increase from 935 in 2001.

The child sex ratio i.e. the sex ratio in the age group of 0-7 years was 927 in 2001. In 2011 this number decreased to 914. Sex ratio in the age group 7 and above was 934 females per 1000 males in 2001 and 944 in 2011. Punjab recorded a worryingly low child sex ratio of 798 in 2001. In 2011 this ratio became 846.As per Census 2011, 9 other states recorded sex ratios of less than 900. Mizoram and Meghalaya showed highest child sex ratios of 971 and 970 respectively. According to 2011, the highest sex ratio of 1000 in the population 7 years and above was recorded in Tamilnadu. Moreover, 2 UTs, Lakshadeep and Puducherry also recorded better sex ratios of 1099 and 1047 respectively.

The prevailing gender imbalance in sex composition of population in India, as observed above, is an age long concern. There are many factors contributing to male dominance in the population. In India, female births usuallydominate over male births – 108 female babies are born against every 100 male babies. But most female babies cannot survive the post-natal period owing to several factors such as insufficient care and attention, unhygienic environment, death of a higher proportion of girls during puberty and reproductive

age, early pregnancy in cases of early marriages within 11-19 age groups etc.Other reasons include sex selective abortion and infanticide in many places in India, practiced in spite of both being declared as illegal practices. This is mostly because people having an age old preference towards male heirs.

2.5 POPULATION POLICY

As we have discussed earlier, the population of India is growing at an alarming pace to occupy the position of the most populous country in the world by 2050 as per the UN projections and other recognised organisations. This exploding population is hampering the economic development of the country in many ways. That is why the government should adopt effective and visionary policies to collapse the explosive population growth as soon as possible. India was one of the countries that made early attempts at controlling its population. In 1952, India launched a population control program at the national level, first of its kind in the world. This program highlighted the necessity of family planning in order to reduce birth rates "to stabilise the population at a level consistent with the requirement of national economy. But the goal of 'stabilising the growth of population over a reasonable period' found actual importance during the Third Five Year Plan (1961-1966). Later in 1983, a Working Group on Population Policy recommended a National Health Policy which aimed to reduce Net Reproduction Rate (NRR) i.e. number of girl child per women. Though this policy was adopted as the demographic goal in the Sixth Plan, it was achievable practically only by the period 2006-2011.

In 1976, the National Population Policy was first formulated and announced on 16th April. The government of India stated while introducing this new policy that it is necessary to consider and act upon the problem of population growth as a 'national commitment' as it makes 'economic development slow and achievement difficult'. The policy stressed on different other areas in addition to family planning unlike previous efforts by government. Those were, raising age of marriage, raising the monetary compensation for individual acceptance of family planning, to introduce group

incentives, implementation of new multimedia national strategy for all media to move from urban to rural approach, to spread the knowledge of family planning and family limitation, to adopt small family norms for the government employees, special measures for female education and freezing the population base at the 1971 level for 25 years to determine central plan allocations to states, their representation in Lok Sabha and to earmark eight percent of central assistance to state plans on the performance of family planning. The policy was later modified in 1977 and came as Modified National Population Policy of India, 1977. But these policies could not deliver a satisfactory result in reducing both growth and birth rate in the population owing to lack of infrastructural facilities andabsence of broad-based approach in the policies; political, economic and cultural restrains; lack of sincerity and strong political will on the part of the engaged organisation; lack of cooperation of public etc.

2.5.1 National Population Policy, 2000

On February 15, 2000 the Government of India launched the National Population Policy 2000. This program promoted the two child norm and aimed to stabilise the population by 2045.The National Population Policy, 2000 (NPP 2000) affirmedthe 'commitment of government towardsvoluntary and informed choice and consent of citizens while availing of reproductive healthcare services, and continuation of the target free approach in administering family planningservices. The NPP 2000 provides a policy framework for advancing goals and prioritisingstrategies during the next decade, to meet the reproductive and child health needs of thepeople of the country, and to achieve net replacement levels (TFR) by 2010.'

Objectives

The objectives of the NPP,2000 as stated by the government read as follows:

- The immediate objective of the NPP 2000 is to address the unmet needs for contraception,healthcare infrastructure, and health personnel, and to provide integrated service delivery for basic reproductive and child health care.

- The medium-term objective is to bring the TFR toreplacement levels by 2010, through vigorous implementation of inter-sectoral operationalstrategies.
- The long-term objective is to achieve a stable population by 2045, at a levelconsistent with the requirements of sustainable economic growth, social development, and environmental protection.

The policy set 14 National Socio-Demographic Goals for 2010 in pursuance of the above mentioned objectives. These include,

- Address the unmet needs for basic reproductive and child health services, supplies and infrastructure.
- Make school education up to age 14 free and compulsory, and reduce drop outs at primary and secondary school levels to below 20 percent for both boys and girls.
- Reduce infant mortality rate to below 30 per 1000 live births.
- Reduce maternal mortality ratio to below 100 per 100,000 live births.
- Achieve universal immunisation of children against all vaccine preventable diseases.
- Promote delayed marriage for girls, not earlier than age 18 and preferably after 20 years of age.
- Achieve 80 percent institutional deliveries and 100 percent deliveries by trained persons.
- Achieve universal access to information/counselling, and services for fertility regulation and contraception with a wide basket of choices.
- Achieve 100 per cent registration of births, deaths, marriage and pregnancy.
- Contain the spread of Acquired Immunodeficiency Syndrome (AIDS), and promote greater integration between the management of reproductive tract infections (RTI) and sexually transmitted infections (STI) and the National AIDS Control Organisation.

- Prevent and control communicable diseases.
- Integrate Indian Systems of Medicine (ISM) in the provision of reproductive and child health services, and in reaching out to households.
- Promote vigorously the small family norm to achieve replacement levels of TFR.
- Bring about convergence in implementation of related social sector programs so that family welfare becomes a people centric program.

Strategic themes

In order to achieve these goals 12 strategic themes were identified. It was of utmost importance to shift the operational strategies with emphasis on decentralised planning and implementation of family welfare program,empowering women for improved health and nutrition, child healthand survival, under-served population groups (urban slums, tribal communities, hill area populations and displaced and migrant populations) etc.



CHECK YOUR PROGRESS

Q3. State whether the following statements are true or false:

a) Sex ratio of India is more than world's sex ratio.

b) In 2011, sex ratio of India was 995.

c) On February 15, 2000 the government launched the National Population Policy 2000.



2.6 LET US SUM UP

- The ever-increasing global population has been a major concern over the past several decades. Population growth, simply defined as an increase in number of individuals in a population at a specific time and space, had been slower until the occurrence of industrial revolution.

- With the incredible healthcare advancement in the recent hundred years, a worldwide fall in mortality rate, increased rate of fertility and higher life expectancy has been reported which is a key factor in the rapid growth of population in many countries.
- Migration, both inward and outward (immigration and emigration) also affects the growth rate of a population to a great extent. The highest population growth in the world occurred during the 20th century, steeping from 1.65 billion to 6 billion.
- India shares 2.4 percent of world's total land area. But, it is the second most populous countries in the world bearing 16.9 percent of total global population.
- In India, the first modern census was held during 1865 to 1872. However, the first synchronous census was conducted in1881.
- Census data of 1891 recorded 287,223,431 persons in India with a growth rate of 13.1 percent, which composed one fifth of the total world population at that time. During the period 1891 to 1921, Indian population increased by 1.5 crore.
- The rate of population growth of a country depends on the birth rate and death rate. If the birth rate stands at replacement level with the death rate, the number of population remain constant.
- Infant mortality rate (IMR) is one of the major indicators of health. It is counted as the number of deaths of children in less than one year of age per thousand live births.
- India is considered as a 'high mortality' region by the World Health Organization. Various factors like poor health facilities, unhygienic environment etc. contributes to higher mortality rate in infants which was as high as 218 infant deaths per thousand live births during the years 1916-20 in India.
- Fertility rate or the average number of live births per thousand woman of reproductive age (15-49 years) is largely responsible for population growth.
- The Census of India 2011 shows that 2.4 children were born to every thousand women aged 15-49 years at the national level.

- Higher birth rate compared to infant mortality rates is a key factor affecting the children population count in the country.
- Sex composition is another factor while studying a population. Sex ratio is calculated as the number of females per 1000 males.
- The prevailing gender imbalance in India, as we can note from the above discussion, is an age long concern. There are many factors contributing to male dominance in the number of population.
- In India, female births are dominant over male births. 108 female babies are against every 100 male babies. But most female babies cannot survive the post-natal period owing to negligence or insufficient care and attention, unhygienic environment, death of a higher proportion of girls during puberty and reproductive age, early pregnancy in cases of early marriages within 11-19 age groups etc.
- In 1976, the New National Population Policy was first formulated and announced on 16th April.
- On February 15, 2000 the government launched the National Population Policy 2000. This program promoted the two child norm and aimed to stabilize the population by 2045.



2.7 FURTHER READING

1. Datt, G and Mahajan,A. (2020). *Datt&Sundharam's Indian Economy.* New Delhi: S.Chand & Co.
2. Dhar, P.K. (2017). *Indian Economy: Its Growing Dimensions*. New Delhi: Kalyani Publishers



2.8. ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: The birth rate is the number of live births per thousand of population in a country during a given period of time. Again, death rate is the number of deaths per thousand of population in a country during a given period of time.

Ans to Q No 2: IMR is stands for Infant Mortality Rate. The number of deaths between birth and age one to the total number of live birth is calledInfant Mortality Rate (IMR).

TFR is stands for Total Fertility Rate. It is defined as number of births per thousand of female population (15-49 years) during a given period of time.

Ans to Q No 3: i) False ii) False iii) True



2.9 MODEL QUESTIONS

Answer the following questions in around 500 words each.

Q.1: Write an essay on Population Growth in India.

Q.2: Briefly discuss on Age and Sex Composition of Population of India.

Q.3: Write a short note on National Population Policy, 2000.

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UNIT 3 : ISSUES OF HUMAN RESOURCE DEVELOPMENT IN INDIA

UNIT STRUCTURE

3.1 Learning Objectives

3.2 Introduction

3.3 Human Resource Development: Problems and Progress

3.3.1 Progress of Human Resource Development in India

3.4 Poverty

3.4.1 Concept of Poverty Lines

3.4.2 Measurement of Poverty

3.4.3 Recent World Bank Estimates on Poverty in India

3.5 Inequality and Unemployment: Causes and Magnitude

3.5.1 Concept of Unemployment

3.5.2 Causes of Unemployment

3.5.3 Magnitude of Unemployment

3.6 Let Us Sum Up

3.7 Further Reading

3.8 Answers to Check Your Progress

3.9 Model Questions

3.1 LEARNING OBJECTIVES

After going through this unit, you will be able to –

- discuss the problems and progress relating to human resource development in India
- discuss the problem of poverty of India
- discuss the issues of inequality in India
- discuss the problem of unemployment in India, particularly its causes and magnitude

3.2 INTRODUCTION

In the previous unit, we discussed some of the issues relating to population in India. In this unit, we shall discuss the issue of human resource development in India. The important issues deliberated in the Unit includes the problems and progress of human resource development in India, the issues of poverty, inequality and unemployment. Thus, this unit will be helpful for building some concepts in the area of human resource development in India.

3.3 HUMAN RESOURCE DEVELOPMENT: PROBLEMS AND PROGRESS

Human resource development may be identified as the process through which a society augments the skills, education, and productive abilities of its people. In essence, it means increases in human capital. The major problems faced by India relating to human resource development are as follows:

- **Increasing population:** An increase in population has adverse effect on the quality of human capital in under-developed and developing countries such as India. This leads to reduction in per head availability of existing services such as employment, education, health care, sanitation, housing, electricity, road and nutrition.
- **Lack of manpower planning:** There is lack of manpower planning and no effort has been made to maintain the demand and supply of technical labour force, to raise the standard of education in under-developed countries. As a result, there is the mis-match between demand for and supply of manpower in most of the sectors of the economy. While in certain areas, there is unemployment, in certain areas where we require specialized train people, there is dearth of manpower.
- **High poverty levels:** A majority of the people lives below the poverty line and they do not have access to basic health and educational facilities. In the next section, we shall discuss the problem of poverty in some detail.

- **Brain drain:** Migration of highly skilled labour termed as brain drain slow down the process of human capital formation in an economy.
- **Lower academic standards:** Privatisation of education in all levels as well as lack of proper monitoring of both public and private system of education has adversely affected the quality of education in India. As education is in the concurrent list of subjects, maintaining a proper standard in quality has become a problem.

3.3.1 Progress of Human Resource Development in India

Some of the progresses made by India in the area of human resource development are as follows:

- **Improvement in Literacy Rate:** Over the years, the literacy rate in India has increased. Literacy rate in India has increased from 18.3 percent in 1951 to 74.04 percent in 2011 (Census of India, 2011).
- **Improvement in Female Literacy Rate:** Not simply the literacy rate, but over these years, the female literacy rate in India also has marked noticeable progress. The female literacy rate in India has increased from 8.9 percent in 1951 to 65.5 percent in 2011 (Census figures).
- **Life Expectancy:** In India, life expectancy at birth was 41.2 years in 1961 (For male: 41.9 years, for female: 40.6 years). According to recent estimates, it has improved to 70.7 years for female and 68.2 years for male.
- **Improvement in Sex ratio:** Sex ratio is used to describe the number of females per 1000 ~~of~~ males. Sex ratio is the ratio of women to that of men in India. In the Population Census of 2011 it was revealed that the sex ratio in India 2011 is 940 females per 1000 of males. The Sex Ratio 2011 shows an upward trend from the census 2001 data. Census 2001 revealed that there were 933 females to that of 1000 males. Since decades, India has seen a decrease in the sex ratio, but since the last two of decades there has been in slight increase in the sex ratio. Since

the last five decades the sex ratio has been moving around 930 of females to that of 1000 of males.

- **Progress in Human Development Index:** Since 1990s, the United Nations Development Programme has been issuing the Human Development Report with the Human Development Index as a comprehensive measure of human development. The basic tenet of the Human Development Report is that a long and healthy life along with the basic educational skills of reading and writing and being capable of maintaining a decent standard of living are the essential components of human development.

As a result, the HDI has been used to measure human development through the following three indices:

- A long and healthy life, as measured by life expectancy at birth. Thus, it indicates the number of years a new born infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.
- Knowledge, as measured by the adult literacy rate (with two-third weight) and the combined gross enrolment ratio in primary, secondary and tertiary levels of education (with one-third weight), and
- A decent standard of living, as measured by Gross Domestic Product(GDP) per capita in purchasing power parity (PPP) in terms of US dollars

Now, let us consider India's achievements in different indicators of the Human Development Index in the recent years. We have taken the HDI of 2007/08 and 2019.

Table 3.1: India's Position in the Indices (HDR, 2007/08)

1	Life expectancy at birth (in years)	69.4
2	Adult literacy rate (in %)	61.0
3	Combined gross enrolment ratio (%)	63.8
4	GDP per capita (PPP US$)	3,452

Please note that some changes have been made in the methodologyof calculation of HDI from time to time. The HDR of 2019 placed India in 129th position and the different indicators recorded in case of India are as follows:

Table 3.2: India's Position in the Indices (HDR, 2019)

1	Life expectancy at birth (in years	63.7
2	Expected years of schooling	12.3
3	Mean years of schooling	6.5
4	GNI per capita (PPP US$)	6829

The above Table 3.2 indicates that there has been some progress in the HDI in India over the years.

3.4 POVERTY

Mahatma Gandhi said, "Poverty is the worst form of violence". Though much has been written about poverty, defining poverty is difficult as it has different interpretations. In general, poverty can be defined as pronounced deprivation in well-being. Here, wellbeing implies peoples' command over resources to obtain the things they want. Defined in this way, poverty is viewed as a lack of adequate monetary accessibility. However, this is too narrow approach to look into a complex concept like poverty. A much broader approach to the deprivation of well-being and hence poverty is found in the works of Amartya Sen. According to him, poverty arises when people lack key capabilities which imply inadequate income or education, poor health, insecurity, low self-confidence, a sense of powerlessness and absence of rights such as freedom of speech. Poverty in this approach is viewed as a multidimensional phenomenon.

3.4.1 Concept of Poverty Lines

Though measurement of poverty in a diverse world is a complex issue, its measurement is vital in order to design, monitor and implement appropriate anti-poverty policies, to analyse poverty profiles by regions, socio-economic groups etc., and to figure out

the determinants of poverty. International poverty line is a number decided upon by the World Bank during their study on poverty in 1985. The poverty line divides the poor from the non-poor. To get the number representing the international poverty line, each country's individual standards for poverty are converted into dollars. Two types of poverty lines are discussed; a) Absolute Poverty b) Relative Poverty

- **Absolute Poverty:** An absolute poverty is defined as the state of living under a certain, pre-determined amount of income or consumption. It is the poverty level defined in terms of the minimal standards of food, clothing, health and shelter. The absolute poverty line is the same in different countries. The latest international poverty line as calculated by the World Bank is fixed at $ 1.25 per day per person. Those failing to reach this minimum standard are considered to be absolutely poor. Measurement of poverty in absolute terms has the advantage of applying the same standard across different locations and time periods and thus makes comparison easier.
- **Relative Poverty:** Relative poverty refers to the standard that is defined in terms of the society in which an individual lives and therefore differs between countries and across time and space. This conception of poverty argues that people are poor when they are worse off than other people in the society. This implies that as living standards rise, the level at which people are said to be in poverty will also rise.

3.4.2 Measurement of Poverty

Various indicators are available to measure the extent of poverty are discussed below:

- **Head Count Index:** This is the most widely used measure of poverty which simply measures the proportion of the population that is counted as poor (P0) . Formally

$$P0 = \frac{Np}{N}$$

Where Np is the number of poor and N is the total population.

- **Poverty Gap Index:** This is an improvement over the head count index which simply counts poverty below the poverty line. The index measures the depth or intensity of poverty i.e. how far off are households from the poverty line. The index adds up the extent to which individuals on an average fall below the poverty line. The gap (Zi) is defined as the poverty line (Zi) less actual income for the poor.

  $Gi=(Z-y_i).\ I\ (y_i< z)$

  The poverty gap index then is defined as the ratio of the poverty gap to the poverty line and expressed as a percentage of the poverty line.

$$\text{PGI} = \frac{1}{N} \sum_{j=1}^{q} \left(\frac{z - yj}{z} \right)$$

where N is the total population, q is the total population of poor who are living at or below the poverty line, z is the poverty line, and y_j is the income of the poor individual j.

By definition, the poverty gap index is a percentage between 0 and 100%. Sometimes it is reported as a fraction, between 0 and 1. A theoretical value of zero implies that no one in the population is below the poverty line. A theoretical value of 100% implies that everyone in the population has zero income. In some literature, poverty gap index is reported as P_1 while the head count ratio is reported as P_0.

- **Squared Poverty Gap Index:** The index measures the severity of poverty. It takes into account not only the distance separating the poor from the poverty line i.e. the poverty gap, but also the inequality among the poor. Defined as the average of the square relative poverty gap of the poor the index is expressed as

$$\text{SPGi} = \frac{1}{N} \sum_{i=1}^{q} \left(\frac{z - yi}{z} \right)^2$$

- **Sen Index:** Amartya Sen proposed an index that seeks to combine the effects of the number of poor, the depth of their poverty and the distribution of poverty within the group. The index is given by

  Ps= P0 $\left\{1-(1-G^{p})\frac{\mu^{p}}{z}\right\}$,

  where P0 is the head count index, μp is the mean income (or expenditure) of the poor and Gp is the Gini coefficient of inequality (detail discussion in the next section).
- **The Sen-Shorrocks- Thon Index:** Also known as the modified Sen Index and proposed by Shorrocks is an extension of the 'Sen Index'. Now the index is considered as one of the widely used indicators of poverty in a society. The SST index measures poverty incidence, depth and inequality jointly and hence, is a comprehensive poverty measure. With an addition to this the index can be decomposed into its constituting parts transparently.
- **Human Poverty Index (HPI):** The United Nations Development Programme in its human development report in 1997 has introduced Human Poverty Index. According to this measure, poverty is measured in terms of three key deprivations, i.e., i) deprivation of life (ii) deprivation of basic education as measured by the percentage of adults who are illiterate; and iii) deprivation of overall economic provisioning measured by the percentage of people without access to health services and safe water and the percentage of children under age 5 who are under weight.
- **Multidimensional Poverty Index (MPI):** This index was developed in 2010 by the Oxford Poverty and Human Development Initiative and the United Nations Development Programme. Considering poverty as a multidimensional phenomenon, the index measures poverty that constitute poor people's experience of deprivation – such as poor health, lack

of education, inadequate living standard, lack of income, disempowerment, poor quality of work and threat from violence. These deprivations are captured by three dimensions of poverty viz., health, education and living standard. These three dimensions of poverty are captured by 10 indictors of poverty; two for health, two for education and six for living standards. These are:

- Two indicators for the health dimension are: i) at least one member of a family is malnourished ii) one or more children have died;
- Two indicators of education dimensions are: i) no one in the family have completed five years of schooling and ii) at least one child in the schooling age who has not enrolled in the school and
- The six indicators for the living dimensions are: i) no provision of electricity ii) no access to clean drinking water iii) no access to adequate sanitation iv) house has a dirty floor v) household uses dirty cooking fuel (dung, wood or charcoal) and vi) household has no car or similar motorised vehicle and owns at the most one of these assets – bicycle, motorcycle, radio, refrigerator, telephone or television.

3.4.3 Recent World Bank Estimates on Poverty in India

A recent World Bank study (Poverty & Equity Brief: South Asia; April, 2020) observes the following with respect to poverty in India:

- Since 2000s, India has made remarkable progress in reducing absolute poverty. Between 2011-12 and 2015, poverty declined from 21.6 percent to an estimated 13.4 percent at the International Poverty Line (2011: PPP US $ 1.90 per person per day), continuing the historical trend of robust reduction in poverty.

- Aided by robust economic growth, more than 90 million people escaped extreme poverty and improved their living standards during this period.
- Despite this success, poverty remains widespread in India. In 2015, 176 million Indians were living in extreme poverty. In this context, the outbreak of COVID 19 pandemic and containment measures adopted by the Government are expected to increase poverty in the country.
- Historically, gains from economic growth and poverty reduction has been uneven, with greater progress in states and social groups that were already better off. India faces the challenges of increasing poverty reduction's responsiveness to growth. This would aid in the areas like inclusion of women, STs and other excluded groups and also in human development outcomes related to health, nutrition, education, and gender.

3.5 INEQUALITY AND UNEMPLOYMENT: CAUSES AND MAGNITUDE

The concept of poverty is closely related to the concepts of inequality and unemployment. Inequality focuses on the distribution of income or consumption across the whole population. Distribution of resources in a country does affect the extent and depth of poverty. Generally, countries with high levels of distributive inequality are also likely to have high levels of poverty and vice versa. It shows that though there are basic differences in their concepts, the problem of poverty is fundamentally linked to the issues of how the resources are distributed in a country. Poverty has also been identified with unemployment. An adequate level of employment is important to provide the basic necessities of life to a family. Unemployment leads to financial crisis and reduces the purchasing power of the people. This in turn results in poverty. The relationship between poverty, unemployment and inequality is a complex one for a number of reasons such as how poverty and inequality are conceptualised and measured, how the nature of unemployment is defined in the phase of changing labour market etc.

Credit Suisse Global Wealth Report 2020: Recently, Credit Suisse has released the Global Wealth Report 2020.Credit Suisse is a financial services company based in Switzerland. The Credit Suisse Global Wealth Report provides the most comprehensive and up-to-date coverage of information on household wealth worldwide.

The report provides the following important points with respect to wealth inequality in India.

- There is considerable poverty reflected in the fact that 73% of the adult population had wealth below USD 10,000 at the end of 2019.
- At the other extreme, a small fraction of the population (2.3% of adults) had a net worth over USD 1,00,000.
- With 4,593 ultra-high-net-worth individuals in the country as of end-2019, India came in fourth after the USA, China and Germany.

Challenges Related to Wealth Inequality in India

- **Distinguishing Poor and Non-poor:** In developing countries such as India, despite having hundreds of pro-poor schemes, the biggest question is whether such benefit is reaching the poor.The real challenge is in distinguishing the poor from non-poor, particularly when such data are questionable.
- **Low Government Spending:** The government spending on health, education and social protection in the country is low and more often than not, subsidises the private sector.
- **Impact on Women:** The burden of inequality continues to be borne by India's women, they continue to be tasked with bearing the burden of care work, thus withholding their entry into the labour force.
- **Impact on Vulnerables:** While traditionally vulnerable communities, such as the Scheduled Castes and Scheduled Tribes, are catching up with the rest of society in primary education, they are falling further behind when it comes to advanced (12 years or more) education. Most now have access to mobiles but few have computers.
- Climate change will only exacerbate the inequality.

3.5.1 Concept of Unemployment

We all know that unemployment is a burning problem in India which directly impacts the economy. The term is used to refer to the workless or jobless environment against a good number of available working age populations. According to the National Sample Survey Organization (NSSO), employment and unemployment can be defined based on the activity statuses of an individual, which follows:

- Working (engaged in an economic activity) i.e. 'Employed'.
- Seeking or available for work i.e. 'Unemployed'.
- Neither seeking nor available for work.

The rate of unemployment hence can be outlined as the percent of unemployed workers against the available total labor force.

Unemployment rate = (Unemployed Workers / Total labor force) × 100

- We all know that India is a country with mixed economy. Both private and government sectors provide employment opportunities to the people. In spite of this, various causes contribute to enlarge the issue to a greater extent. Following are the types of unemployment in India.

- **Structural Unemployment:** The mismatch between the available jobs and skills of the available working population causes this type of unemployment. Poor education and absence of necessary skills required for many jobs makes it difficult to get a job for most people.
- **Disguised Unemployment:** It refers to a situation where more than the required number of people get engaged in a particular job or work, which is largely seen in agricultural and unorganized sectors of India.
- **Seasonal Unemployment:** Agricultural workers generally do not have a work the year round. After the harvest of a season completed, the whole community has to wait for work until the next season. This phenomenon is termed as seasonal unemployment.

- **Cyclical Unemployment:** This category of unemployment is an outcome of the cyclical trends in an industry or a business cycle. It has direct connection with the macro-economic situation in the country. As a result of the recession in a business cycle, unemployment rises and with the rising economic growth unemployment also falls. Cyclical unemployment is mostly existent in capitalist economies, where it shows a negligible mark in India.
- **Technological Unemployment:** The loss of jobs resulting out of changes in technology leads to technological unemployment. The introduction of new technology displaces workers in large numbers. We can cite examples from the agricultural sector, railroad construction etc.
- **Vulnerable Employment:** The number of employees who do not have proper job contracts with the employers without any legal protections towards their jobs. This makes them to be considered as unemployed. It is called the vulnerable employment and is one of the main forms of unemployment existent in India.

3.5.2 Causes of Unemployment

- **Overpopulation:** As the second most populous country, India has experienced a population growth of 361 million populations in 1951 to 121 billion in 2011. This exploding number of population has adversely affected the economic growth of the country by increasing the number of unproductive consumers through increasing many other serious issues including unemployment.
- **Lacking or inadequate educational and vocational skills:** A good number of people in the working population age group (15-60) do not get access to proper education and vocational skill training due to different reasons like poverty, illiteracy, and inadequate support from the state etc. Though the government

has initiated several schemes to train the unemployed youths in the rural areas, but it has not peaked up. In addition, the starving parents prefer their children to get engaged in income generation through any possible ways from a very early age.

- **Improper and inadequate strategy for small industries:** Insufficient state support, legal complexities and low infrastructural, financial and market linkages to small/ cottage industries or small businesses, making such enterprises unviable with cost and compliance overruns.
- **Lacking attention towards informal workforce:** A giant mass of uneducated, unskilled people are associated with the informal sector like domestic helpers, construction workers etc. They are neglected and are not counted in any employment data.
- **The mismatch of knowledge to opportunity:** The educational system in India is not pertinent to the demands of the fast growing tech-based job industry. A huge number of educated unemployed youths have been produced by the system of conventional education year after year being the main reason behind increasing structural unemployment.
- **Inadequate attention towards the secondary sector:** Slow growth of infrastructure and small investments in manufacturing sector by the concerned body of the government has limited the employment prospective in secondary sectors.
- **Low productivity in agriculture sector:** India's economy is primarily agrarian. But decreasing productivity in agriculture owing to numerous causes like squeezing agricultural land due to expansion of cities, urban-oriented youth mentality, depleting ground water, natural disasters like floods, soil erosions in many states, large scale locust attack have left many farmers to give up the practice. In 2017, around 40 lakh hactares of agricultural land was affected because of water woes. Lacking substitute opportunities for agricultural worker which makes it difficult to move from primary to secondary and tertiary sectors etc has contributed towards the growing unemployment problem.

- **Regressive social norms:** Many Indian women are compelled to discontinue employment because of the prevalent regressive social norms meant for women. Many women are barred to even get engaged in any work outside home.

3.5.3 Magnitude of Unemployment

Thegovernment did not take the unemployment issue seriously during the initial years of planning and development. But as the economic growth proceeded at a slower rate, the labour force increased more rapidly than the rate of increase in employment. As a result, the unemployment rate doubled during 1956 to 1972. The NSSO Quinquennial Survey records of 1972-73 compelled the government to change the official approach to employment in mid 1970s that combating unemployment alone cannot boost the economic growth. As an outcome of this the government came up with a number of unemployment and poverty alleviation programs since the fifth five year plan (1974-79). The Committee of Experts on Unemployment under the chairmanship of B. Bhagawati submitted its report to the Government in May 1973. The report shows around 18.7 million people as unemployed in 1971. Out of these, 9 million people were without any job and the rest 9.7 million people work for less than 14 hours per week, who were also treated as unemployed. 86 percent of people comprising 16.1 million were reportedfrom rural areas and 2.6 million in the urban areas. The percentage of unemployed out of total labor force of the country was 10.4 percent. In rural areas it was higher than the national rate, standing at 10.9 percent while in urban areas it was 8.1 percent.

Table 3.3: Unemployment rates (per 100 persons in labor force)

NSS Round (year)	Unemployment Rate							
	Male				Female			
	Usual status (ps)	Usual status (adj)	CWS	CDS	Usual status (ps)	Usual status (adj)	CWS	CDS
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rural								
68th (2011-12)	21	17	33	55	29	17	35	62
66th (2009-10)	19	16	32	64	24	16	37	80
61st (2004-05)	21	16	38	80	31	18	42	87
55th (1999-00)	21	17	39	72	15	10	37	70
50th (1993-94)	20	14	31	56	13	9	29	56
43rd (1987-88)	28	18	42	46	35	24	44	67
38th (1983)	21	14	37	75	14	7	43	90
32nd (1977-78)	22	13	36	71	55	20	41	92
27th (1972-73)	-	12	30	68	-	5	55	112
Urban								
68th (2011-12)	32	30	38	49	66	52	67	80
66th (2009-10)	30	28	36	51	70	57	72	91
61st (2004-05)	44	38	52	75	91	69	90	116
55th (1999-00)	48	45	56	73	71	57	73	94
50th (1993-94)	54	41	52	67	83	61	79	104
43rd (1987-88)	61	52	66	88	85	62	92	120
38th (1983)	59	51	67	92	69	49	75	110
32nd (1977-78)	65	54	71	94	178	124	109	145
27th (1972-73)	-	48	60	80	-	60	92	137

Source: Census of India.2011

In India, the 11.3 million people were unemployed during 2004-05. It fell down to 9.8 million in 2009-10 but again scaled up to 10.8 million in 2011-12 under usual status. However the current daily status (CDS) of unemployed population has seen a steep reduction from 34.3 million in 2004-05 (8.2 percent) to 24.7 million in 2011-12 (5.6 per cent).

As per the Census data, 10 million people with the highest levels of education, comprising 15 percent of total population were recorded to be job-seekers in 2011. Kerala had 30 percent graduate unemployed, being the nation's highest. According to a report by The Hindu, a national daily, the 2011 census data reveals that out of 116 million unemployed people in the country, 84 millions were literate that needs to be concerned seriously. Again, 32 millions illiterate people were also available for work. The rate of illiterate unemployed people grew faster than the literate unemployed as mentioned by the newspaper based on government data. The census data shows an increase in unemployment rate from 6.8 per cent in 2001 to 9.6 per cent in 2011.

If we look at the World Bank data, the unemployment rate in India, a declining trend can be noticed from 2015 to 2018. It was 5.51 percent in 2016, 0.05 per cent decline from 2015. Then in 2017, the rate of unemployed recorded as 5.42 percent and in 2018 it was 5.33 per cent with 0.09 per cent decline each year. In 2019 the rate increased by 0.03 per cent standing at 5.36 per cent unemployed people nationwide. A government job survey report published in 2019 revealed that the country's unemployment recorded at 6.1 per cent in 2017-18, a four-decade high rate that is quite alarming. It also indicated a higher unemployment rate in urban areas than the rural areas.

The Centre for Monitoring Indian Economy released data on average unemployment ratewhich reached a record rise up to 27.1 per cent in April, 2020 resulting out of complete lockdown practiced to tackle the Covid-19 pandemic. The sharp increase was a result of the sudden and steep reduction of jobs in the informal sector, 'the largest source of salaried employment in the country'.

The Economic Survey 2021 reports Bihar as the state with highest unemployment rate (9.8%) followed by Haryana (9.3%), Kerala (9%), Uttarakhand (8.9%) and Punjab (7.4%) for the year 2018-19. The national rate was 5.8 per cent.

Rural-Urban unemployment: The rate of unemployment on CDS basis was higher in urban areas than in rural areas. In 1977-78, urban unemployment was 10.3 per cent while it was 7.7 percent in rural areas. A significant fall was noticed in rural unemployment during 1987-88 to 5.3 percent. Urban rate of unemployment at that time was remarkably higher, reported as 9.4 percent. Rural unemployment rate again lifted up to 8.28 per cent during 1993-94. Simultaneously the urban rate of unemployment also increased marginally to 8.28 per cent during 1993-94 to 2004-05. In 2011-12 the rural-urban difference of unemployment rate on CDS basis has narrowed down recording as 5.7 and 5.5 respectively. The reason behind high urban unemployment may be assigned to the larger proportion of organized sector of unemployment forcing people to remain employed or unemployed as low productivity sectors do not attract most of them. Disguised unemployment is the main form noticed in the rural areas.

Table 3.4: Unemployment among Rural and Urban

(as per cent of labor force)

Survey period	Rural areas	Urban areas
1977-78	7.7	10.3
1983	7.9	9.5
1987-88	5.3	9.4
1993-94	5.6	7.4
1999-2000	7.2	7.7
2004-05	8.28	8.28
2009-10	6.8	5.8
2011-12	5.7	5.5

*Unemployment rate on current daily status (CDS) basis

Source: NSSO Surveys.

Youth unemployment: Youth unemployment rate indicates to the workforce aged between 15-29 age group. The proportion of unemployed youths was 12.1 per cent in India in 1999-2000,

comprising 15.5 per cent in urban and 11.0 per cent in rural areas. In 2011-12 unemployment in the youth was estimated to be 2.7 per cent on the basis of usual principal status (UPS).According to a joint report by Asian Development Bank (ADB) and International Labour Organization (ILO), in 2020 the youth unemployment rate is estimated to be 32.5 per cent owing to the circumstances caused by the Covid-19 pandemic. In 2019, the rate was reported to be 23.3 per cent. It is noticed that youth unemployment is considerably higher than the national unemployment rate.

A number of schemes have been implemented by the Central and different State governments to tackle the problem of unemployment from time to time. Programs like Employment Guarantee Scheme of Maharashtra (EGS), National Rural Employment Program (NREP), Rural Landless Employment Guarantee Programme (RLEGP), Jawahar Rojgar Yojana (JRY) etc are some of the initiatives taken by the government at different times. But the problem needs more attention packed with proper time and space specific strategies.



CHECK YOUR PROGRESS

Q 1: State whether the following statements are true or false:

(i) Regressive social norm is a cause of growing unemployment.

(ii) In 2011 the rate of unemployment was 9.4.

(iii) Haryana tops as the state with highest unemployment rate in 2018-19.

Q 2: Write short answers:

(i) State five reasons of unemployment in India.

(ii) Which five year plan first emphasized the need to consider unemployment as a major issue through implementation of several schemes?

(iii) What is technological unemployment?

(iv) Mention few schemes initiated by the government to tackle the unemployment program.



3.6 LET US SUM UP

- Human resource development may be identified as the process through which a society augments the skills, education, and productive abilities of its people. In essence, it means increases in human capital.
- In general, poverty can be defined as pronounced deprivation in well-being. Here, wellbeing implies peoples' command over resources to obtain the things they want.
- International poverty line is a number decided upon by the World Bank during their study on poverty in 1985. The poverty line divides the poor from the non poor.
- An absolute poverty is defined as the state of living under a certain, pre determined amount of income or consumption. It is the poverty level defined in terms of the minimal standards of food, clothing, health and shelter.
- Relative poverty refers to the standard that is defined in terms of the society in which an individual lives and therefore differs between countries and across time and space.
- The concept of poverty is closely related to the concepts of inequality and unemployment. Inequality focuses on the distribution of income or consumption across the whole population. Distribution of resources in a country does affect the extent and depth of poverty.
- We all know that unemployment is a burning problem in India which directly impacts the economy. The term is used to refer to the workless or jobless environment against a good number of available working age populations.
- The term unemployment is used to refer to the workless or jobless environment against a good number of available working age populations.

- The rate of unemployment can be outlined as the percent of unemployed workers against the available total labor force.
- Overpopulation, lacking or inadequate educational and vocational skills, the mismatch of knowledge to opportunity, inadequate attention towards the secondary sector, regressive social norms etc are some causes of unemployment in India.
- As an outcome of the changing approach towards the unemployment issue the government initiated a number of unemployment and poverty alleviation programs since the fifth five year plan (1974-79).
- The rate of unemployment on CDS basis was higher in urban areas than in rural areas.
- The reason behind high rate of urban unemployment may be assigned to the larger proportion of organized sector of unemployment forcing people to remain employed or unemployed as low productivity sectors do not attract most of them. Disguised unemployment is the main form noticed in the rural areas.
- Youth unemployment rate indicates to the workforce aged between 15-29 age group. It is noticed that youth unemployment is considerably higher than the national unemployment rate.
- Programs like Employment Guarantee Scheme of Maharashtra (EGS), National Rural Employment Program (NREP), Rural Landless Employment Guarantee Programme (RLEGP), JawaharRojgarYojana (JRY) etc are some of the initiatives taken by the government at different times.



3.7 FURTHER READING

1. Datt, G and Mahajan,A. (2020). Datt&Sundharam's Indian Economy. New Delhi:S.Chand&Co.
2. Dhar, P.K. (2017). Indian Economy: Its Growing Dimensions. New Delhi: KalyaniPublishers

3.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: (i) True (ii) False (iii) False

Ans to Q No 2:

(i) Overpopulation, lacking or inadequate educational and vocational skills, the mismatch of knowledge to opportunity, inadequate attention towards the secondary sector, regressive social norms.

(ii) Fifth Five year plan.

(iii) The kind of unemployment resulting out of loss of jobs owing to changes in technology is called technological unemployment. The introduction of new technology displaces workers in large numbers. We can cite examples from the agricultural sector, railroad construction etc.

(iv) Employment Guarantee Scheme of Maharashtra (EGS), National Rural Employment Program (NREP), Rural Landless Employment Guarantee Programme (RLEGP), Jawahar Rojgar Yojana (JRY) etc.

3.9 MODEL QUESTIONS

Answer the following questions in about 300-500 words.

Q 1: Elaborate the concept of Unemployment inIndia.

Q 2: What are the prime causes that resulted in higher unemployment ratio in India?

Q 3: Give an account of India's unemployment scenario.

Q 4: Give an account of the progress of human resource development in India.

Q 5: Discuss the concept of poverty lines. Give an account of recent World Bank estimates on poverty in India.

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UNIT 4: INDIAN AGRICULTURE

UNIT STRUCTURE

4.1 Learning Objectives

4.2 Introduction

4.3 Contribution of Agriculture in Economic Development

4.3.1 Contribution of Agriculture in Indian Economy

4.4 Problem of Food Security

4.4.1 Concept of Food Security

4.4.2 Problem of Food Security

4.5 Public Distribution System

4.5.1 Current Status of PDS

4.5.2 The Working of PDS

4.5.3 Advantages of PDS

4.5.4 Limitations of PDS

4.6 Let Us Sum Up

4.7 Further Reading

4.8 Answer to Check Your Progress

4.9 Model Questions

4.1 LEARNING OBJECTIVES

After going through this unit, you will be able to –

- acquire knowledge on the contribution of Agriculture in India's economic development.
- know about Food security and its problem.
- learn about Public Distribution System and analyse the working system, advantages and limitations of Public Distribution System.

4.2 INTRODUCTION

We all know that there are three main sectors in Indian Economy; i.e. Primary sector, Secondary Sector and Tertiary Sector. Primary Sector includes agriculture, forestry, fishing, mining and quarrying; Secondary

Sector includes manufacturing, construction, electricity, gas, water supply etc and tertiary sector includestrade, transport, finance, real estate, community, community and personal services.

If we look at the history of economic development of various advanced countries, we find something common in their development process. It is that the development of their secondary sector, and also the tertiary sector, was preceded by the development of agriculture. England, for example, relied heavily on development of its agriculture prior to the industrial development.

In this unit, we will discuss, in general, the role of agriculture in economic development. Next, we will examine the contribution of agriculture in the Indian Economy. In this context we will emphasis on the food security and its problems, and also about the Public Distribution System.

4.3 CONTRIBUTION OF AGRICULTURE IN ECONOMIC DEVELOPMENT

The Agricultural sector plays a vital role in the process of economic development. It has made a significant contribution to the economic prosperity of advanced countries, and also plays an important role in economic development in developing countries. In this context, economist Simon Kuznets, in his paper *Economic Growth and the Contribution of Agriculture* publishedin early sixties made some interesting observations. According to Kuznets, agriculture makes three types of major contributions to the process of economic development. These are

(i) The factor contribution
(ii) The product contribution
(iii) The market contribution

- ***The Factor Contribution***: The transfer of resources from agriculture sector to non-agricultural sector is known as *factor contribution* of agriculture. The factor contribution can be in the following forms
  - *Provision of Capital:* The non-agricultural sectors require funds for acquiring material capital. In the initial stages of their

development, these funds were generated in the agricultural sector and then transferred to the other sectors. The transfer of capital to non-agriculture sectors can be voluntary or compulsory. It is voluntary when agriculturists themselves invest their savings to the industrial projects. The compulsory form of flow of funds is generally brought about by the government of the day through taxation on the agricultural sector.

- *Provision of Labour:* Agricultural sector also helps in the growth of non-agricultural sector through releasing labour from agriculture sector. There are three potential sources of labour supply for the developing non-agricultural sectors, namely; natural population growth, immigration and farm population. The natural population growth and immigration can never be smooth and adequate. Therefore, for a rapid development of the non-agricultural sectors, farm population remains the only dependable source of labour supply.

- ***The Product Contribution:*** The product contribution of agriculture has also two forms, namely; provision of wage goods and provision of industrial raw-materials. The agriculture sector must supply food above subsistence needs in order to feed labours working in the alternative occupation. If other sectors of the economy are to be developed, labours need to be fed. The agriculture sector also provides the raw-materials to the industrial sector. A study of the history of industrial development of advanced countries will show that the agro-based industries were the first to develop in such countries.
- ***The Market Contribution:*** The market contributionsof agriculture may take various forms. These are
  - *Expanded market for the products of other sectors:* Agricultural sector provides expanded market for the products of other sectors in the initial stages of economic development. A growing agricultural sector leads to the increase in income of its own

people which in turn increase the demand for the products of other sectors.

- *Flow of agricultural products to the other sectors of the economy:* With the growth of agricultural development, many institutions providing different services such as marketing, processing, packing, distribution etc will come into existence. The development of agro-based industries also depends on the growth of agricultural sector.
- *Development of International Trade:* Agricultural sector also helps to improve the balance of trade of domestic country by exporting the surplus production to the foreign country.

It is, thus, clear that agriculture plays a distinct and determining role in the overall process of economic development of a country.

4.3.1 Contribution of Agriculture in Indian Economy

Agriculture is considered as the backbone of Indian economy where a huge section of rural population solely depends on this sector. About 70 percent of the country's population directly or indirectly depend upon agriculture. The following are the important points which explain the role and contribution of agriculture in the Indian economy

- **Contribution in National Income:** Agricultural sector contributes significantly to the national income of India although it has been declining gradually with the growth of other sectors. In 1950-51, agriculture contributed 55 percent of the total national income. But the share has come down to 44 percent in 1970-71, 31 percent in 1990-91, 20 percent in 2005-06, 16.17 percent in 2015 and 15.96 percent in the year of 2019 (Table 4.1).

Table 4.1 Contribution of Agriculture in National Income

Year	Share of Agriculture in National Income (in percent)
1950-51	55
1970-80	44
1990-91	31
2000-01	26
2005-06	20
2010	17.03
2015	16.17
2019	15.96

Sources: Economic Survey,2006-07; RBI Annual Report 2006-07
World Development Indicators, World Bank, October 2020.

- **Largest Employment Providing Sector:** Agriculture in India is the major source of employment.Almost half of the total population is engaged directly with this sector. It is observed from Table 4.2 that percentage of working population in agriculture is decreasing over the years, but still a large portion are engaged in agriculture sector. In 1951, total working population was 13.95 crores out of which 69.7 percent were engaged in the agricultural sector. Over the years the total working population has increased to 48.19 crores. However, the share of the population engaged in agriculture has come down to 54.6 percent.

Table 4.2 Population and Wrokers engaged in Agriculture

(In millions)

Year	Total Population	Average Annual Exponential Growth Rate (%)	Rural Population	Total Workers	Agricultural Workers		
					Cultivators	Agricultural Labourers	Total
1951	361.1	1.25	298.5 (82.7%)	139.5	69.9 (71.9%)	27.3 (28.1%)	97.2 (69.7%)
1961	439.2	1.96	360.1 (82%)	188.4	99.5 (76%)	31.5 (24%)	131.5 (69.5%)
1971	548.2	2.20	439.0 (80.1%)	180.4	78.2 (62.2%)	47.5 (37.8%)	125.7 (69.7%)
1981	683.3	2.22	525.5 (76.9%)	244.6	92.5 (62.5%)	55.5 (37.5%)	148.0 (60.5%)
1991	846.4	2.16	628.7 (74.5%)	314.1	110.7 (59.7%)	74.6 (40.3%)	185.3 (59%)
2001	1028.7	1.97	742.5 (72.2%)	402.2	127.3 (54.4%)	106.8 (45.6%)	234.1 (58.2%)
2011	1210.9	1.50	833.7 (68.9%)	481.9	118.8 (45.1%)	144.3 (54.9%)	263.1 (54.6%)

Source: Registrar General of India (Pocket Book of Agricultural statistics, 2019)

Notes

1. For 2001, figures include estimated figures for those of the three sub-divisions viz. Mao Maram, Paomata and Purul of Senapati district of Manipur as census results of 2001 Census in these three sub-divisions were cancelled due to technical and administrative reasons.
2. The 1991 Census could not be held owing to disturbed conditions prevailing in Jammu & Kashmir. Hence the population figures for 1991 of Jammu & Kashmir have been worked out by 'interpolation'. The data on workers in exclude J&K.
3. The 1981 census could not be held in Assam. The figures for 1981 for Assam have been worked out by interpolation. The data on workers exclude Assam.

- **Earning of Foreign Revenue:** Agriculture plays an important role in International trade. Agricultural products like tea, coffee, rice, wheat, pulses, tobacco, spices, oil seeds, sugar etc. are the country's well-known export items.

Table 4.3 Year-wise Exports of Principal Agricultural Commodities

(Values in Rs. Crore)

Year	Agricultural Exports	Total Exports	Share of agricultural Exports in Total Exports (%)
1990-91	6012.76	32527.28	18.49
2000-01	28657.37	201356.45	14.23
2010-11	113046.58	1136964.25	9.94
2015-16	215396.32	1716384.39	12.55
2017-18	251563.94	1956514.52	12.86

Source: Directorate General of Commercial Intelligence & Statistics, D/o Commerce (Pocket Book of Agricultural Statistics, 2019)

- **Source of Food Supply:** Agriculture is the major source of food supply which is providing food to huge size of population in India. From Table 4.4it is clear that production of food grains in India increases over the years to meet required demand of food of the people. This sector also helps to reducing hunger and food security problem in the country.

Table 4.4 Year-wise Production of major agricultural Crops

(Million Tonnes)

Crop	1990-91	2000-01	2010-11	2015-16	2017-18
Rice	74.29	84.98	95.98	104.41	112.76
Wheat	55.14	69.68	86.87	92.29	99.87
Maize	8.96	12.04	21.73	22.57	28.75
Nutri Cereals	32.70	31.08	43.40	38.52	46.97
Total Food grains	**176.39**	**196.81**	**244.49**	**251.54**	**285.01**

Source: Directorate of Economics and Statistics (Pocket Book of Agricultural Statistics, 2019)

* 4th Advance Estimates # Million bales of 170 kg. each @ Million bales of 180 kg. each

- **Source of Industrial Development:** Agricultural sector also playsan important role in the development of industrial sector. This sector offers raw materials to various industries. Cotton and jute textiles, sugar, vanaspati, edible oil, plantation industries (viz.tea, coffee, rubber) and agro-based industries collect their raw materials from agricultural sector. The development of agro-based industries is possible only when the agriculture sector grows.

- **Development of Tertiary Sector:** Tertiary sector provides helpful services to the agriculture like banking, warehousing, marketing, processing, packaging, distribution etc. Internal trade mostly done in agricultural produce e.g. various means of transport get bulk of their business by movement of agricultural goods.
- **Source of Government Revenue:** Right from the first five year plan, Agriculture has been a major source of income of Government of India. Both state and central government earn substantial revenues from agricultural and allied activities. It also helps to improve the condition of balance of trade by increasing exports.



CHECK YOUR PROGRESS

Q 1: What are the major contributions of Agriculture Sector in Economic Development according to Kuznets? (Answer in about 150 words)

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4.4 PROBLEMS OF FOOD SECURITY

4.4.1 Concept of Food Security

Food security is a measure of availability of food and individuals' ability to access it. As a concept,food security originated in the mid 1970s, in the discussions of international food problems at a time of global food crisis. The initial focus, reflecting the global concerns of 1974, was on the volume and stability of food supplies.

Food security was defined in the 1974 by the World Food Summit as"availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices".

In 1983, Food and Agricultural Organisation(FAO) expanded this concept to include securing access by vulnerable people to available supplies, implying that attention should be balanced between the demand and supply side of the food security equation"ensuring that all people at all times have both physical and economic access to the basic food that they need". In 1986, World Development Report defined food security as "access by all people at all times to enough food for an active, healthy life".

There are four main dimensions of food security

a) Physical *availability*of food
b) Economic and physical *access* to food
c) Food *utilisation*
d) *Stability* of the above three dimensions over time.

4.4.2 Problem of Food Security

Problem of food security occurs when availability, access, utilisation of required food gets hampered under different conditions and stability of volume and prices of basic foodstuff gets disturbed. There are several reasons giving rise to problems of food security. Some of the reasons are as given under :

- **Excessive Growth of Population:**Excessive growth of population is regarded as one of the major factorsof the problem of food security. According to the United Nations data in 2020, India's population is 138 crores. Therefore, it is a difficult task to supply food to the huge population and ensuring food security for everyone in a country like India.
- **Lower Growth of Production of Food grains:** With the higher rate of increasing population, demand of the food grains also increases. But the production of the foodgrains is not increasing as much as required. So, it is the major hindrance to ensuring food security.

Table 4.5 Targets and achievements of production of Major crops

(Million Tonnes)

Crop	2015-16		2016-17		2017-18		2018-19*	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
Rice	106.10	104.41	108.50	109.70	108.50	112.76	114.0	116.42
Wheat	94.75	92.29	96.50	98.51	97.50	99.87	102.2	102.19
Nutri Cereals	43.20	38.52	44.35	43.17	45.65	46.97	48.1	42.95
Pulses	20.05	16.32	20.75	23.13	22.90	25.42	25.95	23.4
Total food grains	264.10	251.54	270.10	275.11	274.55	285.01	290.25	284.95

*4th Advance Estimates @Million Bales of 180kg. each # Million Bales of 170kg. each.
Source: Directorate of Economics & Statistics, DAC&FW(Pocket Book of Agricultural statistics, 2019)

- **Climate Change:** Climate change results in changes in average temperature and rainfall, changes in pests and diseases, changes in atmospheric carbon-di-oxide etc. which adversely affect the agricultural land use and production. Various reports indicate that climate change will lead to further intensification of temporal and spatial variation in the availability of water and extreme events of flood and drought. These, in turn, will cast impact on food security.
- **Crop Diversification:** In recent years there has been great emphasis of agricultural scientists on implementation of crop diversification. The price of food grains like rice and wheat are not encouraging and farmers end up getting very low return. By concentrating on other crops, the farmers intend to earn higher profits. Therefore, the supply of food grains cannot meet the increasing demand for food grains, and it adversely affects the food security.
- **Land Fragmentation**: Fragmentation of land is another important hindrance to ensuring food security. The increase in population over the years has led to reduction in availability of land for agriculture. There has been increased pressureon putting agriculture land into non agriculture uses to accommodate developmental activities leading to land fragmentation and low productivity.

- **Primitive Method of Cultivation:** A large number of Indian farmers are still applying primitive and outdated method in the cultivation process. They are not applying sufficient quantity of fertilizer in their land and also not using high yielding variety (HYV)of seeds. As a result, agricultural productivity has become low, and therefore country faces problem to ensure food security.
- **Mobility of Labours from Agricultural Sector:** Due to low income from agricultural activities, the labours are diversified to industrial sector and service sector for improving their standard of living. It has also affected negatively the agricultural sector, and results in low production of food grains. The following table clearly shows that the percentage of working population in agricultural sector declines gradually. In 1972-73,agriculture sector has 74 percent of its total working population, which has fallen to 68.1 percent in 1983, 63.9 percent in 1993-94, 53.2 percent in 2009-10, 45.67 percent in 2015 and 41.49 percent in 2020.

Table 4.6 Distribution of Working Force by Industry Division in India

Industrial Division	1972-73	1983	1993-94	2009-10	2015	2020
Agriculture (Agriculture forestry, fishing and hunting)	74.0	68.1	63.9	53.2	45.67	41.49
Industry (Mining and Quarrying, Manufacturing, Electricity gas and water, Construction)	11.2	13.9	14.9	21.5	24.06	26.18
Services (Wholesale and Retail trade and Restaurants and Hotels, Transport, storage and communication, Other services)	14.6	18.2	21.2	25.4	30.27	32.33
Activities not Classified	0.2	0.4	-	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures related to usual status of individuals.

Source : Datt & Sundharam's Indian Economy,2020

World Development Indicators, World Bank, October 2020.

- **Lack of Food storage Capacity:** It is also a main hindrance to ensuring food security. Due to lack of food storage capacity, significant amount of food grains are wasted every year. It also helps to raise the price level and poor people cannot afford it.



CHECK YOUR PROGRESS

Q 2: Define the term 'Food Security". (Answer in about 50 words)

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Q 3: Why food security is needed in a country like India? (Answer in about 150 words)

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4.5 PUBLIC DISTRIBUTION SYSTEM (PDS)

The Public Distribution System (PDS) was introduced to supply essential commodities at subsidised prices and maintain minimum standard of food security and nutrition status. It was considered as an essential element of Government's safety net to thepoor. Major commodities distributed include staple food grains, such as wheat, rice, sugar and essential fuels like kerosene, through a network of "Fair Price Shops" (also known as ration shops) established in several areas across the country. The FoodCorporation of India (FCI) was established in 1965 to run the network of PDS. FCI procures food grains from the farmers or producers at the Minimum Support Price (MSP).

4.5.1 Current Status of the PDS

- The PDS coverage was universal up to year 1992 with no discrimination between poor and non-poor. During that time

issue price of rice was Rs. 2.89 per kg and issue price of wheat was Rs. 2.34 per kg.

- In 1992, Revamped Public Distribution system (RPDS) was introduced in 1700 blocks in the country. This system was targeting remote and backward areas. A ration card holder family got 20kg of food grains at the issue price of rice and wheat at Rs.3.77& Rs.2.80 respectively.The system makes special efforts to deliver the commodities to the doorstep of the fair price shops which would be undertaken by the State Government wherever possible.
- From June 1997, Targeted Public Distribution system (TPDS) was introduced for targeting the poor all over the country. It was the first differential price policy adopted for poor and non-poor. All two categories, i.e. Below Poverty Line (BPL) and Above Poverty Line (APL) got 35 kg of food grains at different prices. For the people of BPL, issue price of rice and wheat were Rs. 5.65 and Rs. 4.15 respectively and issue price of rice and wheat were Rs. 8.30 and Rs. 6.10 respectively for the APL people.
- Further in 2000 and 2002, two special schemes were launched; "Antyodaya Anna Yojna (AAY)" and "Annapurna Scheme (APS)". AAY targeted to benefit 1crore poorest of the poor families out of a total of 6.52 crore BPL families under TPDS where APS targeted the indigent senior citizens. In AAY, people got 35 kg of food grains at the issue price of rice and wheat Rs.3 and Rs.2 respectively. The indigent senior citizens got 10 kg of food grains at free of cost under APS.
- The enactment of the National Food Security Act, (NFSA) on July 5, 2013 marks a paradigm shift in the approach to food security from welfare to right based approach. It aims to provide subsidised food grains to approximately two third of India's 120 crores population. The Act legally entitles up to 75 percent of rural population and 50 percent of urban population to receive subsidised food grains under TPDS. The NFSA also includes

Mid-Day Meal Scheme (MDM) and Integrated Child Development Scheme (ICDS) Services along with the PDS. All states and Union Territories have been asked for the inclusion of the eligible disabled persons as per benchmark fixed for NFSA beneficiaries to the National Food Security Act. Under the provision of NFSA, beneficiaries of the PDS entitled to 5kg per person per month cereals at the following prices Rice at Rs. 3 per kg, Wheat at Rs. 2 per kg and Coarse grains at Rs. 1 per kg.

4.5.2 The Working of the PDS

The existing structure of the PDS works in a Cooperative Federalist system in which both Centre and State share the responsibility.The Central Government is responsible for buying food grains from farmers at MSP. The Central Government then allocates the grains to each state on the basis of a pre-determined formula.The State Government is responsible for identifying the poor and eligible households in the states.The Centre transports the food grains to the Central depots (FCI) in each state. After that, the state government is responsible for delivering the food grains from the centre depots to the ration shops. The Ration shops are the ultimate end points from where the food grains are provided to PDS beneficiaries.

4.5.3 Advantages of PDS

- It has helped in stabilising food prices and making food available to consumers at affordable prices. It protects beneficiaries from inflation and price as well as volatility.
- It has helped in avoiding hunger and famine by supplying food from surplus region of the country to deficient region.
- The system of Minimum Support Price (MSP) and procurement has contributed to increase in food grain production.

- It helps to improve the health and nutritional status of the people of the country.
- It ensures income security to farmers.

4.5.4 Limitations of PDS

- The storage capacity of PDS food grains is limited. There is a lack of storage capacity to store the total supply of food grains.
- The storage of food grains need warehouses which inculcate high costs.
- Lack of proper storage facilities of food grains results in pest infestation causing wastage of the products.
- Adulteration by middlemen deteriorates the food grain quality in many cases.
- The eligible beneficiaries are sometimes excluded from getting food grains while undue benefits are enjoyed bynon eligible families.



CHECK YOUR PROGRESS

Q 5: What is the full form of FCI? When it was established?

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Q 6: What is NFSA? (Answer in about 100 words)

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4.6 LET US SUM UP

- Agriculture is the backbone of Indian Economy where 26.31 crores (as per data of 2011) of working population are directly engaged on this sector.

- According to Kuznets, agriculture makes three types of major contributions to the process of economic development. These are factor contribution, product contribution and market contribution
- The total food grains production in India reached 285.01 million tonnes in 2017-18.
- Agriculture sector contributes 15.96 percent to the total national income in 2019.
- In 2017-18, Agriculture sector has contributed 12.86 percent of total exports earning of the country.
- Agriculture sector plays an important role in the development of industrial sector by providing raw materials to various industries of the country.
- Food security means availability, accessibility and affordability of food to all the people at all times.
- There are four dimensions of food security food availability, food access, utilisation and stability.
- The Public Distribution System (PDS) is a national food security system that distributes subsidised food to poor people.
- On July 5, 2013, The National Food Security Act (NFSA) was introduced by Government of India. Under this act 75 percent of rural population and 50 percent of urban population are to receive subsidised food grains.



4.7 FURTHER READING

1. Datt, G. and Mahajan, A. (2020). *Datt & Sundharam's Indian Economy.* New Delhi S.Chand& Co.
2. Dhar, P.K. (2017). *Indian Economy Its Growing Dimensions.* New Delhi: Kalyani Publishers
3. Mishra, S.K. & Puri, V.K. (2018). *Indian Economy.* New Delhi: Himalya Publishing House.



4.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: According to Kuznets, agriculture makes three types of major contributions to the process of economic development. These are

(i) The factor contribution

(ii) The product contribution

(iii) The market contribution

Ans to Q No 2: Food Security means that all people at all times have physical and economic access to adequate amounts of nutritious, safe and culturally appropriate foods.

Ans to Q No 3: In a country like India where population growth and unemployment are the major problems of the country, a number of people are suffering from hunger. The need of the food security in India are mentioned below-

a) The poorest section of the society remains food insecure all the times.

b) People above poverty line might also feel food insecure in times of natural calamities like earthquake, drought, flood, tsunami etc.

c) To secure the health and nutritional status of the people of the country.

Ans to Q No 4: The full form of FCI is 'The Food Corporation of India'. It was established in 1965.

Ans to Q No 5: The National Food security Act (NFSA) is an act of Parliament enacted in July 5, 2013 which aims toprovide subsidised food grains to approximately two third of India's 120 crores population. The act legally entitles up to 75 percent of rural population and 50 percent of urban population to receive subsidiary food grains under TPDS.



4.9 MODEL QUESTIONS

A. Short questions (Answer each question in about 150 words)

Q 1: Discuss the major contributions of Agriculture Sector in Economic Development from the view of Kuznets.

Q 2: What is food security? Give some suggestions for achieving Food Security in India.

Q 3: What is PDS? How PDS can mitigate food insecurity in a country like India.

Q 4: What are the advantages and limitations of PDS ?

B. Essay Type Questions(Answer each question in about 500-700words)

Q 1: Discuss the major contributions of Agriculture Sector in Economic Development in the context of Indian Economy.

Q 2: Discuss the problems of food security.

Q 3: Explain the Public Distribution System of India.

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UNIT 5: CHANGING DYNAMICS IN INDIAN AGRICULTURE

UNIT STRUCTURE

5.1 Learning Objectives

5.2 Introduction

5.3 Diversification in Agriculture

- 5.3.1 Pattern of Diversification in Agriculture
- 5.3.2 Factors responsible for Agricultural Diversification
- 5.3.3 Drivers of Agricultural Diversification

5.4 Contract Farming

- 5.4.1 Meaning of Contract Farming
- 5.4.2 Beginning of Contract Farming in India
- 5.4.3 Regulatory Structure for Contract Farming in India
- 5.4.4 Models of Contract Farming

5.5 Subsidy to Farmers

- 5.5.1 Government Schemes and Policies for Subsidies
- 5.5.2 Types of Agricultural Subsidies

5.6 Agriculture and Environment

- 5.6.1 Relationship between Agriculture and Environment
- 5.6.2 Crop Residue Burning and Environment
- 5.6.3 Measures to reduce Agricultural Impact on Environment

5.7 WTO and Agriculture

- 5.7.1 WTO Agreement on Agriculture

5.8 Let Us Sum Up

5.9 Further Reading

5.10 Answers to Check Your Progress

5.11 Model questions

5.1 LEARNING OBJECTIVES

After going through this unit, you will be able to

- describe the factors responsible for agricultural diversification

- list out different models of contract farming
- know different subsidies provided to farmers
- analyse impact of agricultural practices on environment
- discuss the WTO agreement on agriculture.

5.2 INTRODUCTION

We have already seen that agriculture plays a pivotal role in Indian economy and provides employment to nearly half of the workforce in the country. However, over the past few decades the Indian economy has undergone a significant shift from agriculture to non agriculture sector. Despite this rapid shift, agriculture has been a way of life and continues to be an important sector in Indian economy due to its importance to food security, employment generation and poverty reduction especially among rural masses. The rapid population growth accompanied by strong urbanisation and a persistent rise in per capita income are likely to cause a significant transformation of the agricultural production, both in quantity as well as in quality. Indian agriculture has been changing from its inception. Green Revolution has showed the importance oftechnological advancements, supporting institutions like credit, land reforms as well as incentives like prices as drivers of growth in Indian agriculture. During 1990s, Indian agriculture marked a shift from cereal based production systems towards production of high value crops. However, because ofstressed situations in food security during the first decade of the 21st century, policy emphasis was placed again on cereal-based productionsespecially rice and wheat.

Nevertheless, diversification of agriculture towards high value crops intensified by rapid urbanisation and rise in per capita income has emerged as the important factors bringing dynamism to Indian agriculture.

5.3 DIVERSIFICATION IN AGRICULTURE

Diversification is an integral part of the process of structural transformation of aneconomy. In the field of agriculture, the term 'diversification' is in frequent usefor last few decades. What does diversification actually means?

Diversification is basically adopted to accelerate the positive economic growth and development. Agricultural diversification can be described in terms of shift from monoculture to mix culture of crops, animals and their products. There are various factors that trigger the process of diversification in agricultural sector. Agriculture growth during the period of green revolution, was largely achieved by supply driven policy instruments such as irrigation, power, extension services, price support whereas in the post reform period the agriculture growth has been demand driven. Rapid urbanisation, increase in per capita income and globalisation are some key catalysts to accelerate the dramatic shift of people's choice of dietary consumption away from staples towards High Value Commodities(HVC) like livestock, dairy products, vegetables and fruit,fats and oils . To generate higher income and employment in agriculture sector, diversification of farm activities is emerging as an important instrument.

5.3.1 Pattern of Diversification in Agriculture

There are, generally, two types of diversification in agriculture:

- Horizontal Diversification: It is the primary pattern of diversification; wherediversification takes place through crop intensification. It is the diversification from single crop to multiple crops, where one or more high value crops are added to the existing cropping system.
- Vertical Diversification: It refers to incorporation of some non-crops areas like animal husbandry, forestry and fisheries along with main crops. It is basically the diversification from monoculture to use of various resources in harmony within agriculture.

5.3.2 Factors responsible for Agricultural Diversification

There are various factors and agricultural diversification is the result of interactive effect of all factors. These include

- Environmental factors likerainfall, temperature, climatic condition and soil fertility

- Price-related factorslike output and input prices with respect to national and international trade policies and other economic policies affecting the prices either directly or indirectly.
- Technological factors which include use of hybrid seeds, fertilisers and water technologies, as well as those related to marketing, harvest, storage, agro-processing etc.
- Household-related factors which include regional food, fodder and fuel as well as the labour and investment capacity of farm people and their communities.
- Institutional and Infrastructural factors like farm size, location and tenancy arrangements, research, in-field technical support, marketing systems and government regulating policies, etc.

5.3.3 Drivers of Agricultural Diversification

Consumers'demand: For the last few decades people's dietary pattern has changed from consumption of only staple items towards consumption of animal proteins, dairy products, fruits and vegetables. To meet those needs, emphasis is given on diversification of crops from only staple to other types.

- **Demography:** Rapid urbanisation results in large scale conversion of agricultural land to other uses. Due to the lack of cultivated areas, farmers have to shift their cropping pattern from cultivation of staple towards cultivation of high value but low volume crops.
- **Climate:** Extreme temperature, erratic rainfall, frequent and intensive flood, cyclone and other natural eventsarising out of climate change have cast distinct and severe impact on agriculture. In such scenario, diversification of agricultural system may reduce the impacts.



CHECK YOUR PROGRESS

Q 1: Define Horizontal Diversification.

.....

.....

Q 2: Mention few environmental factors responsible for agriculture diversification.

.....

.....

5.4 CONTRACT FARMING

5.4.1 Meaning of Contract Farming

Contract farming can be defined as the production and supply of agricultural products according to agreements made between farmers and processing and/or marketing firms at predetermined prices. In contract farming, the purchaser also provides a degree of production support, for example, the supply of inputs and the provision of technical advice. There is commitment on the part of the farmer to provide best commodity in respect to quantity and quality determined by the purchaser and a commitment on the part of the company to support the farmer's production and to purchase the commodity from the producer.

The following three areas determine the intensity of the contractual arrangement

- **Market provision***:* There should be agreement between the grower and buyer with regard to theterms and conditions for the future sale and purchase of a crop or livestock product;
- **Resource provision***:* In addition to the marketing arrangements, the buyers must agree to supply specific inputs including land preparation and technical advice to the producers

- **Management specifications***:* The grower agrees to follow recommended production methods, inputs regimes, and cultivation and harvesting specifications by the buyers

5.4.2 Beginning of Contract Farming in India

Contract Farming is not a new concept in India. It dates back to the British colonial period in India where plantation of cash crops like tea, coffee, rubber, poppy and indigo was done under contract farming. In 1920s, Imperial Tobacco Corporation (ITC) introduced the first documented large-scale contract farming operation in coastal Andhra Pradesh. But, contract farming in India gained impetus after introduction of tomato contract farming by PepsiCo during early 1990's with over 400 farmers in Punjab.

Table 5.1: Milestones of Contract Faming in India

Year	Milestones
1850s - 1860s	Cotton exported to Britain after disruption of US supplies.
1860s	Plantations for tea and coffee in the hills of the North-east and in the South, indigo and poppy cultivation in plains
1910s	Distress and unrest among indentured contract farmers
1930s	Virginia tobacco contract farming in Andhra Pradesh
1948-50	Sugar co-operatives emerge in Maharashtra and milk co-operatives in Gujarat incorporating many elements of contract farming
1950s	Emergence of seed business based on contract farming
1980s	Popular introduction through contract farming; also tomato contract farming
1990s	Tomato introduced in Punjab through contract farming
2000s	Variants of contract farming introduced for wheat in MP and crop diversification in Punjab; emergence of specialist contract farming firms
2003-04	Contract farming accepted in new policy framework for agriculture reforms

Source: NABARD Occasional paper-42

5.4.3 Regulatory Structure for Contract Farming in India

In India Contract Farming is regulated under the Indian Contract Act 1872 which has many general provisions in respect of contract farming like formation of contract, obligations of parties and consequences in case of violation of contract. In addition to that, the Model APMC (Agricultural Produce Marketing Committee) Act, 2003 provides provision of registration of contract farming sponsors, recording of their agreements and proper dispute settlement mechanism for orderly promotion of contract farming in the country. So far, 20 states (Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Maharashtra, Madhya Pradesh, Mizoram, Nagaland, Odisha, Rajasthan, Sikkim, Telangana, Tripura and Uttarakhand) have amended their APMC Acts to provide for contract farming, while Punjab has a separate law on contract farming. However, only 14 states have notified rules related to contract farming, as of October 2016.

The Department of Agriculture and Farmer's welfare formulated a Model Contract Farming Act, called "The State / Union Territory Agricultural Produce and Livestock Contract Farming (Promotion and Facilitation) Act", 2018. Very recently, a new Act has been passed as the Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020. This Act provides for a framework for contract farming through an agreement between a farmer and a buyer prior to the production or rearing of any farm produce. It provides for a three-level dispute settlement mechanism: the conciliation board, Sub-Divisional Magistrate and Appellate Authority.

5.4.4 Models of Contract Farming

- **Centralised model:** This model involves contracting company who provides requisite supports to the farmers for production of selected crops. Under this model, the contracting company

purchases the crop from the farmers, and then processes, packages and markets the product. This type of farming is quite famous in high value crops like tobacco, cotton, sugarcane, banana etc.

- **Nucleus Estate Model:**It is the modified version centralised model where, contracting company manages central estate or plantation. The central estate is usually used to guarantee through output for the processing plant but is sometimes used only for research or breeding purposes. Typical example of crops for this model is tree, perennials and sometimes fresh vegetables.
- **Multipartite Model:** In this model, the involvement of multiple organisations is common featureswhere statutory body or state agencies and private companies jointly participate with farmers.
- **Informal model:** This model includes small entrepreneurs or companies who enter into informal contracts with farmers on a seasonal basis which mainly includes crops like fresh vegetables, watermelons or tropical fruits etc. Material inputs are mainly limited to fertilisers and seeds. A common example of the informal model is where the company, after purchasing the crop, simply grades and packages it for resale to the retail trade such as supermarkets, etc.
- **Intermediary Model:** Under this model, companies make formal sub-contracts with intermediaries (like agents, farmer groups or NGOs) for production of crops. The intermediaries generally enter into informal contracts with farmers to meet the obligations under formal contract with companies.



CHECK YOUR PROGRESS

Q 3: In which state of the Country, first documented large scale contract farming was introduced?

.....

.....

Q 4: In India, Contract Farming is regulated under .....

Q 5: In which model of contract farming involvement of multiple organisations is a common feature?

.....

.....

Q 6: Choose the correct answer

a. Among the following states, which state has separate contract farming act (Assam/Punjab/Gujrat/Andhra Pradesh)

.....

5.5 SUBSIDY TO FARMERS

Subsidy is derived from Latin word "*Subsidium"* meaning is to provide support. Thus, subsidy can be defined as a support given by the Government to individuals orbusinesses in the form of cash, grants that improve the supply of certain goods and services. An agricultural subsidy is a financial support provided by Government to farmers and agribusinesses to increase their income, manage the supply of agricultural commodities, and influence the cost and supply of such commodities.

5.5.1 Government Schemes and Policies for Subsidies

In India, central as well as state governments are providing subsidies on fertilisers, irrigation, electricity and other subsidies to marginal farmers and farmers' cooperative societies in the form of seeds, development of oil seeds, pulses, cotton, rice, maize and crop insurance schemes and price support schemes etc. for better development of agricultural sector. The Department of Agriculture & Cooperation, Government of India, has been implementing various

schemes and programmes under which these subsidies are provided for the benefit of farmers through State Governments. RashtriyaKrishiVikasYojana (RKVY 2007), National Mission on Agricultural Extension & Technology (NMAET 2010), National Food Security Mission (NFSM 2007), Mission for Integrated Development of Horticulture (MIDH 2014), National Horticulture Mission (NHM 2005), National Mission on Oilseeds and Oil Palm (NMOOP 2010), Cotton Technology Mission (CTM 2000) are some of the schemes being implemented to help the small and marginal farmers to help reduce their cost of cultivation, increase profit and encourage diversification. The subsidies under various schemes are given in the form of inputs such as seed, fertilisers, plant protection materials, farm machinery, micro-irrigation units and credit.

5.5.2 Types of Agricultural Subsidies

- **Input subsidy:** It means distribution inputs at price lower than the original price of the inputs.Several varieties of subsidies can be included in this group like fertiliser, power, irrigation, seed, and credit subsidies.
- **Price subsidy:** The market price may be so low that the farmers will have to bear losses instead of making profits. In such a case, the government may promise to buy the crop from the farmers at a price which is higher than the market price.
- **Infrastructure subsidy:** To keep both production and sale operations in harmony good roads, storage facilities, power, information about the market, transportation to the ports, are essential. As these facilities are in the domain of public goods, the cost is high. No farmer will come forward to provide these facilities because of their large size and inherent problemsrelated to revenue collections. Therefore, Government takes the responsibility of providing the public goods and given the condition of Indian farmers so that, a lower price can be charged from the poorer farmers.

- **Exportsubsidy:** When a farmer or exporter sells agricultural products in foreign market, he earns money for himself, as well as foreign exchange for the country. Therefore, agricultural exports are generally encouraged as long as these do not harm the domestic economy. Subsidies provided to encourage exports are referred to as export subsidies.



CHECK YOUR PROGRESS

Q.7: The word subsidy is derived from a Latin word .....

Q.8: Which Department of Government of India, has been implementing various schemes and programmes under which these subsidies are provided for the benefit of farmers .....

Q.9: What is "Green box subsidy" ?

.....

.....

5.6 AGRICULTURE AND ENVIRONMENT

5.6.1 Relationship between Agriculture and Environment

Agriculture and Environment have always been closely related. Agriculture is important system to provide food and fibre but agricultural practices has particular impact on environment. In the prehistoric era, humans used to survive by hunting and collecting food. But when human communities started domestication of animals, their impact on environment was accelerated. Since that era, human agricultural activity has continued to intensify, and over the last 150 years the rate of intensification has accelerated significantly.Water, soil, air and biodiversity are the common domains for all the agricultural activities and any environmental impact as a result of agricultural activities would reflect in these common domains. Agricultural activitiesare beneficialas

well as harmful to the environment. Agricultural activities are helpful in increasing the water storage capacity of certainagricultural systems which may improve problems of soil erosion, landslides, biodiversity loss and flooding. Excessive use of fertilisers, pesticides has negative impact on soil as well as environment.Agriculture is responsible for around 16 percent of India's GHG emissions. Methane is largely emitted from livestock mainly cows and buffalo, paddy cultivation, and biomass burning. N_2O emissions originate from fertilisers, animal urine, waste storage sites, biomass burning and fossil fuel use. However, Agriculture also act sink of GHGs through fixation of carbon by crop and pasture land.

5.6.2 Crop Residue Burning and Environment

With year round crop production, India generates large amount of agricultural waste including crop residues. Crop residues burning has became an alarming issue that accelerates air pollution in Delhi and other northern states most especially in and after the year 2015. According to the Indian Ministry of New and Renewable Energy (MNRE), India generates on an average 500 million tons of crop residue per year. As per National Policy for Management of Crop Residue (NPMCR,) majority of the crop residue is used as fodder, fuel for other domestic and industrial purposes. However, there is still a surplus of 140 Mt out of which 92 Mt is burned each year.Large scale burning of residues increases CO_2, CO, N_2O and NO_x in the atmosphere casuing air pollution. In last few years, the air quality in the northern India has deteriorated to nearly twice the permissible Indian standard and ten times higher than the WHO standard.

Table 5.2: Agricultural waste generation in India compared to other select nations in the same region

Country	Agricultural Waste Generated (million tons/year)
India	500
Bangladesh	72
Indonesia	55
Myanmar	19

The Indian Government has taken various measures torestrict the amount of crop residue burning and promoteusing crop residue in the energy sector as a raw material. The Indian Agricultural Research Institute (IARI), Indian Ministry of New and Renewable Energy (MNRE) are continuously promoting research and innovative measures to handle crop waste without burning. The National Policy for Management of Crop Residue (NPMCR) recently formulated by the Central Government, has laid out policies and regulations to be undertaken by the local agencies emphasising to restrain crop burning and promote sustainable management practices. The National Remote Sensing Agency (NRSA) and the Central Pollution Control board (CPCB) now monitor crop burning through aerial surveillance and penalise farmers for burning crops.

5.6.3 Measures to reduce Agricultural Impact on Environment

- **Reducing Pesticide Pollution:** Integrated Pest management (IPM)can be considered as agood practice forcontrolling pests. IPM is suitable to control the pest population and minimise risks to human health and environment.
- **Promotion of Organic Farming:** It is not like that organic farming does not have any negative impact on environment. Improper use of manure, for example overuse of manure or badly managed applications can increase ammonia in the air and nitrate in groundwater. To promote organic farming

emphasis should be given on establishment of an internationally agreed accreditation mechanism, government support to the farmers willing to switch to organic farmingetc

- **No tillage/Zero tillage practice or conservation agriculture:** Tillage operation during soil preparation for crop cultivation leads to degradation of soil structure and thus results in less recharge of ground water. Conservation agriculture can be beneficial in such condition and government policies need to be directed towards conservation agriculture.

5.7 WTO AND AGRICULTURE

5.7.1 WTO Agreement on Agriculture

The Agreement on Agriculture (AoA), came in to force on 1st January, 1995 after its negotiation in Uruguay Round (1986-1994). Prior to WTO, agriculture has been covered by General Agreement on Tariffs and Trade (GATT). But it had some loopholes like it allowed countries to use some non-tariff measures such as import quotas, and subsidy. Agricultural trade became highly deformed, especially by means of using export subsidies which was not normally allowed for industrial products.The Uruguay Round produced the first multilateral agreement dedicated to the sector.This agreement is to establish a fair and market-oriented agricultural trading system. Agreement comprises specific commitments to reduce support and protection in the areas of domestic support, export subsidies and market access.

The WTO Agreement on Agriculture (AoA), 1995 permitted the developed countries to continue to provide farm subsidies, but under certain restrictions. In WTO terminology, agricultural subsidies have been segregated into various 'boxes':

- Green Box subsidies – It includes amounts spent on research, disease control, and infrastructure and food security. These also include direct payments made to farmers such as income support that do not stimulate production.

- Blue Box subsidies– It includes direct payments to farmers to limit production and certain government assistance to encourage agriculture and rural development in developing countries. Blue Box subsidies are seen as being trade distorting.
- Amber Box subsidies – It includes all agricultural subsidies that do not fall into either blue or green boxes. These include government policies of Minimum support Prices (MSP) for agricultural products or any help directly related to production quantities (e.g. power, fertilizer, seeds, pesticides, irrigation, etc.).



CHECK YOUR PROGRESS

Q.10: Agriculture is responsible for around ..... of India's GHG emissions

Q.11: How much amount of crop residue is generated in India per year?

.....

Q 12: Write few categories of input subsidy.

.....

.....



5.8 LET US SUM UP

- Diversification is an integral part of the process of structural transformation of an economy. In the field of agricultural development, the term 'Diversification' is most frequently used term since last few decades.
- Agricultural diversification can be defined in terms of shift from monoculture to mix culture of crops, farming of animals and their products. The Process of agriculture diversification is triggered by various factors like environmental, price related, household and infrastructure. Drivers of agriculture diversification include consumer demand, demographics changes, climate etc.

- Contract farming means the production and supply of agricultural products according to agreements made between farmers and processing and/or marketing firms at predetermined prices. Three areas determine the intensity of the contractual arrangement which is: Market provision, resource provision and resource specification. Very recently, a new Act has been passed as the Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020. This Act provides for a framework for contract farming through an agreement between a farmer and a buyer prior to the production or rearing of any farm produce.
- Though Contract farming is an old practice in India,but it gained impetus after introduction of tomato contract farming by PepsiCo during early 1990 s with over 400 farmers in Punjab.
- In India Contract Farming is regulated under the Indian Contract Act 1872. In addition to that, the Model APMC (Agricultural Produce Marketing Committee) Act, 2003 provides provision of registration of contract farming sponsors, recording of their agreements and proper dispute settlement mechanism for orderly promotion of contract farming in the country.
- Recently, the Department of Agriculture and Farmer's welfare formulated a Model Contract Farming Act, called "The State / Union Territory Agricultural Produce and Livestock Contract Farming (Promotion and Facilitation) Act", 2018.
- An agricultural subsidy is a financial support provided by Government to farmers and agribusinesses to increase their income, manage the supply of agricultural commodities, and influence the cost and supply of such commodities. Agricultural Subsidies can be categorised in to input subsidy, price subsidy, infrastructure subsidy and export subsidy.
- Agricultural activities are helpful in increasing the water storage capacity of certainagricultural systems which may improve problems of soil erosion, landslides, biodiversity loss and flooding. Excessive use of fertilizers, pesticides has negative impact on soil as well as

environment. Agriculture is responsible for around 16% of India's GHG emissions.

- Crop Residue burning is a major reason for alarming air quality degradation in Delhi and other northern states. The government has taken various measures to restrict this residue burning and promoted to use these residues in energy sector as row materials.
- The implementation of the Agreement on Agriculture started on 1st January, 1995. In WTO terminology, agricultural subsidies have been segregated into various 'boxes': Green box subsidies, blue box subsidies and Green box subsidies.



5.9 FURTHER READING

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5.10 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: It is the primary pattern of diversification, where diversification takes place through crop intensification. It is the diversification from single crop to multiple crops, where one or more high value crops are added to existing cropping system.

Ans to Q No 2: Irrigation, rainfall, and temperature and soil fertility.

Ans to Q No 3: Andhra Pradesh

Ans to Q No 4: Indian Contract Act 1872

Ans to Q No 5: Multipartite Model

Ans to Q No 6: Punjab

Ans to Q No 7: *Subsidium*

Ans to Q No 8: The Department of Agriculture & Cooperation,

Ans to Q No 9: Fertilizer, power, irrigation, seed, and credit subsidies.

Ans to Q No 10: 16% of India's GHG emissions

Ans to Q No 11: 500 Million tons.

Ans to Q No 12: It includes amounts spent on research, disease control, and infrastructure and food security.



5.11 MODEL QUESTIONS

Short Questions: (Answer each question in around 150 words)

Q 1: Make a list of factors responsible for agricultural diversification.

Q 2: What are the different models of Contract farming. Describe in brief the Nucleus Estate model.

Q 3: What are the three broad areas of agriculture and trade policy on whichWTO Agreement on Agriculture contains provisions/? Write a note on Amber box Subsidies.

Long Questions: (Answer each question in around 300-500 words)

Q 1: Discuss in details about subsidy to farmers.

Q 2: Discuss various drivers of Agricultural diversification.

Q 3: Define Contract farming. Discuss when and how did contract farming start in India.

Q 4: "Crop Residue burning is an alarming issue for the environment" Justify.

Q 5: Discuss in details about the WTO agreement on Agriculture. Describe the categories of agricultural subsidies in WTO terminology.

*** ***** ***

UNIT 6: INDIAN INDUSTRY

UNIT STRUCTURE

6.1 Learning Objectives

6.2 Introduction

6.3 Growth and Pattern of Industrialisation

- 6.3.1 Industrial Pattern on the Eve of Planning
- 6.3.2 Industrial Pattern and the Five Year Plans
- 6.3.3 Structural Transformation of Indian Industries

6.4 Industries having India's Comparative Advantage

- 6.4.1 Some Large Scale Industries in India
- 6.4.2 Information Technology and Knowledge Economy
- 6.4.3 Small Scale Enterprises

6.5 Industrial Sickness in India

6.6 Disinvestment

6.7 Let Us Sum Up

6.8 Further Reading

6.9 Answers to Check Your Progress

6.10 Model Questions

6.1 LEARNING OBJECTIVES

After going through this unit, you will be able to –

- discuss the meaning of industrialisation and the need for industrialisation in India
- outline the pattern and changes brought about in the industrial sector of India
- trace out the industries having comparative advantage in India and also the problems faced by them
- discuss the initiatives undertaken by the Government to deal with industrial malfunctioning.

6.2 INTRODUCTION

Industrialisation has a major role to play in the economic progress of a country. It is evident from studies that nations with industrial advancements are at an advantageous position in terms of their per capita income. The gap in per capita income between the developed and underdeveloped countries is largely reflected in the disparity in the structure of their economies; the former are largely industrial economies while in the latter production is confined predominantly to agriculture. Some countries like Saudi Arabia, Kuwait have witnessed high per capita income by virtue of their natural resources endowments and enjoying the advantage of international trade. However, industrialisation is a key to achieve economic growth.

Now, the question might come to your mind regarding what exactly is industrialisation? Industrialisation is the process by which the centre of gravity of an economy shifts from agriculture to industry with the use of technology and modern methods. It results in improvement in infrastructure, urbanisation, economic growth, employment opportunities and standard of living. Now you must be thinking why do we need industrialisation? In India, with the increase in population, the agriculture sector has been suffering from diminishing return which is instrumental in creating the trap of poverty. In order to break this vicious cycle, the essential precondition for development is a marked shift from the low productivity occupations to high productivity occupations. In general, the net value of output per person is higher in industry than in agriculture. In industry, the scope for internal as well as external economies is greater than in other sectors and certainly greater than in agriculture. As industrialisation proceeds, it leads to the creation of economic surplus in the hands of industrial producers for further investment. Besides, the process of industrialisation is associated with the development of mechanical knowledge, attitudes and skills of industrial work, with experience of industrial management and with other attributes of a modern society which in turn, are beneficial to the growth of productivity in agriculture, trade, distribution and other related sectors of the economy. As

a consequence of these factors, any successful transfer of labour from agriculture to industry contributes to economic development. Industrialisation is thus inseparable from substantial, sustained economic development because it is both a consequence of higher income and a means of higher productivity. Industrialisation acts as an instrument both of creating capacity to absorb excess labour and of catering for the diversification of the market required at higher stages of economic development.



CHECK YOUR PROGRESS

Q 1: What is meant by industrialisation?

.....

.....

Q 2: State the need for industrialisation in India?

.....

.....

Q 3: When did the planning process begin in our country?

.....

.....

6.3 GROWTH AND PATTERN OF INDUSTRIALISATION

6.3.1 Industrial Pattern on the Eve of Planning

Before the rise of the modern industrial system, the Indian manufacturers had a world-wide market. Indian muslin and calicoes were in great demand all over the world. Indian industries besides fulfilling the local demands also enabled India to export its finished products. Indian exports consisted of manufactures like cotton and silk fabrics, calicoes, artistic ware, silk and woollen cloth. The impact of the British connection and industrial revolution led to the decay of Indian handicrafts and made ways for the machine-made goods to the Indian markets. The void created by decay of Indian handicrafts was not filled by the rise of modern industry in India because of the British had the policy of encouraging the import of manufactures to

India and export of raw materials from India. The British Government in India provided discriminating protection to some selected industries since 1923. This protection was accompanied by the most favoured nation clause for British goods. Despite this factor, some industries such as cotton textiles, sugar, paper, matches and to some extent iron and steel did make progress. During the British period no effort was made to improve the development of capital goods industries, instead the British Government put definite hindrances in their development. Basic features of structure of Indian industries on the eve of planning was marked by low capital intensity, limited development of medium sized factory enterprises and imbalance between consumer goods and capital goods industries.

6.3.2 Industrial Pattern and the Five Year Plans

The planning process initiated in our country in the year 1951. The Government of India recognised the significant contribution industrialisation could make to the development process and thereby emphasised on improving the industrial sectors in the five year plans.

First Five Year Plan(1951-56*)*: The main objective of the first year plan was on agricultural development.Therefore, the importance was given on existing industries like cotton, wool and jute textiles, cement, paper, medicines, paints, sugar etc. rather than the establishment of new industries.

Second Five Year Plan(1956-61): This plan gave importance to the establishment of heavy industries. The ideals of industrialisation under this plan were based on the Industrial Policy Resolution of 1956 which aimed at expansion of the public sector. Three new iron and steel plants were built, Bhilai Steel Plant in Madhya Pradesh, Durgapur Steel Plant in West Bengal and Rourkela Steel Plant in Orissa. The other programmes of industrial development included the manufacture of electrical equipments, expansion of Hindustan Machine Tools, expansion of Sindri Fertiliser factory and the establishment of a fertiliser plant at Nangal, further expansion of Hindustan Shipyard and Chittaranjan Locomotive factory.

Third Five Year Plan(1961-66): There was an emphasis on the expansion of basic industries like iron and steel,fossil-fuel and machine building. The aim was to make the economy self-sustaining in producers' goods industries such as steel, machine building, etc., so that the quantum of external assistance needed could be reduced to a very low level. The Ranchi Machine Tool and three more units ofHindustan Machine Tools Limitedwere established for Machine building, Locomotive and Railway coach making.

Fourth Five Year Plan(1969-74): The fourth plan intended to complete industrial projects undertaken in the Third Plan. It also aimed to enlarge capacities in export promotion and import substitution industries. Industries like sugar,cotton, jute,vanaspathi,metal based and chemical industries were given much importance and during this plan, much progress was made in alloys, tools aluminium, electronic goods, machine tools, tractors and special steel.

Fifth Five Year Plan(1974-79): Programmes of industrial development in the fifth plan were formulated keeping in view the objectives of self-reliance and growth with social justice. The main emphasis was given to the rapid growth of steel plants and exports.The Steel Plants at Salem, Vijayanagar and Visakhapatnam were proposed to create additional capacity. Moreover, drug manufacturing, oil refining, chemical fertilisers and heavy engineering industries made steady progress.

Sixth Five Year Plan(1980-85): The main objective of this plan was on producing goods to exploit the domestic and international markets and priority was given to industries like aluminium, automobiles, electric equipment and thermostats. Production targets were achieved in industries like commercial vehicles, drugs, T.V.,automobiles, cement, coal, jute industry, railway wagons, sugar industry etc.

Seventh Five Year Plan(1985-90): Industrial dispersal, self-employment, exploitation of local resources, efficient use of existing

capacity as well as the establishment of new power stations including super thermal and nuclear plants, technology up-gradation, encouragement of 'sunrise' industries such as telecommunications, computers, micro-electronics, ceramic composites and bio-technology, preferring industries and proper training were the preference areas of the plan.

Eighth Five Year Plan (1992-1997): The Eighth Plan was formulated under a new environment when a number of reforms in industrial, fiscal, trade and foreign investment policies were introduced in the economy commonly called as economic liberalisation. In the context of the new Industrial Policy of July 1991, the role of the public and private sector was reviewed. During this period, the private sector gained momentum and foreign investors were encouraged. Emphasis was given on the removal of regional imbalances and encouraging the growth of employment in small and tiny sectors. However, the industrial growth was slow as the Indian industries were not prepared to face foreign competition since they had been operating on a totally protected environment for decades. Inadequate infrastructure, management mismatch are other factors that affected the growth of Indian industries during this period.

Ninth Five Year Plan(1997-2002): The Ninth Plan targeted a growth rate of 8 per cent for industry, but realised growth rate was only 5.0 per cent which was even lower than the growth rate of 7.3 per cent realised in the Eighth Plan. In this way, it may be stated that the Ninth Plan was a failure. As against the target of 5.9 per cent for mining, the realised growth rate was barely 2.5 per cent. Similarly, achievement in manufacturing was 5.3 per cent as against the target of 8.2 per cent and in electricity; the realised growth rate was 5.5 per cent as against the target of 9.3 per cent.

Tenth Five Year Plan(2002-2007): During this plan, the main emphasis was on modernisation, technology enhancement,reducing transaction costs, increasing exports and global competitiveness

and also to achieve balanced regional development. 10th Plan states that Industrial performance in this period improved to a respectable level of 8.9 per cent from the very low level of growth rate of 5 percent in the Ninth Plan.

Eleventh Five Year Plan (2007-12): This Plan gave priority to industry,infrastructure, and employment.The plan recognised the importance of a rapid industrial development in order to bring a faster reduction in poverty, generate employment opportunities and ensure essential services such as health and education to all sections of the society.

Twelfth Five Year Plan (2012-2017): The planning commission prioritised the concept of "inclusive growth" which was originally initiated in the eleventh plan. It was expected that this plan would help to create employment through developing India's manufacturing sector and move the nation higher up the value chain which would be a boon for Industries.

6.3.3 Structural Transformation of Indian Industries

Since 1951, industrialisation has been an important feature of the economic development of our nation. Industrial Policy Resolution of 1956, its implementation throughout the five year plans resulted in increase in investments in capacity of a wide range of industries. The industrial sector has been highly diversified covering broadly the entire range of consumer, intermediate and capital goods. The progress India has made in the field of industrialisation is clearly reflected in the commodity composition of India's foreign-trade in which the share of imports of manufactured goods has steadily declined; on the other hand, industrial products, particularly engineering goods have become a growing component of India's exports. Finally, the rapid stride in industrialisation has been accompanied by a corresponding growth in technological and managerial skills for efficient operation of the most sophisticated industries and also for planning, designing and construction of such industries.

A major achievement in the industrial sector has been the diversification of India's capability. India has attained self sufficiency in almost all consumer goods and the growth of capital goods has also been impressive. An impressive industrial capacity has been achieved in mining and metallurgical industries, chemical and petrochemical industries, fertiliser production, capital goods industries including sophisticated equipment for steel mills, fertiliser plants, chemical plants, etc. light, medium and heavy engineering industries, power and transportation industry, construction industry, etc. The infrastructure including R and D capability, consultancy and design engineering services, project management services and innovative capacity to improve and adapt technologies have indeed shown an impressive record of progress.The strategy adopted by Indian planners consisted of accelerated industrialisation with a base of heavy industry. Such a strategy required development of high technological capability which in turn required the promotion and creation of engineering sector.For instance, the engineering industry alone could provide the base for the industrialisation thrust contemplated in Indian planning. A broad-based industrial structure could not be sustained except on the basis of a strong, vibrant, growth-oriented engineering sector. At the same time, the engineering industry was encouraged to develop indigenous skills and know-how and reduce dependence on imported technology. Above all, our planners recognized that technological skills and expertise alone could lead to high productivity levels and consequently to high levels of incomes. The engineering industry was, therefore, promoted to act as a catalytic agent for over-all economic development.

6.4 INDUSTRIES HAVING INDIA'S COMPARATIVE ADVANTAGE

6.4.1 Some Large Scale Industries in India

Now you are going to study about few large scale industries of India. They are as follows-

- **Iron and steel industry-**The first Prime Minister of India, Jawaharlal Nehru termed steel to be a symbol of strength of the economy and as a sign of the glory of India in the future. India has made intrinsic advantages in the production of steel. Some of the richest iron ore content is to be found in India. Steel and iron ore are found in proximity to one another.As per World Steel Association data, India became the second largest steel producer of crude steel after China in 2018 and 2019, by replacing Japan. The Steel Authority of India Limited (SAIL) was introduced in 1974 and was made responsible for the development of the steel industry and also for the major inputs for the industry.

  An important feature of the growth of iron and steel industry is the growth of research, design and development within the country. The reforms in the iron and steel sector consisted of liberalisation of import and export of steel materials, abolition of price and distribution controls and successive reduction of import duties on iron and steel products. The Government has also removed barriers pertaining to the private sector. The iron and steel industry is now facing a competitive environment.

- **Cotton and synthetic textile industry-** The cotton textile industry is one of the oldest and most firmly established major industries of our country. The textile industry comprises of highly mechanised mill sector on one hand and the hand spinning and hand weaving (handloom) sector on the other hand with the decentralised power loom sector in between. India has opportunities in textile industry to grow globally given its low

cost of labour. The Indian textile industry is predominantly cotton - based with 65 per cent of the cloth production in the country being accounted for by cotton. Production of raw cotton varies from year to year depending upon rainfall and weather conditions, and price fluctuations in raw cotton affect the industry.

Problem of raw materials, obsolete machinery and need for modernisation, high costs and competition in foreign markets, etc. have influenced the cotton and textile industry. India has a natural competitive advantage in terms of a strong and large multi-fibre base, abundant cheap skilled labour and the entire range from spinning, weaving and manufacture of garments. But, emergence of intense competition, especially from China, India's advantages in the textile sector may not be adequate. Accordingly, the Government is encouraging the industry in many ways through cost cutting measures, upgrading of technology, favourable tax measures etc.

- **Jute industry-** The jute industry was started in 1885. Its importance to the economy lies in its capacity to earn foreign exchange. Currently, India is ranked one in the jute producing countries of the world. Besides giving employment, a huge number of people in India rely on jute cultivation to derive their livelihood. However, the acute shortage of raw jute was seen since independence and as such intensive and extensive strategies were undertaken in the first two plans inorder to fill the gap between production and demand for raw jute. But the production of jute textile was stagnant for many years despite the government initiatives. The industry is now modernising its post-spinning equipment by new high speed machines and the installation of broadlooms for the manufacture of carpet backing. Discovery of new uses and new products is the strategy of development of the jute industry. Some of the specialities are cotton bagging, jute tarpaulins, paper lined hessian, jute carpet and jute webbing. With an aim to promote the export of jute

goods, the Government of India had taken some short measures like continuation of Cash Compensatory Support (CCS) scheme and permission to Jute Corporation of India to import raw jute to meet the scarcities. Such measures helped in boosting the jute exports to Soviet Union, Japan and USA to certain extent.

Before Independence India enjoyed a monopoly in raw jute and manufacturers and the owners of jute mill exploited this monopoly position by charging high prices in the international market. The Government too joined by imposing high export duties. This resulted in the discovery and use of synthetic substitutes to jute. The Indian jute industry is constrained by competitionfrom synthetic substitutes in domestic as well as international markets and competition from rival producing countries. Indian jute industry faces very stiff competition from new producers like Bangladesh, Philippines, Japan and Brazil. A whole range of rival packaging materials has been introduced like paper and cloth which offer stiff competition to jute goods.

- **Sugar industry-** India has emerged as one of the major sugar producing countries of the world. Currently, India is ranked second in sugar production in the world next to Brazil. Sugar industry is the second largest agro based industry of India. Sugarcane is an important source of excise duty for the Central Government. However being an agro-based industry, its output depends upon the characteristic of the monsoons. Moreover, the output of cane is influenced to a great extent by the prices of sugarcane- industry's main raw material which in turn depend upon the prices of competing food crops on one hand and the cane prices fixed by the Government on the other. The output of sugar is also influenced greatly by the relationship between cane prices and *gur* prices. The low yield of sugarcane, short crushing season, unsatisfactory location of the industry in U.P. and Bihar and inadequate supply of cane—all these create problems of production of sugar in India. Besides, Indian sugar

factories have low milling efficiency and recovery of sugar from sugarcane is very low. One reason for that is the uneconomic character of many of the sugar mills. Further, Indian sugar mills do not have sugar plantations of their own (as in the case of West Indies) and hence do not have control over the quantity and quality of sugarcane supplied by the innumerable cane growers.

The Sugar Development Fund was set up in 1982 under the Sugar Cess Act and is funded by transfer of proceeds of sugar cess imposed at the rate of Rs. 14 per quintal on sugar produced by all sugar factories. The Fund is utilised for advancing loans at concessional rate of interest for the rehabilitation and modernisation of sugar industry and for development of sugarcane in the sugar factory area. The Sugar Development Fund makes grants for undertaking research projects for development of sugar industry. The Fund is also used to defray expenditure for the purpose of building up and maintenance of buffer stocks of sugar with a view to stabilising its price.

- **Cement industry-** The foundation of a stable Indian cement industry was laid in 1914 when the Indian Cement Company Ltd. manufactured cement at Porbundar in Gujarat. India is the second largest cement producer in the world and accounted for over 8 per centof the global installed capacity as of 2019. According to Indian Cement Industries Analysis report, India's overall cement production capacity was nearly 545 million tonnes (MT) in FY20. Of the total capacity, 98 per cent lies with the private sector and the rest with public sector. The top 20 companies account for around 70 per cent of the total cement production in India. As India has a high quantity and quality of limestone deposits through-out the country, the cement industry promises huge potential for growth. A total of 210 large cement plants account for a combined installed capacity of 410 MT in the country, whereas, 350 mini cement plants make up for the

rest. Of the total 210 large cement plants in India, 77 are in the states of Andhra Pradesh, Rajasthan, and Tamil Nadu. Sale of cement in India stood at Rs 63,771 crore (US$ 9.05 billion) in FY20. India's export of cement, clinker and asbestos increased at a CAGR of 6.44 per cent between FY16-FY19. In FY20 (till January 2020), it reached US$ 1.66 billion.

In no other industry of India is there greater centralisation of ownership and control than in the cement industry. The public sector, the A.C.C., the Dalmia and the Birlas control bulk of the cement units. In recent years, mergers and acquisitions have been quite significant in the cement industry. The industry is well diversified over all the States of India. Since the manufacture of cement requires materials like limestone or chalk, clay and gypsum, the industry has a tendency to be attracted at the point of minimum transportation costs in relation to raw materials. As late as 1980, cement factories were largely concentrated in the southern and western regions of the country. Andhra Pradesh is the largest cement producing state in India.

There has been huge increase in the demand for cement in house construction, road construction, etc. There is great scope for increase in export of cement. The industry has tremendous potential for development as limestone of excellent quality is found almost throughout the country. However, the major problems faced by the cement industry in recent years include inadequate and irregular supply of coal mainly due to poor availability of rail wagons, increase in coal prices following partial deregulation, inadequate production as compared to its demand, cost escalation and rigid prices, unrealistic distribution policies by the Government that proved to be ineffective and poor quality of coal and frequent power cuts in major cement producing states like Rajasthan , Andhra Pradesh, Karnataka , Madhya Pradesh, Gujarat and Kerala. As such, in recent years, the Government of India has introduced both direct and indirect encouragement to the cement industry. The indirect benefits

have been in the form of demand push by giving priority to infrastructure and housing sectors. Besides, imports of cement are made unviable by the Government and there is no fear of dumping of foreign cement in India.

Apart from the above mentioned industries, the paper industry, petrochemical industry and automobile industry of India has contributions to the economic growth of the nation.

6.4.2 Information Technology and Knowledge Economy

Information Technology(IT) is the industry through which the use of computers and other supporting equipment helps in the spread of knowledge. The term information technology includes computers and communication technology along with associated software. Hanna N and Dugonjic (1995), therefore, are of the view that in IT Industry, "on the supply side are computer hardware and software, telecommunications equipment, and micro-electronics-based industries. On the demand side are applications of IT and all economic sectors." IT for some time was used as synonymous to computers. But with the rapid advancement in various information delivery systems such as Radio, TV, Telephone, Newspapers, Fax and of course Computers and Computer Networks, information technology refers to the entire gamut of media and devices used to transmit and process information for use by various target groups in the society. IT has, therefore, been rightly termed as Information and Communication Revolution.

Information has become an important and distinct input in production. Thus, along with three sector model of primary, secondary and tertiary industries, a fourth sector information-related industry has emerged. Information is, therefore, used as a raw material of knowledge just as iron is a raw material for machinery. According to Low (2000), "The activities of generating, processing, transmitting, disseminating, storing, archiving and retrieving information constitute information industry." The information industry

has thus pervaded a wide range of industries, viz., manufacturing, education, entertainment, defence, trade, communications, etc. In the knowledge economy, the raw material that matters is intellectual rather than physical. Low, therefore, states: "The knowledge economy implies shift in the geographical centre from raw material and capital equipment to information and knowledge, especially in education and research centres and man-made brain industries. The knowledge economy depicts the automation of labour intensive manufacturing and service activities, as well as growth in new service industries such as health care, distance education, software production and multimedia entertainment." Information technology has integrated the world by the use of internet and the internet economy has become very powerful. The new knowledge economy is also creating high quality employment. It is reshaping the job market. Many of these jobs did not exist prior to 1994-95.

Although IT industry is a recent origin, it is spreading fast in India.Bengaluru is known as the Silicon Valley of India and contributes to more than 30 per cent of India's IT exports. Information technology is a major facilitator and catalyst for accelerating growth of the economy. It is, therefore, necessary to remove barriers on the path of growth of IT industry, businesses and services. The IT industry earns revenue from software, hardware, peripherals, maintenance and networking. These revenues are earned either in the domestic market or in the export market. The setting up of National Association of Software and Services Companies (NASSCOM) paved the way towards collection of data about growth of computer industry. The Information and Technology (IT) industry has a tremendous potential to generate foreign exchange earnings, high quality employment and also contribute to productivity in the rest of the economy. IT sector can benefit from international boom and also use IT in domestic economy to achieve higher level of efficiency. IT-enabled services like back-office operation, data entry jobs, medical transcription, insurance claim processing and content

development have a large employment potential. IT industry has a great future. To enable poor students to acquire computer education, the government should make adequate provision in the form of subsidies or charge differential fees. The government has a major role to play in expanding computer education to rural and remote areas in the country.

The IT industry helps in Outsourcing, which implies obtaining goods or services by contract from an outside source. Firms resort to outsourcing within the country as well. Producers of cars do not produce all the parts within the firm, but may outsource some parts from the producers who have specialised in them. This helps firms to cut costs. In the information technology (IT) sector, outsourcing has acquired an international dimension. US firms find it more profitable to contract IT software and services in developing countries like India and China. The costs for these services in developing countries are much less than in the developed world.



CHECK YOUR PROGRESS

Q 4: What is information technology industry?

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Q 5: Define knowledge economy.

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6.4.3 Small Scale Enterprises

A significant feature of the Indian economy since Independence is the rapid growth of the small industry sector. In the Industrial Policy Resolutions of 1948 and 1956, the small sector was given special role for creating additional employment with low capital investment. A new thrust was given in favour of small units by the Industrial Policy Statement of 1977. A common classification is between traditional small industries and modern small industries. Traditional

small industries include khadi and handloom, village industries, handicrafts, sericulture, coir, etc. Modern small-scale industries produce wide range of goods from comparatively simple items to sophisticated products such as television sets; electronics control system, various engineering products, particularly as ancillaries to the large industries. The traditional small industries are highly labour-intensive, while the modern small-scale units make use of highly sophisticated machinery and equipment.

The role of micro, small and medium enterprises (MSMEs) in the economic and social development of the country is well established. The MSME sector is a nursery of entrepreneurship, often driven by individual creativity and innovation. The labour to capital ratio in MSMEs and the overall growth in the MSME sector is much higher than in the large industries. The geographic distribution of the MSMEs is also more even. Thus, MSMEs are important for the national objectives of growth with equity and inclusion. However, it is seen that MSME sector in India is highly heterogeneous in terms of the size of the enterprises, variety of products and services produced and the levels of technology employed. Cutting across all sections of production and services, MSME sector is truly a strategic asset for the economy of the country. On one hand, we have the village and rural industries including Khadi industry. Location wise, they are primarily in the rural landscape and provide an important ingredient of the local economic eco-system. In a significant number, they also are inter-related and inter-dependent on the agricultural/ horticultural/other forest and non-forest produce. It adds wealth to the local economy and at the same time provides major employment and in the long run acts, as a measure against rural to urban migration. The challenge here is to provide grass-root and affordable technologies and ensure, at least primary processing at the village/ cluster level to add value and reduce the costs of logistics. With the increase of educated youth power at the village level, the second challenge is to train them to set up their own rural level enterprises

and encourage them through policy as well as fiscal instruments. Diverting unproductive labour forces from agriculture sector to productive enterprises would add to rural economy and simultaneously reduce the disguised unemployment in agricultural sector.

Small enterprises tend to get handicapped in comparison with larger units by an inequitable allocation system for scarce raw materials and imported components, lack of provision of credit and finance; low technical skill and managerial ability; and lack of marketing contracts. Hence, it is essential to develop an overall approach to remove these disabilities so as to strengthen their competitive position.

6.5 INDUSTRIALSICKNESS IN INDIA

The Sick Industrial Companies (Special provision) Act, 1985 defines, "An industrial unit (not registered for less than seven years) as sick if it has incurred cash losses for the current and preceding year equal to or exceeding its net worth". A sick unit has been regarded as a unit which does not perform its primary functions- production, sales, and collection of debts in the normal way for reasons beyond the control of the management. A persistent irregularity in working capital advances (not on account of inadequacy of limits) for a period of 12 to 18 months or stoppage of production for a sufficiently long period of time can lead to a unit's sickness. Causes of industrial sickness are usually divided into two categories- internal causes and external causes. The external factors originate outside the unit and therefore, are not under the control of the unit such as power cuts, demand, recession, erratic availability of inputs, government policies, etc. On the other hand, the internal factors originate within the unit and can therefore be said to be under the control of the unit such as production, management, marketing and finance.

A large number of textile manufacturing units had problems of management when they were taken over by the Central Government under the Cotton Textile Companies Management of Undertakings and Liquidation

or Reconstruction Act, 1967. Such taking over was necessitated with a view to providing effective management as the units in a particular industry were not capable to cope with situation arising out of recession. The situation affected the traditional industries, viz. engineering, textile, jute and a few others. There were political uncertainties, inter-union rivalries, besides scarcity of critical raw materials resulting in continuous losses from year to year. At this juncture the Government of India as also the State Governments became anxious, as the closure of the industrial concerns led to widespread unemployment and rendered the productive assets idle. Besides, a large number of industrial units suffered from underutilisation of capacity and were threatened with closure. It was necessary to extend other forms of assistance and support which the existing commercial banks and other financial institutions, being otherwise engaged in various developmental activities, could not undertake.

The Industrial Reconstruction Corporation of India (IRCI) was thus born in April 1971 and was primarily assigned the task of extending assistance to sick and closed concerns in and around Calcutta. Setting up of IRCI was unique in the sense that, in the past no financial institution had any experience to deal with the sick industrial concerns, in as much as the handling the situation was distinct from usual norm of lending. The 1980s was a decade of small industry (SSI) sickness. In August 1984, through a Parliamentary Act, the Industrial Reconstruction Corporation of India (IRCI) was converted into a statutory body called the Industrial Reconstruction Bank of India (IRBI). This new bank has been established with a capital base of Rs. 50 crores which could go up to Rs. 200 crores, for the purpose of rehabilitating and reconstructing ailing industrial concerns.The pre-reform period witnessed a massive shakeout in the SSI sector, which dominated the scenario with its high growth rate both in terms of number of units and amount blocked. The liberalisation policy of India initiated in 1991 was in part a response to the growing industrial sickness during the 1980s.During the early years of reform, the policy shift livedup to the expectations of policy-makers and the incidence ofsickness registered a drastic decline, particularly in small-scaleindustry (SSI). However, this declining trend was reversed

in1997, when recession hit the economy. More than the SSIsector, the recession battered the large- and medium-scale industry (non-SSI sector). The government then prepared for a majoroverhaul of the rules and regulations regarding industrialsickness. The Sick Industrial Companies Act of 1985 (SICA),which provided the legal framework for the rehabilitationwinding up of sick non-SSI units, is going to be repealed.



CHECK YOUR PROGRESS

Q 6: Define industrial sickness.

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Q 7: What are the causes behind industrial sickness?

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6.6 DISINVESTMENT

Disinvestment means sale or liquidation of assets by the government, usually Central and state public sector enterprises, projects, or other fixed assets.The government undertakes disinvestment to reduce the fiscal burden on the exchequer, or to raise money for meeting specific needs, such as to bridge the revenue shortfall from other regular sources.Disinvestment is the process of privatisation. Since the beginning of 1980s, the functioning of the public sector began to be questioned. Since a large number of public enterprises incurred losses year after year, the question of privatisation of the public sector was debated.

For the initial four decades after Independence, India followed a path of development in which the public sector was expected to be the engine of growth. But the public sector overgrew itself and its shortcomings started manifesting in low capacity utilisation and low efficiency due to over manning, low work ethics, over capitalisation due to substantial time and cost overruns, inability to innovate, take quick and timely decisions, large interference in decision making process etc. Hence, a decision was taken in 1991 to follow the path of Disinvestment. The change process in India began in the year

1991-92, when 31 selected PSUs were disinvested. The Industrial Policy Statement of 24th July 1991 stated that the government would divest part of its holdings in selected Public Sector Enterprises (PSEs), but did not place any cap on the extent of disinvestment. The objective for disinvestment was stated to be to provide further market discipline to the performance of public enterprises. In August 1996, the Disinvestment Commission, chaired by G V Ramakrishna was set up to advice, supervise, monitor and publicize gradual disinvestment of Indian PSUs. However, the Disinvestment Commission ceased to exist in May 2004. The Department of Disinvestment was set up as a separate department in December, 1999 and was later renamed as Ministry of Disinvestment in September, 2001. From 27th May, 2004, the Department of Disinvestment was brought under the Ministry of Finance. The Department of Disinvestment has been renamed as Department of Investment and Public Asset Management (DIPAM) from 14th April, 2016 which has been made the nodal department for the strategic stake sale in the Public Sector Undertakings (PSUs). The National Investment Fund (NIF) was constituted in November, 2005, into which the proceeds from disinvestment of Central Public Sector Enterprises were to be channelized.

Disinvestment is not only beneficial for the firm but also for the government since government gets money to cover their fiscal imbalance and can focus more on core operations like education, healthcare, infrastructure, poverty eradication, employment, defence and other activities which ultimately help the country in the better way. Also even if the money from disinvestment is not used to reduce fiscal deficit, it can be used to finance core operations of government which will benefit the tax payers in long run since less tax money would be required for these purposes.



CHECK YOUR PROGRESS

Q 8: Define disinvestment.

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6.7 LETS US SUM UP

- Industrialisation is the process by which the centre of gravity of an economy shifts from agriculture to industry with the use of technology and modern methods. It results in improvement in infrastructure, urbanisation, economic growth, employment opportunities and standard of living.
- In India, with the increase in population, the agriculture sector has been suffering from diminishing return which is instrumental in creating the trap of poverty. In order to break this vicious cycle, the essential precondition for development is an all-round rise in low productivity occupations to high productivity occupations. In general, the net value of output per person is higher in industry than in agriculture. In industry, the scope for internal as well as external economies is greater than in other sectors and certainly greater than in agriculture. As industrialisation proceeds, it leads to the creation of economic surplus in the hands of industrial producers for further investment.
- Underdeveloped countries should consider a pattern of industrialisation suitable to their economic conditions. It has been suggested that the pattern of industrialisation in under-developed countries should be guided primarily by considerations arising from the relative scarcity of capital. Since labour is relatively plentiful and capital scarce, the development of labour intensive consumer goods seems quite legitimate.
- The planning process initiated in our country in the year 1951. The Government of India recognized the significant contribution industrialisation could make to the development process and thereby emphasized on improving the industrial sectors in the five year plans.
- A major achievement in the industrial sector has been the diversification of India's capability. India has attained self sufficiency

in almost all consumer goods and the growth of capital goods has also been impressive.

- Information Technology (IT) is the industry which through the use of computers and other supporting equipment helps in the spread of knowledge. The term information technology includes computers and communication technology along with associated software.
- According to Low (2000), "The activities of generating, processing, transmitting, disseminating, storing, archiving and retrieving information constitute information industry."
- The knowledge economy depicts the automation of labour intensive manufacturing and service activities, as well as growth in new service industries such as health care, distance education, software production and multimedia entertainment.
- The IT industry helps in Outsourcing, which implies obtaining goods or services by contract from an outside source.
- Traditional small industries include khadi and handloom, village industries, handicrafts, sericulture, coir, etc. Modern small-scale industries produce wide range of goods from comparatively simple items to sophisticated products such as television sets; electronics control system, various engineering products, particularly as ancillaries to the large industries. The traditional small industries are highly labour-intensive, while the modern small-scale units make use of highly sophisticated machinery and equipment.
- The Sick Industrial Companies (Special provision) Act, 1985 defines, "An industrial unit (not registered for less than seven years) as sick if it has incurred cash losses for the current and preceding year equal to or exceeding its net worth". A sick unit has been regarded as a unit which does not perform its primary functions- production, sales, and collection of debts in the normal way for reasons beyond the control of the management.
- Causes of industrial sickness are usually divided into two categories- internal causes and external causes. The external factors originate outside the unit and therefore, are not under the control of the unit

such as power cuts, demand, recession, erratic availability of inputs, government policies, etc. On the other hand, the internal factors originate within the unit and can therefore be said to be under the control of the unit such as production, management, marketing and finance.

- Disinvestment means sale or liquidation of assets by the government, usually Central and state public sector enterprises, projects, or other fixed assets. The government undertakes disinvestment to reduce the fiscal burden on the exchequer, or to raise money for meeting specific needs, such as to bridge the revenue shortfall from other regular sources.



6.8 FURTHER READING

1. Datt, G. & Mahajan, A. (2020). *Datt&Sundharam's Indian Economy*. New Delhi: S. Chand & Co. Ltd.
2. Mishra, P. K. &Puri, V. K. (2020). *Indian Economy*. New Delhi: Himalaya Publishing House.



6.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No. 1: Industrialisation is the process by which the centre of gravity of an economy shifts from agriculture to industry with the use of technology and modern methods. It results in improvement in infrastructure, urbanisation, economic growth, employment opportunities and standard of living.

Ans to Q No 2: In India, with the increase in population, the agriculture sector has been suffering from diminishing return which further results in deepening poverty among the masses. In order to break this vicious cycle, we need industrialisation in order to bring about an all-round rise in low productivity occupations to high productivity occupations. The net value of output per person is higher in industry than in

agriculture. Moreover, the scope for internal as well as external economies is greater in industries than in other sectors and certainly greater than in agriculture.

Ans to Q No 3: The planning process initiated in our country from 1951.

Ans to Q No 4: Information Technology (IT) is the industry which uses computers and other supporting equipment to help in the spread of knowledge. The term information technology includes computers and communication technology along with associated software.

Ans to Q No 5: Information is used as a raw material of knowledge just as iron is a raw material for machinery. Thus, the knowledge economy implies shift in the geographical centre from raw material and capital equipment to information and knowledge, especially in education and research centres and man-made brain industries.

Ans to Q No 6: The Sick Industrial Companies (Special provision) Act, 1985 defines a sick industry as a unit which has incurred cash losses for the current and preceding year equal to or exceeding its net worth. An industrial unit has been regarded as a sick industry when it does not perform its primary functions of production, sales, and collection of debts in the normal way for reasons beyond the control of the management.

Ans to Q No 7: Causes of industrial sickness are usually divided into two categories- internal causes and external causes. The external factors originate outside the unit and therefore, are not under the control of the unit such as power cuts, demand, recession, erratic availability of inputs, government policies, etc. On the other hand, the internal factors originate within the unit and can therefore be said to be under the control of the unit such as production, management, marketing and finance.

Ans to Q No 8: Disinvestment means sale or liquidation of assets by the government, usually Central and state public sector enterprises, projects, or other fixed assets.



6.10 MODEL QUESTIONS

Q 1: What is industrialisation? Why do we need to give importance on industrialisation?

Q 2: Explain the pattern of industrialisation in the five year plans.

Q 3: Mention some industries having comparative advantage in India. Explain the challenges faced by these industries.

Q 4: Explain the information technology industry in India.

Q 5: Explain the scope of small sector enterprises in India.

Q 6: What is industrial sickness? Explain.

Q 7: Explain the process of disinvestment.

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UNIT 7: SOCIAL SECTOR

UNIT STRUCTURE

7.1 Learning Objectives

7.2 Introduction

7.3 Meaning, Importance and Major Issues of Social Sector

- 7.3.1 Importance of Social Sector
- 7.3.2 Major Issues Relating to Development and Management of Social Sector

7.4 Performance of Social Sector and Social Infrastructure

- 7.4.1 Education
- 7.4.2 Health
- 7.4.3 Housing

7.5 Recent Government Policies and Programmes in the Social Sector

- 7.5.1 Major Policies and Programmes in the Education Sector in India
- 7.5.2 Major Policies and Programmes in the Health Sector in India
- 7.5.3 Major Policies and Programmes in the Housing Sector in India

7.6 Let Us Sum Up

7.7 Further Reading

7.8 Model Questions

7.1 LEARNING OBJECTIVES

After going through this unit, you will be able to –

- discuss the meaning, importance of social sector in an economy
- trace the major issues relating to the social sector in the Indian economy
- discuss the performance of the key social sectors, viz., education, health and housing

- discuss the major policies and programmes introduced in the social sectors like education, health and housing.

7.2 INTRODUCTION

Social sector plays an important role in the Indian economy. The important social sectors include education, health, housing, water and sanitation, social welfare and social protection etc. This unit shall be helpful in deriving an idea about the social sectors in India. In this unit, three major social sectors have been discussed: education, health and housing.

7.3 MEANING, IMPORTANCE AND MAJOR ISSUES OF SOCIAL SECTOR

For the several decades in the past, the governments in developed countries have tended to expand its function and role resulting in the emergence of the public sector. As is well known, the original role of government started from the very limited scope defined by Adam Smith that provides for only defence and the administration of justice. However, it is widely acknowledged that the government had begun to play an expanding role in providing public goods and services to maintain better conditions in the economy and society.

In providing public goods and services in a welfare state, social sector plays a significant role. The ultimate aim of the social sector is to achieve social development in the economy, which refers to fulfilling basic needs of the people.

7.3.1 Importance of Social Sector

The social sector such as education, health and medical care, water supply and sanitation, poverty alleviation, housing conditions etc. play a vital role in the overall development. Social sector may also refer to the value system entailing philanthropy, social business and social entrepreneurship. The liberalisation and consequent economic reforms have played a key role in the areas of social infrastructure and development. Important aspects of human development are now governed within the economic sphere marked by both market

principles and private philanthropy. Due to the rapidly globalising market coupled with the increasing need to ensure quality of life at the grassroots, policy makers in India are slowly but surely encouraging series of reforms in the social sector.

7.3.2 Major Issues relating to Development and Management of Social Sector

For inclusive growth in general and enhancing employment in particular, expenditure on social sector as a proportion to GDP becomes extremely important. Social sector pursues both social and economic goals, and engages in the delivery of social services for disadvantaged groups and communities both in urban or rural area. Economic Survey 2019-20 draws attention to social services which include, education, sports, art and culture; medical and public health, family welfare; water supply and sanitation; housing; urban development; the welfare of SCs, STs and OBCs, labour and labour welfare; social security and welfare, nutrition, relief on account of natural calamities etc.

Issues related to the development and management of Social Sector/ Services are:

- Issues related to coverage i.e. ensuring coverage of all sections of people without leaving anyone deserving.
- Issues related to equityi.e. ensuring provision according to peoples' need through participation of people
- Issues related to accessi.e. ensuring availability and affordability of social sector infrastructure and services to everyone. Here, awareness and technological innovation can play distinct role.
- Issues related to scaling up of the efforts to make the desired impart
- Issues related to creating employment opportunities in the
- Issues related to providing quality services along with the quantity, especially in healthcare and education

- Issues related to maintaining and sustaining the social sector over the period of time. This requires resources and also a defined system of regular monitoring.

7.4 PERFORMANCE OF SOCIAL SECTOR AND SOCIAL INFRASTRUCTURE

7.4.1 Education

There are reasons to believe that increased educational opportunity and achievement lead to social progress. Education can promote social progress in an economy keeping multiple aims ahead concerningeducational governance, educational institutions, educators, curriculum, and also pedagogy.

Education plays an empowering role in the society. To understand the connection between education and social progress, we distinguish among four distinct aims of education: *economic*, *civic*, *humanistic*, and *equity promotion*.Each of these goals can be understood by the following functions of education.

- Education develops productive skills, and this is valuable for the individual, to advance in the labour market and for society, to improve and maintain prosperity and compete in a globalised economy.
- Education develops civic skills, and this is valuable for the individual, to allow for meaningful participation in civil society and political life, and for society, to benefit from an informed and engaged citizenship.
- Education develops human talents and interests, and this is valuable for the individual, allowing for personal flourishing, and for society, since the expansion of knowledge and human achievement are valuable for their own sake.
- Education can be a vehicle for equity and greater social inclusion, or when absent, poorly delivered or unfairly distributed, a vehicle for injustice and greater social exclusion.

Education in India – Key Indicators

- 74.04 per cent of the Indian people are literate (82.14 per cent of male and 65.46 per cent of females) according to Census of India 2011.
- While close to 90 per cent children in the 6-11 age group are formally enrolled in primary schools, nearly 40 per cent drop out at the primary stage. The enrolment ratios of Scheduled Caste (SC), Scheduled Tribe (ST) and Muslim children (especially girls) still remain far lower than the national average.
- 1.36 crore (40 per cent) children in the age group of 6-14 years remained out of school as on March 2005, even after four years of the launch of SarvaShikshaAbhiyan (SSA).
- Half of India's schools have a leaking roof or no water supply, 35 per cent have no black board or furniture, and close to 90 per cent have no functioning toilets.
- The official teacher-student norm is 1:40, yet in some states the average teacher student ratio continues to be one teacher per 80 children. The prescribed norm of a school being available within the radius of one kilometre is still not being fulfilled.
- Malnutrition, hunger and poor health remain core problems, which comprehensively affect attendance and performance in classes. The added burden of home chores and child labour still influence a large number of children, especially girls, to drop out of school.

7.4.2 Health

The World Health Organization (WHO) defines health systems as all organisations, people, and actions whose primary intent is to promote, restore, or maintain health. This includes efforts to influence determinants of health as well as more direct preventive and curative activities. WHO describes health systems as onethat comprises six interrelated building blocks viz. service delivery; fielding a well-performing healthcare workforce; maintaining a

functioning health information system; providing access to essential medical products, vaccines, and technologies; provision of adequate financing; and leadership and governance.

In order to explain the relationship between health and economic growth, it is necessary to understand the concept of health in a broad sense. Health is not only the absence of illnesses; it is also the ability of people to develop to their potential during their entire lives. In that sense, health is an asset individuals possess, which has intrinsic value (being healthy is a very important source of well-being) as well as instrumental value. In instrumental terms, health impacts economic growth in a number of ways. For example, it reduces production losses due to worker illness, it increases the productivity of adult as a result of better nutrition, and it lowers absenteeism rates and improves learning among school children. Health also allows for the use of natural resources that used to be totally or partially inaccessible due to illnesses. Finally, it permits the different use of financial resources that might normally be destined for the treatment of ill health. In sum, health affects economic growth directly through enhancing labour productivity and reducing the economic burden of illnesses, for example. Health also indirectly impacts economic growth since aspects such as child health affect the future income of people through the impact health has on education. This indirect impact is easier to understand if it is observed on a family level. When a family is healthy, both the mother and the father can hold a job, earn money which allows them to feed, protect and send their children to school. Healthy and well-nourished children will perform better in school and a better performance in school will positively impact their future income.

The social case: Good health is an important enabler of positive family and community life. It enables people to participate in activity and contribute to the society in different ways.

- A family member in good health is better able to build foundations that support other family members to thrive. For example, a

parent provides emotional support for a child. On the other hand, health challenges such as childhood obesity and poor mental health can negatively affect family life and people's ability to form and maintain good quality relationships.

- Having good health enables people to take part in civic society, including clubs and social groups, while poor health may hinder participation. In turn, engagement with communities can have a positive effect on social cohesion.

The economic case: Where a person stands in the labour market – such as whether they have a job that pays enough to live on – is the key to their financial security and wellbeing. Yet that person's wellbeing throughout their life is also crucial to employers, businesses and the economy as a whole. The potential economic benefits of ensuring the best possible health of the population are huge. A healthy population can be good for the economy because:

- healthier children have better educational outcomes, which positively impact productivity in adulthood
- a healthy working-age population can lead to economic prosperity by being more engaged and productive
- a healthy person is enabled to continue to work as they get older, whereas poor health can lead to forced early retirement.

Health in India – Key Indicators

- India accounts for more than 20 per cent of global maternal and child deaths, and the highest maternal death toll in the world estimated at 138,000.
- United Nations calculations show that India's spending on public health provision, ashare of GDP is the 18th lowest in the world.
- Nearly 67 per cent of the population in India do not have access to essential medicines.
- As per the Sample Registration System (SRS) Data, 2020 India's Infant Mortality Rate (IMR) is 32 (rural 36 and urban 23) per 1000 live births. The highest IMR is recorded in Madhya Pradesh as 48 (rural 52, urban 36) while the lowest is recorded

in Kerala as 7 (rural 9 and urban 5). The IMR in Assam is found to be 41 per 1000 live births (rural 44, urban 20).

- Maternal Mortality Rate (MMR) i.e. proportion of maternal deaths per one lakh live births, is 113 (SRS, Special Bulletin on MMR 2016-18) and India accounts forthe largest number of maternal deaths in the world. Assam records the highest MMR with 215 while Kerala has the lowest MMR at 43.
- 79 per cent of the children between the age of 6-35 months, and more than 50 per cent of women, areanaemic, and 40 per cent of the maternal deaths during pregnancy and child-birth relate toanaemia and under-nutrition.
- There are 585 rural hospitals compared to 985 urban hospitals in the country. Outof the6,39,729 doctors registered in India, only 67,576 are in the public sector.
- The ratio of hospital beds to population in rural areas is almost fifteen times lower thanthat for urban areas.

7.4.3 Housing

Housing is one of the most important components of life giving shelter, safety and warmth, as well as providing a place to rest.

The need for housing is not only one of the basic human facilities, but also the indicator of living standard of the population. Today it is a topical issue that housing has to be comfortable, economical and reasonably maintainable, as well as architectonically expressive and compliant with the environment.

Proper housing provides children in low-income households the opportunity to improve and succeed academically, maintain their health and well-being, and achieve financial success in life, while reducing costs to society in the long term. When families can afford rent, everyone benefits.

Housing provides shelter, obviously, but it also serves other needs in both developed and developing countries. Housing is a location for business and provides other intangible emotional and cultural benefits.

The role of housing is multi-faceted in the progress of a household as housing affects access to infrastructure, employment, health, education, poverty levels and many other indicators. As India seeks to improve its living conditions on a large scale, and access to affordable housing becomes a major stumbling block for its citizens. Current urban housing shortage in India accounts to 18.78 million units in 2017. Over 95 per cent of those affected via acute housing shortage belong to the Economically Weaker Section (EWS) and Lower Income Group (LIG). India is expected to gain a staggering 218 million people in its urban areas from 2011 to 2030. Government intervention into housing is driven by a number of different rationales, ranging from human rights to fundamentals of economic growth in terms of housing.

The extent of government support for housing ranges from a comprehensive approach, such as the wholesale provision of public housing to a more hands-off approach of playing a facilitating role in market-based activities. The central government, state governments and the local governments all thrive to bring the urban poor in the mainstream by following inclusive planning. The central government as well as state governments make provisions for mitigating the housing shortage by providing various direct and indirect financial options. After trying out various options many states in the country now want to reach the goal of affordable housing for all through Public Private Partnership, for which again different states have set of models, polices and schemes specified for EWS/LIG.

7.5 RECENT GOVERNMENT POLICIES AND PROGRAMMES IN THE SOCIAL SECTOR

7.5.1 Major Policies and Programmes in the Education Sector in India

After independence India adopted the Constitution in 1950. Education became the responsibility of both state and central governments.

Thus, in independent India education policies have been closely influenced by the Education Commissions that were set up from time-to-time. In the following section highlights of the recommendations of these important Commissions have been presented.

University Education Commission (1948): The first Commission to be appointed in independent India was the University Education Commission of 1948, under the chairmanship of Dr. S. Radhakrishnan, to report on the status of Indian university education and suggest improvements and extensions that would be desirable to suit the present and future requirements of the country. This Commission aimed at creating universities as a provider of knowledge and wisdom for a comprehensive national as well as personal development. It considered university education as a pivotal step for higher level of learning. The main goal of establishing a university in a particular region was to make higher education accessible to all sections of society, irrespective of region, caste, gender and region. This report proposed the re-construction of education system in tune with the vision of the Indian constitution.

Secondary Education Commission (1952): The Secondary Education Commission was set up under the chairmanship of Dr. A. LakshmanaswamiMudaliar in 1952. Also known as Mudaliar Commission, the Commission suggested diversification of high school courses and the establishment of multipurpose high schools as well as technical schools following a uniform pattern of education throughout India. Though the recommendations of the Commission were noteworthy, yet they were criticised for lacking freshness, being replication of old policies and offering impractical suggestions. Many however pointed out that the Commission also did lay proper emphasis on women's education.

Indian Education Commission (1964-66): The Mudaliar Commission was followed by the appointment of the Indian Education Commission under the chairmanship of D. S. Kothari.

Popularly known as the Kothari Commission, it was entrusted with the task of dealing with all aspects and sectors of education and to advise the Government on the evolution of a National System of Education. It is in accordance with the recommendations of this Commission that the National Educational Policy of 1968 was formulated. In the Commission's view education had to work as a powerful instrument of social, economic and political change. Therefore, educational objectives have to be related to long term national aspirations. If the change is to be achieved without any violent revolution, the only instrument, the Commission noted was education.

Further, the Commission reviewed the development of education in India in the modern period and particularly since Independence and came to the conclusion that Indian education needs a drastic reconstruction, almost a revolution, to realise the constitutional goals and to meet the various problems facing the country in different sectors.

National Policy on Education (1968): In 1968 the Government of India had formulated the National Policy on Education, in response to therecommendations of the Kothari Commission. The National Policy on Education sought 'total reformation' and aimed at extending the prospects of education to all sections of the society to accomplish the goal of harmony and integration. The policy suggested the provision of compulsory education to children in the 6-14 years age group as proposed in the Indian Constitution. Further, it also recommended that regional languages must be encouraged for being used in secondary schools. The Commission was of the opinion that English had to be the medium of instruction in schools and it considered Hindi as the national language. The National Policy on Education also promoted the development of Sanskrit, which was the symbol of India's cultural heritage. This policy recommendedto the Government of India that 6 percent of the national income be spent on education.

National Policy on Education (1986): National Policy on Education (1986) stressed on the provision of fellowships for the poor, imparting adult education, recruiting teachers from oppressed groups and also developing new schools and colleges. The policy focused more on providing primary education to students. Further, it also gave importance for the establishment of open universities besetting up the Indira Gandhi National Open University (IGNOU) at Delhi. The policy had recommended that education be given to rural people in consonance with the Gandhian philosophy. It also set the stage for the emergence of information technology in education, besides opening up the technical education sector in a rather big way to private enterprise.

National Policy on Education (1992): The Government of India had set up a commission under the chairmanship of AcharayaRamamurti in1990 to reassess the impact of the provisions of the NPE, 1986 and also to give recommendations. Later, under the leadership of N. Janadhana Reddy the Central Advisory Board of Education was set up. This Board considered some modifications in NPE. The report of the committee had been submitted in 1992 and it came to be known as the National Programme of Action of 1992.The National Policy on Education – 1992 stressed on promotion of development and strengthening national integration. The National Policy on Education (1992) emphasised the need for greater transformation of the Indian educational system, with a focus on quality enhancement. The policy also stressed on developing moral values among students and bringing education closer to life.

SarvaShikshaAbhiyan (SSA): SarvaShikshaAbhiyan or The Education for All Movement is a central government programme which aimed at universalising elementary education in a time bound manner. This programme hasbeen in operation since 2000-2001. However, its origin dates back to 1993-94, when the District Primary Education Programme (DPEP) was launched. DPEP had basically

aimed at fulfilling the goal of universalising primary education. SSA proposed that the education system must be developed in consonance with contemporary societal needs.Availability of infrastructure is fundamental in providing access to education.

Under the SSAscheme between 2002-03 and 2008-09, 1,48,492 new primary schools and 1,33,277 new upper primary schools were opened and an additional 8,00,000 classrooms were built, significantly expanding access to the elementary level. Further, the Mission also motivated increased efforts to develop, fund and implement specific strategies to reach deprived urban children, particularly in the35 cities with more than one million inhabitants.

Right to Education Act (2009): Right to Education Act or The Right of Children to Free and Compulsory Education Act ensures free and compulsory education for children who are in the age group of 6 to 14years. The Act came into existence on 1st April, 2010 and since then India became one of the 135countries to make education a fundamental right of every child.

Further, this Act specifies that all private schools have to reserve 25 percent of seats to children of socially disadvantaged groups. It also laid down that no child shall be held back, expelled or required to pass a board examination until the completion of elementary education. For school dropouts there is a special training, given under this Act. Since education is a concurrent issue in the Indian Constitution, the responsibilities of implementation of this Act have been distributed among centre, state and local government bodies.The central government bears 70 percent of the expenses of the implementation of this Act and 30 percent are provided by state government.

Besides these centrally sponsored education policies, state governments have also launched many support schemes such as for example, the Midday Meal Scheme, Bicycle to Girls Students Scheme, establishment ofpre and post-matric hostels to enhance access and utilisation of educational opportunities. Almost every

state government has set up committees and commissions to recommend policy changes in the field of education, to make it more 'inclusive', 'quality conscious' and 'attune itself to meet globally accepted standards'. But at the implementation level, there have been many shortfalls which need to be addressed in future policies.

7.5.2 Major Policies and Programmes in the Health Sector in India

Some major initiatives undertaken by the Govt which aim at providing accessible, cost-friendly and quality healthcare services to the majority of the citizens along with providing a holistic view of the health system in the country are:

Pradhan Mantri Jan ArogyaYojana (PMJAY) was launched in September 2018, aiming to provide health insurance worth Rs 500,000 to over 100 million families every year, and is already implemented in several states. In August 2018, the Government of India approved Ayushman Bharat, the National Health Protection Mission as a Centrally Sponsored Scheme contributed by both centre and state govt. It aims at covering 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 tertiarycare hospitalisation.

Under the Ayushman Bharat program, nearly 1.5 lakh primary health centres will be transformed as health and wellness centres by 2022. These centres will be equipped to provide treatment and care for several diseases such as high blood pressure, diabetes, cancer, and old age-related illnesses.

Another important mission undertaken in full throttle is Mission Indradhanush (launched in December 2014) which aims to achieve at least 90per cent full immunisation coverage of India and sustain the same by the year 2020. The ultimate goal here is to ensure full immunisation with all available vaccines for children up to two years of age and pregnant women in both rural and urban areas.

It is also important to highlight recent developments such as the decline in India's maternal mortality rate (MMR), which dropped by 22 per cent, to 130 (per lakh of live births), also referred to as a 'groundbreaking' decline by WHO. The Sustainable Development Goal target for MMR is 70, by 2030 which India expects to achieve within the next 3 years. WHO also recently commended India over its achievement of curbing the overall malaria score, thanks to a significant drop in Malaria in the state of Odisha.

These are all major positives to consider in a country with more than a billion citizens, where accessible health care in remote areas and effective diagnosis is of utmost importance. Ministry of Health and Family Welfare has been given a push in terms of money allocation in recent years.

7.5.3 Major Policies and Programmes in the Housing Sector in India

Housing policies in India have come a long way since the 1950s; initially the policies were welfare centric which later on dwelled to be market-centric policies. The role of government has also seen a shift from being provider to being the facilitator of housing. Dividing the policies in India into four phases as the first phase comprising of first two decades (1950s to 1970s) where the policies were taking shape that focused more upon integrating all sections of the society. The second phase (1970s to mid-1980s), shifting the focus to economically weaker section (EWS) of the society. The third phase (1980s to 2000s), focusing more on physical provision of housing as well as housing finance mechanisms. The last phase (2000s to present) shifting the role of government as facilitator of housing.

It is important to focus on housing policies in the last phase i.e., from 2000 to present. The major reform came with the onset of Jawaharlal Nehru Urban Renewal Mission (JNNURM), 2005. The program was launched with an objective to improve state of infrastructure in cities. The two sub-missions under JNNURM are

Basic Services for Urban Poor (BSUP) designed to upgrade and improve the existing conditions of slums by giving them access to basic amenities like water and sanitation, health care and education etc. The second part is Integrated Housing and Slum Development Program (IHSDP), designed to tackle the poor housing for urban slum dwellers as per 2001 Census.

Rajiv AwasYojna (RAY), launched was in 2011 with a vision to 'create a slum-free India'. Under the scheme, central support up-to 25 percent of cost of civic infrastructure (external and internal), whichever is lower was provided. The first component of RAY involved in-situ slum redevelopment of existing slums and second proposed to curb creation of slums.The Affordable Housing in Partnership (AHP) a part of the second component of RAY made provision for public private partnership for affordable housing. The state's implementing agencies were to make effort to ensure that at least 25 percent of the total built up/constructed area of the projects proposed is for EWS/LIG units. To facilitate private investment in this sector, Government had allowed 100 per cent FDI in housing sector and the budget (2014-15) has gone one step further in this direction by listing slum redevelopment as an accepted component under the Corporate social responsibility (CSR)4 to attract more private funds (GOI,2014-15).

Pradhan MantriAwasYojna- Urban launched by the BJP government in 2015 envisages 'Housing for All' by 2022. The flagship mission under the Ministry of Housing &Urban Affairs (MoHUA), Government of India was launched in 2005 for a seven year period to encourage cities to initiate steps in improving civic services and improve housing.Housing scheme launched by central government in name of Prime Minister to achieve Transformative, Inclusive and Sustainable development through planning, development and reforms. The Mission compromises of four components:

- In situ slum redevelopment by using land as a resource. Slums located on government land/ ULB land or private land are

covered under in-situ slum redevelopment for providing houses to all eligible slum dwellers.

- Promotion of Affordable Housing through credit linked subsidy for beneficiaries include economically weaker section (EWS), low-income groups (LIGs) and Middle Income Groups (MIGs).
- Affordable Housing in Partnership with Public & Private sectors, where the private sector and public sector join together to produce the required housing stock.
- Subsidy for beneficiary-led individual house construction / enhancement for families who want to construct their own house or make addition to the existing housing unit.Under each of the components eligibility, income groups, ceiling for subsidy, minimum construction, unit area and other conditions vary so as to benefit large number of people.



7.6 LET US SUM UP

- Social sector plays an important role in the Indian economy. The important sectors that are included in the scope and purview of social sectors in India include: education, health, housing, water and sanitation, social welfare etc.
- For the several decades in the past, the government in any developed countries has tended to expand its function and role in the borderline zone between private and public sectors. As is well known, the original role of government started from the very limited scope of Adam Smith's "cheap government" that provides only defence and the administration of justice. However, it is widely acknowledged that the government had begun to play an important role in providing public goods and services to maintain better conditions in the economy and society.
- Social sector is an important sector for India's economy and includes several important components such as education, health and

medical care, water supply and sanitation, poverty alleviation, housing conditions etc. that play a vital contribution in human development.

- For inclusive growth and employment, expenditure on social services as a proportion of GDP and investment in social infrastructure is of paramount importance. Social sector pursues both social and economic goals and engages in the delivery of social services for disadvantaged groups and communities whether in urban or rural area.
- There are many reasons to believe that increased educational opportunity and achievement lead to social progress. Education can promote social progress in an economy keeping multiple aims ahead, and concerning – educational governance, educational institutions, educators, curriculum, and pedagogy
- In order to explain the relationship between health and economic growth, it is necessary to understand the concept of health in a broad sense. Health is not only the absence of illnesses; it is also the ability of people to develop to their potential during their entire lives. In that sense, health is an asset individuals possess, which has intrinsic value (being healthy is a very important source of well-being) as well as instrumental value.
- Where a person stands in the labour market – such as whether they have a job that pays enough to live on – is key to their financial security and wellbeing.
- Housing is one of the most important life components giving shelter, safety and warmth, as well as providing a place to rest.
- Housing provides shelter, obviously, but it also serves other needs in both developed and developing countries. Housing is a location for business and provides other intangible emotional and cultural benefits.
- After independence India adopted the Constitution in 1950. Education became the responsibility of both state and central governments.

- The first Commission to be appointed in independent India was the University Education Commission of 1948, under the chairmanship of Dr. S. Radhakrishnan, to report on the status of Indian university education and suggest improvements and extensions that would be desirable to suit the present and future requirements of the country.
- Housing policies in India have come a long way since the 1950s; initially the policies were welfare centric which later on dwelled to be economic-centric policies. The role of government has also seen a shift from being provider to being the facilitator of housing.



7.7 FURTHER READING

1. Datt, G. & Mahajan, A. (2020). Datt&Sundharam's Indian Economy. New Delhi: S. Chand & Co. Ltd.
2. Dhar, P.K. (2017). Indian Economy: Its Growing Dimensions. New Delhi: Kalyani Publishers
3. Kapila, U. (Ed.) (2020). Indian Economy: Performance and Policies. New Delhi: Academic Foundation
4. Mishra, P. K. &Puri, V. K. (2020). Indian Economy. New Delhi: Himalaya Publishing House.



7.8 MODEL QUESTIONS

Short Questions. Answer each question in about 150 words.

Q 1: Discuss the Meaning and Importance of Social Sector.

Q 2: Discuss some Major Issues Relating to Development and Management of Social Sector in India.

Long Questions. Answer each question in about 300-500 words.

Q 1: What has been the growth of the education sector in India since independence? Discuss.

Q 2: What has been the growth of the health sector in India since independence? Discuss.

Q 3: Discuss some of the recent policy measures initiated in the education sector.

Q 4: Discuss some of the recent policy measures initiated in the health sector.

Q 5: Discuss some of the recent policy measures initiated in the health sector.

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Name of the Paper: Course Code:

Centre for Internal Quality Assurance (CIQA)
Krishna Kanta Handiqui State Open University
City Office, Housefed Complex, Guwahati- 06

Learner's Feedback on Course

Dear Learner,

Regarding the course as mentioned above, we would like to know your opinions and comments so as to improve the quality of self learning materials in future. Please respond to the following statements by ticking the number you feel most reflect your opinion. After completion of the additional comments, please detach the page and send/mail the same to us at the address given below.

The Director, Centre for Internal Quality Assurance, KKHandiqui State Open University
Housefed Complex, Dispur, Guwahati- 781006
(E-mail id: ciqa@kkhsou.in)

1. Approximately how many hours did you spend for studying the units in the course? | | | |
2. Please give your opinions (by √ mark) to the following items based on your reading of the block:

Sl. No.	Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I.	The SLMs of the course fulfil the learning objectives set out in the beginning of each unit					
II.	The units of the SLM could satisfy my academic needs and expectations					
III.	The Unit writers have excellent knowledge about the course contents					
IV.	Language and contents of the units were presented at a level which I could readily understand					
V.	Ample opportunity for participation in the activities provided in the units					
VI.	Used enough Illustrations (Diagrams, tables etc.) for conceptual clarity					
VII.	Quality of content is engaging, relevant, and up-to-date					
VIII.	The self check questions are very helpful					
IX.	The Possible/model questions and the answers to check my progress have benefited me a lot					

Additional Comments: *(Please feel free to provide your open comments)*

1. Which aspects of the SLM, according to you, worked well?

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2. What sort of changes/improvements do you feel KKHSOU could implement to improve the overall quality of the SLM?

Thank you for taking the time to complete this form.

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