

B.A.

**2nd YEAR
CBCS**

INDIAN ECONOMY

SEMESTER - IV



Nalgonda Economics Forum

NALGONDA



A teacher par excellence

Thanks to the free coaching imparted by Akkenapalli Meenaiah, students from rural background can now hope to secure a seat in Osmania University

Getting a seat in any post graduation course in Osmania university campus is always a tough task for rural graduates. Those who are keen to get a seat there have to spend money for tailor-made coaching classes.

Realising the need to impart free coaching, Akkenapalli Meenaiah, lecturer in Economics, Government Women's Degree College, Nalgonda, offered special training for students of Economics in the district. Indeed the effort yielded good results and seven out of 25 students got seats in PG courses.

While Maraju Kavita, a bright student of the Women's Degree College could secure eighth rank, three of her friends – Koorella Himavathi, Chintapalli Sailaja and Cherukuri Seshu Kumari – got seats in the OU campus, Hyderabad. They are all eligible to get a hostel facility thus getting a wonderful opportunity to prepare for competitive exams. Five other students are all set to get seats in other institutions. "But for Mr. Meenaiah coaching, I would not have fared well in the entrance test," Ka-vitha said. The convener of the Nalgonda Economics Forum, Mr. Meenaiah said that a small initiative taken by him yielded very good result. He opted out of spot valuation to train his students to prepare for the entrance test. "I might have lost about Rs.10,000 for spending my time with the students but the ranks they



ALL SMILES : A. Meenaiah, lecturer in economics, with his students, all rank holders in Osmania University M.A.Economics entrance test in Nalgonda. - PHOTO: NAGARA GOPAL

got gave me an immense satisfaction," he maintained. Asked for the secret of success of his mission, Mr. Meenaiah, a native of Gopulaipallypalli in Narketpally mandal, said: "Every teacher must strive hard to - create interest on the subject among the students. Motivation works wonders among the rural students." It remains to be seen whether other teachers emulate this concerned lecturer or not.

- S. RAMU, in Nalgonda

INDIAN ECONOMY

B.A. II - Year (4th Semester)

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Indian Economy

(Second Year - 4th Semester)



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Foreword



The Nalgonda Economics Forum initiated its activity on the 12th of January 2007 and was subsequently registered on 10th May, 2013 with the registered number 297/13. This purely service oriented free coaching institution primarily aimed at training up students belonging to the rurally poor and socially and economically backward classes for admission through entrance into MA Economics course, but subsequently expanded to imparting training in a variety of areas of competitive examinations. When it came into existence some fourteen years ago, almost every one of not more than ten students got selected to MA Economics course in different universities. And the Forum has now gradually, year after year, grown into fetching admission into PG Economics course to a bulky strength of as many as 650 candidates over these years of almost a decade and a half now. It is also to be noted that candidates trained at this Forum stood in the first rank in the PG Economics entrance examinations at Osmania University in 2009 and both at the Osmania and the Kakatiya universities subsequently in 2016, 2017 and 2018. The students of Nalgonda Economics Forum brought in the top three 1st, 2nd and 3rd ranks followed by 7th, 8th, 9th and 10th ranks in CPGET -2020.

As part of the extended areas of training programmes in different areas of competitive examinations, in addition to the basically mooted out MA Economics entrance training, the following are the achievements to our credit. Larger number of students trained here were qualified to SET and NET. Five of forum students were awarded PhD in Economics. Five other students got selected as Lecturers in Economics different Government Residential Degree Colleges in the Telangana State. Four of forum students got PGT posts in Residential Schools and Junior Colleges in Telangana. A notable number of 25 candidates trained here are now working as Economics faculty in different private unaided junior and degree colleges.

The forum brought out in the year 2019 two economics text books, MICROECONOMICS in Telugu and English for first semester, in the year 2020 two Economics Text books, MACROECONOMICS in telugu in english for second semester, one text book STATISTICS FOR ECONOMICS for third semester in telugu medium, in 2021 - INDIAN ECONOMY for Second year fourth semester in english medium with ISBN mark, for the under graduate students in the state, in tune with the choice based credit system that has come into vogue with the academic year 2019-20. In the process the Forum will be bringing out text books for the subsequent semesters.

It is also to be mentioned here that the Forum, with a view to be in tune with the changing examination patterns year after year, has been keeping on updating itself and catering to the newest needs of the examination goers. It is particularly in this process that, apart from imparting training directly in classroom situations, Forum

Continued..

created a website of its own to help the students face the computer-based tests, besides providing study material on-line, bringing to the doorsteps the latest relevant information that boosts up the students' morale and self-confidence.

As has already been mentioned, Forum created a website of its own to help the students in ways more than one and started providing study material on-line. The Forum started YouTube channel on 17th April 2020 and as yet uploaded 106 video lessons on Economics subject. This Forum channel was monetized on 21st November 2020. As on 8th January 2021, the channel bagged to its credit as many as 40,300 viewers and 1318 subscribers.

Another innovative achievement of the Nalgonda Economics Forum is facilitating Google Meet platform, especially at a situation of disrupted communication on account of the prevalence of Covid -19 pandemic havoc. Thus Forum successfully conducted under this roof CPGET-2020 coaching classes for Economics and conducted nine online Computer Based Tests designed in the website. Started too here at this Forum in February 2021 is a training programme for candidates competing for posts of Junior Lecturers and Degree Lecturers in Junior colleges and Degree Colleges respectively.

As mentioned in one of the columns above, there has been a sustained growth of the student potentiality since the inception of the Forum. And, besides the unhindered growth in the size of the student strength, there has been a proportionately parallel increase of the achievements of the goals the Forum has been relentlessly endeavouring to meet year after year. More specifically, the training activity at the Forum has been continuing over so many years in no way uninterrupted at any moment of time. That there has always been an affirmatively evinced confidence in the reliability of our commitment to the interests' and aspirations of the students as well as to a scientifically reasoned approach to the curriculum activity stands proof positive to the continued scalability and sustainability of the motto before the Forum and its organizers.

Contributions from the donors, a minimal on-line registration fee of Rs 100/- for a systematic streamlining of a disciplined admission process are the primary source of funds. However, the recurrent source of funds is the Mallu Venkata Narsimhareddy (MVN) Vignana Kendram Trust. The same Trust, apart from facilitating total accommodational facilities for classrooms, library, etc, also provides from time to time all infrastructural facilities in a five-storied building of its own situated in the town of Nalgonda.

Dr. Akkenapally Meenaiah,

M.A, M.Phil, Ph.D.

President

Nalgonda Economics Forum

* * *

B.A. (ECONOMICS) SYLLABUS

Semester - IV

INDIAN ECONOMY

Discipline Specific Elective : Paper – IV

Module-I : STRUCTURE OF THE INDIAN ECONOMY :

Indian Economy at the time of Independence. Changes in the Composition of National Income and Employment. Natural Resource base: Land, Water, Forest, Mineral and Metal Resources. Population: Size, Growth and Composition and their implications for Indian economy.

Module-II : INDIAN AGRICULTURE :

Importance and Role of Agriculture. Trends in Agricultural Production and Productivity. Land Reforms. Green Revolution. Agricultural Finance. Agricultural Marketing. Agricultural Price Policy. Food Security in India.

Module-III : INDIAN INDUSTRY AND SERVICES :

Role and Importance of Industrialization. Trends in Industrial Production and Services. Industrial Policy Resolutions: 1956, 1991. The Role of Public and Private Sectors. Formal and Informal Sectors in Industry and Services.

Module - IV : NITI AAYOG :

Demise of planning commission. Genesis of NITI Aayog: structure and composition of NITI Aayog, Functions and objectives of NITI Aayog, Differences between NITI Aayog and planning commission, Economic prism-cooperative federalism platform for interface between Centre and State. NITI Ayog role in strategic planning and innovation and knowledge hub. Challenges ahead.

Module-V : SERVICE SECTOR, ECONOMIC REFORMS :

Concept, Components, Trends and Role of Service Sector,-Infrastructural Development: Transport, Banking, Insurance, and Information Technology. Economic Reforms: Liberalization, Privatization, and Globalization- A critical evaluation.

References :

1. SK Misra and Puri : Indian Economy, Himalaya Publishing House.
2. Ishwar C Dhigra : The Indian Economy :
3. Gaurav Dutt and Ashwini Mahajan: Indian Economy, S.Chand Publication
4. Ramesh Singh: Indian Economy
5. Economic Survey 2018-19 6) RBI Reports,
7. Press Information Bureau – Press Releases.

MODEL QUESTION PAPER

COMMON CORE SYLLABUS (with effect from 2019-20)

(For All Universities In Telangana State)

B.A. ECONOMICS : SECOND YEAR : Semester-IV (Indian Economy)

Time: 3 Hours

Max. Marks : 80

PART - A (5x4 = 20 MARKS)

Answer any 5 of the following questions

1. Size and Growth of Population in India
2. Disguised Unemployment
3. Food Security Programs in India
4. Regulated markets
5. Write a note on Formal and Informal Sectors
6. Objectives of NITI Aayog
7. Information Technology
8. Transport Sector

PART - B (5x12 = 60 MARKS)

Answer all the following questions

9. a) Explain the structure of Indian Economy at the time of Independence?
(or)
b) Explain the composition National Income in our country?
10. a) Explain the causes for low productivity in Agriculture Sector in Indian?
(or)
b) Explain the defects of agricultural marketing in India and suggest remedial measures.
11. a) Critically examine the new industrial policy 1991
(or)
b) Explain the importance of Industrialisation
12. a) Explain the structure and composition of NITI Aayog
(or)
b) What is cooperative federalism? Explain in detail
13. a) Explain the role and importance of service sector in economic development
(or)
b) Critically evaluate the economic reforms in India.

I N D E X

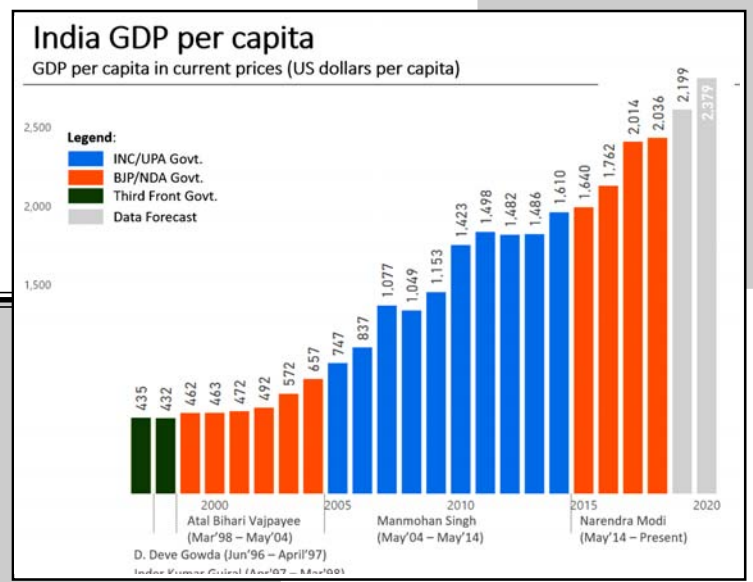
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Structure of The Indian Economy

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- 1.3.1. Unemployment in India
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- 1.3.5. Measures to solve the Unemployment Problem
- 1.4.1. Natural Resources
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- 1.5.2. Size and Growth of Population in India
- 1.5.3. Demographic Features of India
- 1.5.4. Population and Economic Development
- 1.5.5. Population Policy
- 1.6 Model Examination Questions

1.0. Objective

The primary objective of this module is to familiarize you with the structure of the Indian Economy prior to the country's independence. The structure of present economy is not just of current making; it has its roots steeped in history, particularly in the period when India was under British rule which lasted for almost two centuries. You will also know in this module, the changes in the Composition of National Income after independence. You will understand, Natural Resource base like Land, Water, Forest, Mineral and Metal Resources in India. And also you will know Population Size, Growth, Composition and its implications on Indian economy.

1.1.1. Indian Economy at the time of Independence :

The Indian economy in the pre-British period consisted of isolated and self-sustaining villages on the one hand, and towns, which were the seats of administration, pilgrimage, commerce and handicrafts, on the other. Means of transport and communication were highly underdeveloped and so the size of the market was very small. On the eve of independence Indian economy was in very bad shape due to the presence of British colonial rule. The sole purpose of the British colonial rule in India was to reduce the country to being a feeder economy for Great Britain's own rapidly expanding modern industrial base. Thus, in 1947, when British transferred power back to India, we inherited a crippled economy.

To understand pre-British India, it is essential to study the following:

1. Decline of Indian handicrafts.
2. Growth of the new land system.
3. Commercialisation of Indian agriculture.
4. Industrial transition in India.
5. Colonial exploitation

1. Decline of Indian Handicrafts: Before the beginning of industrial revolution in England, the East India Company concentrated on the export of Indian manufactured goods, textiles, spices, etc., to Europe where these articles were in great demand. The industrial revolution reversed the character of India's foreign trade. Tremendous expansion of productive capacity of manufactures resulted in increased demand of raw materials for British industry and the need to capture foreign markets. As a first step, attempts were made to restrict and crush Indian manufactures. On the other hand, efforts were made to commercialize agriculture so as to step up the export of raw materials. The Indian textile handicrafts were the first to be hit. The decline of this industry started a chain reaction leading to the speedy decline of other handicrafts. The process of decline of handicrafts was accelerated by the development of means of transport.

2. Growth of the New Land System : Another important impact of the British rule is the growth of a new land system in India. In the early period of the East India Company rule, the Company directors were keen on securing the largest possible revenue. Land revenue was a principal source of finance for Company administration in India as also of satisfying the Company directors in England with larger returns every year from their conquest of India. In order to bring about stability in agriculture the British introduced land settlement in 1793 was called the Zamindari system in Bengal. Another and a totally different land system was evolved for large parts of Bombay and Madras and subsequently extended to North-Eastern and North-Western India. According to this system, called the ryotwari settlement, each peasant holding a plot of land was recognised as the landlord and made directly responsible to the state for the annual payment of land revenue. The British land system helped the concentration of economic power in the hands of absentee landlords and moneylenders in rural India. It depressed agriculture and the peasantry.

3. Commercialisation of Indian Agriculture: Another noteworthy change in Indian agriculture was its commercialisation that spread between 1850- 1947. Commercialisation of agriculture implies production of crops for sale rather than for family consumption. By the middle of the nineteenth century, Industrial Revolution had been completed in England. There was a tremendous demand for raw materials, especially cotton, jute, sugarcane, groundnuts for the British industries. By offering a higher bait of market price, the peasants were induced to substitute commercial crops for the food crops as the former were more paying than the latter. Consequently, the peasants shifted to industrial crops and started buying foodstuffs from the mandis for their domestic needs. This led to a fall in the production of food and, consequently this period is marked by the occurrence of most terrible famines in the economic history of India.

4. Industrial Transition in India: The process of industrial transition in the British period is broadly divided into industrial growth during the 19th century and industrial progress during the 20th century. It was mainly the private sector-whether indigenous or foreign - that carried industrialisation forward. Only after the First World War some protection was granted to Indian industries otherwise Indian industry had to weather all storms and face world competition on its own strength. This explains the slow growth of industrialisation.

5. Colonial Exploitation: The major form through which the exploitation of India was done was trade. Later, the British started making investments in Indian industries and the process of economic drain started through investment income in the form of dividends and profits.

1.2.1. National Income in India

According to the National Income Committee, “A national income estimate measures the volume of commodities and services turned out during a given period, counted without duplication.” Thus, a total of national income measures the flow of goods and services in an economy. National Income is a flow and not a stock. As contrasted with national wealth which measures the stock of commodities held by the nationals of a country at a point of time, national income measures the productive power of an economy in a given period to turn out goods and services for the satisfaction of human wants.

Pre-Independence : In the pre-independence estimates, Dadabhai Nairabi, Shah and Khambatta, Findlay Shirras, Wadia and Joshi estimated the value of the output of the agricultural sector and then added a certain percentage as the income of the non-agricultural sector. The assumptions of most of these estimators were arbitrary and hence devoid of any scientific basis. The first scientific calculation was under taken by Dr. V.K.R.V. Rao made use of a combination of census of output and census of income methods.

After Independence : Soon after Independence, the Government of India appointed the National Income Committee in August, 1949, so as to compile authoritative estimates of national income. The Committee consisted of Professor P.C. Mahalanobis, Professor D.R. Gadgil and Professor V.K.R.V. Rao. In the year 1951 in its first report, the total national income of the year 1948-49 was estimated at Rs. 8,830 crore and the per capita income of the year was calculated at Rs. 265 per annum. The committee continued its estimation works for another three years and the final report was published in 1954. The report was a landmark in the history of this country because for the first time, it provided comprehensive data of national income for the whole of India. The report of the National Income Committee provided complete statistics on the national income of the whole country.

The following were the main features of the National Income Committee report:

1. Agriculture including forestry, animal husbandry and fishery contributed about one half of the national income of the country during 1950-51.
2. Mining, manufacturing and hand trades contributed nearly one-sixth of the national income India.
3. Commerce, transport and communication also contributed a little more than one-sixth of the total national income of the country.
4. Income earned from other services such as professions and liberal arts, house property, administrative and domestic services contributed nearly 15 per cent of the total national income of the country.
5. Commodity production constituted nearly two-thirds share of the national income whereas services contributed the remaining one-third of the national income of India.
6. In 1950-51, the share of the Government sector contributed about 7.6 per cent of net domestic product.
7. In the computation of national income estimates, the margin of error was estimated at about 10 per cent.

1.2.2. National Income Estimations in India

During the post-independence period, the estimate of national income was primarily conducted by the National Income Committee. Later on, it was carried over by the Central Statistical Organisation. For the estimation of national income in India the National Income Committee applied a mixture of both 'Product Method' and the 'Income Method'. This Committee divided the entire economy into 13 sectors. Income from the six sectors, viz., agriculture, animal husbandry, forestry, Fishery, mining and factory establishments was estimated by the output method.

Income from the six sectors, viz., agriculture, animal husbandry, forestry, Fishery, mining and factory establishments is estimated by the output method. But the income from the remaining seven sectors consisting of small enterprises, commerce, transport and communications, banking and insurance, professions, liberal arts, domestic services, house property, public authorities and rest of the world is estimated by the income methods.

But the income from the remaining seven sectors consisting of small enterprises, commerce, transport and communications, banking and insurance, professions, liberal arts, domestic services, house property, public authorities and rest of the world was estimated by the income methods.

The National Income Unit of the Central Statistical Organisation (C.S.O.) is now-a-days entrusted with the measurement of national income. Here this unit of C.S.O. estimated the major part of national income from the various sectors like agriculture, forestry, animal husbandry, fishing, mining and factory establishments with the help of product method.

The unit of C.S.O. is also applying the income method for the estimation of the remaining part of national income raised from the other sectors. Till now we have three different series in the national income estimates of India.

1. Conventional Series
2. Revised Series
3. New Series.

1. Conventional Series: The Conventional series revealed national income data both at current prices and at 1948-49 prices covering the period from 1948-49 to 1964-65. Here the contribution of all the 13 sectors was added for obtaining an estimate of the net domestic product at factor cost through the application of both net output method and net income method.

2. The Revised Series: The revised series revealed national income data for both at current prices and at 1960-61 prices for the period 1960-61 to 1975-76. Later on, a new

series was also started with 1970-71 as base year. Due to this difference in the base year and differences in weights used for the two series, estimates of national income revealed differences in its magnitudes.

3. New Series: The National Income Unit of Central Statistical Organisation (C.S.O.) prepared a new series on national income with 1980-81 as base year as against the existing series with 1970-71 as the base year. Again the CSO prepared another new series on national income with 1993-94 as base year as against the existing series with 1980-81 as base year. Again The Central Statistical Organisation has revised the existing series of national accounts with 1993-94 as the base year with a new series with 1999-00 as the base year. The present base year for gross domestic product is 2011-12.

The government is planning to change the base year for Gross Domestic Product (GDP) calculations on constant prices to 2020-21, stated the Union statistics ministry in Lok Sabha on March 11, 2020. This was in view of the structural reforms in the economy and the likely availability of data through annual surveys such as consumer expenditure, annual surveys on in incorporated sector enterprises and service sector enterprise, etc.

1.2.3. Trends in National Income

In order to understand the impact of planning in India, a study of trends in national income is necessary. It would be, therefore, better if the trend in national income and changes in the structure of national product are analysed over the last 57 years of planning.

National Income estimates are published annually by the Central Statistical Organization of the Government of India (CSO) in its publication 'National Accounts Statistics'. The current series of national income estimates records India's national income since 1950-51 onwards. The estimates presented are of two types, viz. Those based on current prices, i.e. the prices prevailing in the year to which the estimates relate and based on specified base-year prices, popularly known as national income at constant prices.

The base year for the current series is 2004-05 till the year 2011-12. For years after 2011-12, as new series has been published and estimates for the later years are available with 2011-12 as the base year. For the purpose of comparing national income and per capita incomes over different years, it is desirable to take into account only the estimates of national and per capita income at some constant base-year prices.

Table No. 1.1, indicates that the national income of India, at 2004-05 prices, has grown from Rs. 2,69,724 crore in 1950-51 to Rs. 49,58,849 crore in 2011-12. Under the new series national income increased from Rs. 78,46,531 crore in 2011-12 to Rs. 94,00,266 crore in 2014-15. However, this growth has neither been uniform nor steady during this period.

Table No.1.1. Growth Rates of NNP and Per Capita NNP				
Year	National Income Rs Crores		Per Capita income	
	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices
	Base Year 2004-05			
1950-51	9,829	2,69,724	274	7513
1960-61	17,062	4,11,519	393	9,482
1970-71	44,550	5,96,470	823	11,025
1980-81	1,38,565	7,95,193	2,041	11,711
1990-91	5,26,017	13,42,031	6,270	15,996
2000-01	19,47,788	22,91,795	19,115	22,491
2010-11	69,42,089	46,57,438	58,534	39,270
2011-12	80,52,996	49,58,849	66,997	41,255
	Base Year 2011-12			
2011-12	78,46,531	78,46,531	64,316	64,316
2012-13	88,41,733	81,93,427	71,593	66,344
2013-14	1,00,56,523	87,51,834	80,388	69,959
2014-15	1,12,17,079	94,00,266	88,533	74,193

Source: Economic Survey 2014-15

Table No. 1.2, indicates that the Gross Domestic Product of India, at 2011-12 constant prices, has grown from Rs. 1,13,69,493 crore in 2015-16 to Rs. 1,45,65,951 crore in 2019-20. In the same period Per capita GDP increased from Rs. 88,616 to 1,08,620 (RBI Report 2020)

Table No.1.2. Growth Rates of GDP and Per Capita GDP				
Year	GDP Rs Crores		Per Capita GDP	
	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices
	Base Year 2011-12			
2015-16	1,37,71,874	1,13,69,493	1,07,341	88,616
2016-17	1,53,91,669	1,23,08,193	1,18,489	94,751
2017-18	1,70,98,304	1,31,75,160	1,30,124	1,00,268
2018-19	1,89,71,237	1,39,81,426	1,42,963	1,05,361
2019-20	2,03,39,849	1,45,65,951	1,51,677	1,08,620

Source: RBI Report Sep 18,2020

1.2.4. The Sectoral Composition of National Income

Sectoral contribution of national income depicts a clear picture about the composition or distribution of national income by industrial origin. Thus it shows the contribution made by different sectors towards the national income of the country. In India, among the different sectors, the primary sector and more particularly agriculture still plays a dominant role in contributing the major portion of the national income of the country.

Table 1.3 shows the changes in the sectoral contribution towards the national income of the country since 1950-51.

Table No. 1.3 Sectoral Composition of National Income

Year	Agriculture & Allied Activities	Manufacturing, Construction, Electricity etc	Service: Trade, Transport, Storage etc
2004-05 as base year			
1950-51	55.0	17.0	28.0
1980-81	41.8	21.6	36.5
1990-91	34.9	24.6	40.5
2000-01	25.8	23.8	50.4
2010-11	16.7	26.0	57.3
2011-12	16.5	29.1	57.4
2011-12 as base year			
2011-12	21.6	29.9	48.5
2012-13	20.8	29.3	50.0
2013-14	20.2	28.7	51.1
2014-15	19.0	28.4	52.5

Source: Economic Survey 2014-15

Year	2011-12 as base year		
2019-20	14.65	30.19	55.17

Source: Ministry of Statistics and Programme Implementation

Table No. 1.3 Indicates that there is substantial decline in the share of primary sector in GDP over the last six decades. The primary sector (agriculture, forestry, fishing, mining, etc.) under the new series with the base year 2011-12, share of agriculture and allied sector was revised upwards to 21.6 percent in 2011-12 that declined to 19 percent in 2014-15. The contribution of the secondary sector (manufacturing industry, construction, electricity, gas and water supply etc.) under the new series with the base year 2011-12 was 30 percent in 2011-12. In 2014-15, the secondary sector contributes over 28 percent of GDP. In 2019-20 the contribution of primary sector was 14.65 per cent, secondary sector was 30.19 and tertiary sector was 55.17 per cent. The factors responsible for the rapid growth of the tertiary sector are:

1. With the economic growth and industrial development, demand for services like transport, communication, electricity, storage, finance etc, increased tremendously and that led to the expansion of tertiary sector. Rapid Development of Information Technology service has proved to be a great source of expansion of tertiary sector.

2. Defense, civil administration, economic and Social service like health, education, etc., too have made a huge contribution to the service sector. Due to increase in the income of the people has increased demand for services like hotels and restaurants, transport, communication and many other kinds of services.

The trends in national income reflect the growth of Indian economy, which has been sometimes slow and erratic, but is moving ahead gradually in a planned manner. Decline in the share of primary sector, increased contribution of tertiary sector and growing share of secondary sector are the trends in the direction of development and progress.

1.2.5. Difficulties in Estimating National Income

The estimation of national income in any country is a very difficult task and in India the difficulties are very much glaring. The major difficulties among them are as follows.

1. Lack of Reliable Statistics: The most serious handicap is the inadequacy, non-availability and unreliability of statistics. Reliable statistical information regarding agriculture and allied occupations is not available. There is also no information available regarding consumption expenditure and savings of either rural or urban population

2. Difficulties of Estimating the Output of the Non-monetized Sector: In India, „where agriculture is largely carried on a subsistence basis, a considerable portion of the output does not come to the market for sale, but is either consumed by the producers themselves or is bartered away in exchange for other goods and services. Thus a serious difficulty arises in regard to the estimation of the imputed value of the produce.

3. Absence of Proper Accounts: Literacy of the people and the lack of practice in keeping accounts is another difficulty. In Western countries, economic statistics are collected directly from individuals and enterprises. This is obviously not possible in India. Moreover, Indian people are by tradition suspicious and do not cooperate in/the collection of data.

4. Inability to Estimate: Besides, major part production is not capable of knowing the exact quantity and the value of their products. Thus, an assessment of output, produced by self-employed agriculturists, small producers and owners of households enterprises in the unorganised sector would require an element of guess work.

5. Unorganised Production: a major part of the production both agricultural and industrial sectors is unorganised and scattered. Thus, it does not admit of easy calculation. The Indian agricultural sector is dominated by subsistence farming and is a semi-stagnant sector and has therefore small significance in estimating the national income of a developing economy. This also applies to household crafts.

6. Lack of Proper Classification: A major part of the Indian economy consists of household enterprises which perform functions belonging to different occupational categories simultaneously. Thus, the usual industrial classification cannot be followed

7. Lack of Uniform Basis: Another difficulty is the absence of a uniform basis, which could be used for evaluating commodities and services in terms of money. This is made more difficult by the fact that a considerable portion of the output in India does not come into the market at all either it is consumed by the producers themselves or is bartered for other commodities and services. The large unorganised and non-monetized sector of the Indian economy presents the greatest difficulty in national income estimation.

1.3.1. Unemployment in India

The size of employment in a country depends to a great extent on the level of development. Therefore, when a country makes progress and its production expands, the employment opportunities grow. In India, during the past three decades the production has expanded in all the sectors of the economy. In response to these developments the absolute level of employment in absolute terms has increased. This has happened because during the first three decade of economic planning, trend rate of growth was considerably lower than the targeted rate. Therefore, jobs in adequate number were not created. Further, economic growth by itself does not solve the problem of unemployment. In broad sense a state of unemployment appears when a labourer does not obtain employment opportunity despite his willingness to work on existing wage rate.

India is a developing economy, the nature of unemployment, therefore, sharply differs from the one that prevails in industrially advanced countries. In advanced countries unemployment to be the result of a deficiency of effective demand. This type of unemployment is called cyclical unemployment or frictional unemployment. But more serious than cyclical unemployment or frictional unemployment in a developing economy like India is the prevalence of chronic under-employment or disguised unemployment in the rural sector and the existence of urban unemployment among the educated classes. Present unemployment problem in India is mostly structural in nature. Unemployment can be broadly classified into (1) Rural Unemployment (2) Urban Unemployment.

1.3.2. Types of Unemployment

The different types of unemployment are as follows:

- 1. Structural Unemployment:** This type of unemployment is associated with economic structure of the country. When demand for labour falls short to the supply of labour due to rapidly growing population and their immobility, the problem of unemployment appears in the economy. Besides, due to growing population, rate of capital formation falls down which again limits the employment opportunities. This type of structural unemployment is of long run nature. Indian unemployment is basically related to this category of unemployment.
- 2. Under-Employment:** Those labourers are under-employed who obtain work but their efficiency and capability are not utilized at their optimum and as a result they contribute in the production up to a limited level. A country having this type of unemployment fails to exploits the efficiencies of their labourers.
- 3. Disguised Unemployment:** A person does not contribute anything in the production process or in other words, if he can be removed from the work without affecting the productivity adversely, he will be treated as disguisedly unemployed. The marginal productivity of such unemployed person is zero. Agriculture sector of under developed or developing economies possesses this type of unemployment on a large scale.
- 4. Open Unemployment:** When the labourers live without any work and they don't find any work to do, they come under the category of open unemployment. Educated unemployment and unskilled labour unemployment are included in open unemployment. The migration from rural to urban areas in search of work is very often found in India which is an example of open unemployment.
- 5. Educated Unemployment:** Even when a person who is educated/trained and skilled, fails to obtain a suitable job suited to his qualifications, he is said to be educated unemployed. Presently this type of unemployment has become a problem for developing economies, particularly for India.
- 6. Frictional Unemployment:** The temporary unemployment which exists during the period of transfer of labour from one occupation to another is called frictional unemployment. It arises due to the imperfections of labour market. Imperfections of labour market are reflected in the ignorance of labour about job opportunities.
- 7. Seasonal Unemployment:** Seasonal unemployment appears due to a change in demand based on seasonal variations. Labourers do not get work round the year. They get employment only in some seasons in the year. They get employment in the peak

season of agricultural activities and become unemployed when these activities are over. Indian agriculture ensures employment for only 7-8 months and labourers remain unemployed in the remaining period. This temporary type of employment gives birth to seasonal unemployment.

8. Cyclical Unemployment: The main cause of cyclical unemployment is the slackness in business activities. This type of unemployment is generally witnessed in the developed countries.

9. Technological Unemployment: When the introduction of new technology causes displacement of workers, it is called technological unemployment.

10. Non-Employment: The people who are working in their household activities or unorganised sector in developing countries are treated as coming under non-employment category.

1.3.3. Estimations of Unemployment in India

That a large number of workers are forced to remain jobless both in rural and urban areas is true beyond dispute. The Committee of Experts on Unemployment under the chairmanship of B. Bhagwati in its report submitted to the Government in May 1973, observed:

Table No. 1.4 Unemployment In India, 1971 (In millions)				
S.No	Type	Total	Rural	Urban
1	Total number of Unemployed	18.7	16.1	2.6
2	Total Labour force	180.4	148.4	32
3	Total unemployed as per cent of total labour force	10.4	10.9	8.1

On the basis of the data, the likely number of unemployed in 1971 may be reasonably taken at 18.7 million including 9 million who are without any job whatsoever and 9.7 million who work for less than 14 hours per week may be treated at par with the unemployed. Out of this, 16.1 million (86 per cent of total) unemployed are in the rural areas and 2.6 million in the urban areas. Unemployed as a percentage of total labour force worked out to 10.4 per cent for the country as a whole, 10.9 per cent for the rural areas and 8.1 per cent for the urban areas. (Refer Table 1.4).

Unemployment Estimates: A person working 8 hours a day for 273 days of the year is regarded as employed on a standard person year basis. On the basis of the recommendations of the Committee of Experts on Unemployment Estimates set up by the Planning Commission, three estimates of unemployment were generated in the 27th Round of NSS.

1. Usual Status Approach: This approach estimates only those persons as unemployed who had no gainful work for a major time during the 365 days preceding the date of survey. This measure is more appropriate to those in search of regular employment. This is also referred to as 'open unemployment'.

2. Weekly Status Approach: This approach records only those persons as unemployed who did not have gainful work even for an hour on any day of the week preceding the date of survey.

3. Daily Status Approach: Under this approach, unemployment status of a person is measured for each day in a reference week. A person having no gainful work even for 1 hour in a day is described as unemployed for that day.

The usual status (US) unemployment rate is generally regarded as the measure of open unemployment during the reference year; the current weekly status (CWS) unemployment rate also measures chronic unemployment, but with reduced reference period of a week. The current daily status (CDS) is considered to be a comprehensive measure of unemployment, including chronic unemployment as well as under-employment, on weekly basis.

Unemployment statistics (based on findings from Centre for Monitoring Indian Economy (CMIE))

1. India Unemployment Rate increased to 7.11 % in Dec 2020, from the previously reported number of 5.27 % in Dec 2019.
2. India Unemployment Rate is updated yearly, available from Dec 1991 to Dec 2020, with an average rate of 5.65 %. The data reached an all-time high of 7.11 % in Dec 2020 and a record low of 5.27 % in Dec 2019.
3. The data is reported by reported by World Bank. In the latest reports, India Population reached 1,355.00 million people in Mar 2021.
4. The country's Labour Force Participation Rate dropped to 46.29 % in Dec 2020.

1.3.4. Causes of Unemployment in India

Unemployment problem in India is the cumulative result of so many factors. The broad causes of unemployment problem are as follows:

1. Population Explosion: The most fundamental cause of large scale unemployment in India is the high rate of population growth since the early 1950s and the consequent increase in its labour force. It was estimated that with the 2.5 per cent annual rate of population growth, nearly 4 million persons are added to the labour force every year.

2. Underdevelopment: Indian economy continues to be underdeveloped even as a vast quantity of unutilized and under utilised natural resources is prevailing in the country. The scale and volume of economic activities are still small. The non-agricultural sector especially modern industrial sector which could generate huge number of employment is growing very slowly.

3. Inadequate Employment Planning: In the first phase economic planning in India, employment opportunities could not be increased adequately and little has been done to utilise variety of labour surplus existing in the rural areas. Moreover, weak manpower planning is also another serious gap in Indian planning.

4. Slow Rate of Growth: In India the rate of growth of the economy is very poor and even the actual growth rate lies far below the targeted rate. Thus the increased employment opportunities created under the successive plans could not keep pace with the additions to the labour force taking place in the country every year leading to a huge and larger backlog of unemployment at the end of each plan.

5. Backwardness of the Agriculture: Heavy pressure of population on land and the primitive methods of agricultural operations are responsible for oversize rural unemployment and underemployment in the country.

6. Insufficient Industrial Development: Industrial development in the country is not at all sufficient. Rather the prospect of industrial development has never been completely realised. Due to shortage of capital, lack of proper technology, scarcity of industrial raw materials, shortage of electricity and lack of labour intensive investment industrial sector could not gain its momentum and also could not generate sufficient employment opportunities in the country.

7. Prevailing Education System: The prevailing education system in India is full of defects as it fails to make any provision for imparting technical and vocational education.

8. Slow Growth of Employment during Economic Reforms: Finally, the current phase of economic reforms introduced in India has resulted jobless growth to some extent. Economic Reforms has resulted large scale retrenchment of surplus workers in different industries and administrative departments due to down-sizing of workers.

1.3.5. Measures to Solve the Unemployment Problem

Following are the suggestions to solve unemployment problem:

1. Change in education system: Educational pattern should be completely changed. Students who have liking for higher studies should be admitted in colleges and universities. Emphasis should be given on vocational education. Qualified engineers should start their own small units.

2. More assistance to self employed people: Most people in India are self employed. They are engaged in agriculture, trade, cottage and small scale industries etc. These persons should be helped financially, providing raw materials and technical training.

3. Increase in Production: To increase employment, it is essential to increase production in agriculture and industrial sectors. Development of small and cottage industries should be encouraged.

4. High rate of capital formation: Rate of capital formation in the country should be accelerated. Capital formation should be particularly encouraged in such activities which generate greater employment opportunities. Capital output ratio should be kept low.

5. Decentralization of industrial activity: Decentralization of Industrial activity is necessary to reduce unemployment. If industrial activities are centralised at one place, there will be less employment opportunities in the under developed areas. So Govt. should adopt such policies which encourage decentralization of industrial activity.

6. Population control: The growth of population should be checked in order to solve unemployment, problem. Family planning programme should be implemented widely and effectively.

7. Government Measures: Following the publication of the Bhagwati Committee report in 1973, the Government took the following measures to provide employment and alleviate underemployment.

1. Employment Guarantee Scheme of Maharashtra 1972-73
2. Rural Landless Employment Guarantee Programme (RLEGP) 1983
3. IRDP, NREP
4. Jawahar Rozgar Yojana: 1989
5. Indira Awaas Yojana (IAY): 1993-94
6. Jawahar Gram Smridhi Yojana (JGSY):1999
7. Swarna Jayanti Gram Swarozgar Yojana (SGSY): 1999
8. Swarna Jayanti Sahari Rozgar Yojana (SJSY): 1997

1.4.1. Natural Resources

The existence or the absence of favourable natural resources can facilitate or retard the process of economic development. Professor W.A. Lewis writes: “The extent of a country’s resources is quite obviously a limit on the amount and type of development which it can undergo.” Underdeveloped countries, embarking on programmes of economic development, “usually have to begin with and concentrate on the development of locally available natural resources as an initial condition for lifting local levels of living and purchasing power, for obtaining foreign exchange with which to purchase capital equipment, and for setting in motion the development process.”

Natural resources include land, water resources, fisheries, mineral resources, forests, marine resources, climate, rainfall and topography. Some of these resources are known to man. For example, the topography of a region, the size of land surface, the climate, the area under forests, and the discovered mines form a part of the natural wealth about which the people of a country possess knowledge. But nature possesses more in its bosom and in order to discover what it hides; man is required to develop techniques of knowing the undiscovered resources. Sometimes the discovery of the use of a resource can immediately increase its use-value.

When we talk about the natural resources of a country, we have obviously in mind the extent of the known or discovered natural resources with their present uses. With the growth of the knowledge about the unknown resources and their use, the natural endowment of a country is materially altered.

While some natural resources such as land, water, fisheries and forests are renewable others like minerals and mineral oils are exhaustible and can be used only once. Consequently, careful use of the exhaustible resources and maintenance of the quality of renewable resources like land are a must in the process of development.

1.4.2. Land Resources

Table 1.5 describes the land utilisation pattern in India for the year, 1999-2000. The total geographical area of India is about 329 million hectares, but statistical information regarding land classification is available for only about 306 million hectares; this information is based partly on village papers and partly on estimates.

Table No.1.5 Land Utilisation Pattern 2009-10

Particulars	Area Million Hts	Per cent
1) Total geographical area	329	
2) Total reporting area	306	100
3) Barren land, not available for cultivation	42	14
4) Area under forests	69	23
5) Permanent pastures and Grazing land	10	3
6) Cultivable waste lands	13	4
7) Fallow lands	26	9
8) Net area sown	140	46
9) Area sown more than once	52	17
10) Total cropped area (8+9)	192	63

Source: Agricultural Statistics at a glance, 2012

1. Barren Land: 43 million hectares or 14 per cent of the total reporting area in India are classified as: (1) barren land, such as mountains, deserts, etc. which cannot be brought under cultivation, and (2) area under non-agricultural uses, that is, lands occupied by buildings, roads and railways, rivers and canals, and other lands put to uses other than agriculture. Presently, 14 per cent of the total reporting area is not available for cultivation. With rapid increase in population and growing urbanisation, this percentage would increase over the years.

2. Area under Forests: Table 1.5 shows that 69 million hectares of land or 23 per cent of the total land area is under forests. Area under forests includes all land classified as forests by law or administered as forests, whether state-owned or private, and whether wooded or maintained as potential forest land.

3. Pastures and Grazing Land: Permanent pastures and other grazing lands include all grazing lands such as permanent pastures and meadows and village common grazing land. Table 1.5 shows that 10 million hectares or 3 per cent of the total land area are classified as permanent pastures.

4. Cultivable Waste Lands: Table 1.5 refers to Culturable waste lands, viz., lands available for cultivation but not cultivated during the previous 5 or more years. They include land under miscellaneous tree crops such as casuarinas trees, thatching grasses, bamboo bushes and other groves for fuel, etc. These lands may either be fallow or covered with shrubs and jungles which are not put to any use. Such lands are called cultivable waste lands; they account for 13 million hectares or 4 per cent of the total land area.

5. Fallow Lands: These are cultivable but remain uncultivated or remain fallow during a given year or for some period. Fallow lands are further classified into current fallows and other fallow lands. Current fallows represent cropped areas which are kept fallow during the current year, as, for example, the seeding area may not be cropped in the same year. Other fallow lands include all lands which are taken up for cultivation but are temporarily out of cultivation for a period not less than one year and not more than five years. Table 1.5 shows that fallow lands account for 26 million hectares or 9 per cent of the total reporting area in this country.

6. Agricultural Land: Now, out of the total reported area of 306 million hectares, net area sown is only 140 million hectares or 46 per cent of the total land area. Net area sown includes the total area sown with crops and orchards, counting area sown more than once in the same year, only once. Area sowed more than once represents the area on which crops are cultivated more than once during the agricultural year. Total cropped area represents total area covered with crops and it is the sum total of all the land covered by all the individual crops; area sown with crops more than once during the year being counted as separate areas for each crop. Table 1.5 shows that the total cropped area in India in 2009-10 was 192 million hectares.

1.4.3. Forest Resources

Forests are an important natural resource of India. They help control floods and thus they protect the soil against erosion. They supply timber, fuel wood, fodder and a wide range of non-wood products. They are the natural habitat for bio-diversity and repository of genetic wealth. Forests, thus, play an important role in environmental and economic sustainability.

Table No.1.6 Forest Cover Estimates from 1987

Assessment Year	Forest Cover Million Hectares	Percentage of Land area
1987	64.1	19.5
1991	63.9	19.4
1995	63.9	19.4
2003	67.8	20.64
2011	69.2	21.05

Source: Tenth 5 year plan (2002-07). Vol.II.p. 1056

Eleventh 5 year plan (2007-12) Vol./III p.67

Area under Forests: Under land utilisation pattern, the Government of India estimated the total area under forests as 69 million hectares or 23 per cent of the total geographical area (Table 1.6). Using remote sensing technology, the Forest Survey of India has been periodically assessing the forest cover of the country biennially since 1987. The results of these surveys are summarised in Table 1.6:

The assessments since 1987 show clearly that the forest cover in India has stabilised around 19 per cent of the total geographical area (i.e. around 64 million hectares). The State of Forest Report 2011 of Forest Survey of India indicates the tree cover over 69.2 million hectares i.e. 21.05 per cent of the land area. Actually, however, only about 38 million hectares are dense forests (i.e. 12 per cent) and the rest are open forests or degraded forests (about 7 per cent) and mangroves.

Announcing the results the Union Minister Shri Javadekar said that India is among few countries in the world where forest cover is consistently increasing. The total forest and tree cover of the country is 80.73 million hectare which is 24.56 percent of the geographical area of the country. (PIB 30 December 2019).

Actually, forests have generally been undervalued in economic and social terms in our country. The contribution of the forest sector to GDP was put at 1 per cent in 1996-97 (measured at 1980-81 prices). A recent estimate puts the gross value of forest products at 2.4 per cent of GDP. These values are indeed important and should be given proper weight in all policy decisions affecting forestry.

Plan Outlays on Forests: During the first Five-Year Plans, the expenditure of forest development has been in the range of 0.5 per cent to 0.6 per cent of the total Plan expenditure. The Sixth Plan outlay on forests was 690 crores, which was 40 per cent more than what was spent in the previous five plans (480 crores); but in percentage terms, the Sixth Plan outlay was less than 0.6 per cent of the total Plan outlay. During the successive Plans also there was been an increase in plan outlay on forests, but in relative terms it was more or less insignificant. The Eleventh Plan (2007-12) has projected a total investment of 8,840 crores for forests and environment (in 2006-07 prices) or about 10,000 crores at current prices.

Forest Policy 1952: Appreciating the necessity of developing forests, the Government of India formulated its forest policy in 1952 to be implemented. According to this policy, it was decided to raise steadily the area under forests to 100 million hectares or 33 per cent for the country as a whole. The target was to provide green cover over two thirds of the land area in the hills and mountains. To achieve this goal, it was necessary to secure the long range development of forest resources on the one hand, and to meet the increasing demand for timber and firewood on the other. The main objectives of forest policy under the Five-Year Plans were:

- (1) To increase the productivity of forests
- (2) To link up forest-development with various forest-based industries
- (3) To develop forests as a support to rural economy.

1.4.4. Water Resources

India is one of the wettest countries in the world, with average annual rainfall of 1100 m.m. There is, however, no accurate information about India's water resources. Narottam Shah of the Bombay-based Centre for Monitoring Indian Economy, stated: "Unbelievable as it may seem, till now we have no arrangements in this country to compile and publish on an annual basis, comprehensive data regarding various aspects of water which are important for policy analysis and programme formulation and for monitoring the efficiency of use of our scarce water resources." Central Water Commission in its Water Resources Information System Directorate provides estimates about water resources and utilization as given in Table 1.7.

Table No. 1.7 Water Sector at a Glance

1	Estimated Annual Precipitation	400	BCM (Billion Cubic Meter)
2	Geographical Area	328.7	Million Hectares
3	i) 2001 Census Population	1029	Millions
	ii) 2011 Census Population	1210	Millions
4	Estimated Annual Rainfall 2009	3136	BCM
5	Average Annual Potential in Rivers	1869	BCM
6	i) Per Capita Water Availability(2001)	1816	Cubic Meter
	ii) Per Capita Water Availability(2010)	1588	Cubic Meter
7	Estimated Utilisable Water		
	i) Surface	690	BCM
	ii) Ground	433	BCM
	iii) Total	1123	BCM

Source: Central Water Commission, 2010

In Table 1.7 we note that total estimated annual rainfall in 2009 was 3136 billion cubic meters (BCM). Average annual potential in reverse is 1869 BCM. Per capita water availability in 2010 was 1588 cubic meter, which was 1816 cubic meter in 2001. This indicates fast declining per capital availability of water in the country. It is reported by Central Water Commission that total estimated Utilisable Water was 1123 BCM per annum, out of which 690 BCM was surface water and 430 BCM was ground water. The nation has been witnessing acute water shortages are being experienced year after year by most parts of Tamil Nadu, Rajasthan, Gujarat, Orissa, etc. The problem of water scarcity is assuming crisis proportions with growth of cities and increasing urban population and rising demand for water for irrigation.

1.4.5. Mineral and Metal Resources

The development and management of mineral resources plays a major role in the industrial growth of a nation. Coal and iron, for instance, are the basic minerals needed for the growth of iron and steel industry which in turn, is vitally necessary for the country's development. Similarly, there are other minerals like mica and manganese, copper, lead and zinc which are of economic importance. Then, we have mineral fuels like petroleum, coal, thorium and uranium which are of national importance. Besides these, we have a number of minor minerals with varying degrees of utility to the country. The reserves of coal and iron so essential for basic industries viz., are ample. But there is a fairly long list of vital minerals like copper, tin, lead, zinc, nickel, cobalt and sulphur and most of all petroleum, in which India is deficient.

Trends in Mineral Production: On account of the efforts of the Indian Government, there has been significant improvement in the production of minerals both in volume and value. The value of mineral production has improved from about 58 crores in 1947 to 55,360 crores in 2000-01 (consisting of Rs 30,000 crores of minerals and Rs 25,360 crores of crude petroleum and natural gas production).

Coal: Coal is one of the primary sources of energy accounting for about 67 per cent of total energy consumption in the country. The total workable reserves of coal are estimated at 180 billion tonnes for the country as a whole though the geological coal reserves of the country are estimated at 221 billion tonnes. The principal centres of coal are the Bengal-Bihar region, the Madhya Pradesh, Maharashtra, Orissa and Andhra Pradesh. But bulk of the coal production comes from Bengal-Bihar coal fields. They contribute 60 to 65 per cent of the total production.

Oil and Natural Gas: In the beginning of 2001, it was estimated that India had reserves of 734 million tonnes of oil crude and 750 billion cubic meters (BCM) of natural gas. The great stimulus to industrial development and the general intensification of the country's economic activities since Independence led to a rapid growth in the consumption of petroleum products, which rose from 3.3 million tonnes in 1950-51 to 148.0 million tonnes in 2011-12.

Oil Crude: At the beginning of the First Plan, the production of indigenous crude oil was insignificant, at 0.3 million tonnes. The Government went in a big way for oil exploration through the Oil and Natural Gas Commission (ONGC) and Oil India Limited (OIL). The discovery of oil reserves on and offshore led to rapid increase in the indigenous production of crude. The domestic production of oil crude rose smartly to nearly 7 million tonnes in 1970-71, and to 33 million tonnes by 1990-91. Since then, domestic production of oil crude has been stagnant around 32 to 34 million tonnes. Due to stagnant production of oil crude in the country, gross import of crude oil went up from 21 million tonnes in 1990-91 to 171.7 million tonnes in 2011-2012.

Petroleum Products: Let us now consider the growth in demand and supply of petroleum products. As mentioned above, rapid industrialisation and consequent growth of the transport system, the demand for and consumption of petroleum products rose rapidly since Independence. For instance, consumption of petroleum products rose from 3.3 million in 1950-51 to 148.0 million tonnes in 2011-12.

Iron Ore: Iron ores are extremely important both for the production of steel and for purposes of exports. The production of iron ore was only 3 million tonnes in 1950-51. It rose to 54 million tonnes in 1990-91, and 218.6 million tonnes in 2009-10, before declining to only 167.3 million tonnes in 2011-12.

Explorations of iron-ore have revealed the presence of the numerous and rich deposits of iron in Bihar, Orissa and Madhya Pradesh. Low grade iron ores were also found in Tamil Nadu, Maharashtra and Andhra Pradesh. The total reserves of iron have now been estimated to be of the order of 21,000 million tonnes. The Indian iron and steel industry is fortunate in the sense that it possesses high quality iron ores and at low cost. India is today one of the cheapest producers of steel in the world.

1.5.1. Population

The study of human resources is vital from the point of view of economic welfare. It is particularly important because human beings are not only instruments of production but also ends in themselves. It is necessary to know in quantitative terms the number of people living in a country at a particular time, the rate at which they are growing and the composition and distribution of population.

The world is populated today as it has never been before. Although rates of population growth have fallen and will continue to fall, we currently add about a million people every four days to the world population, net of deaths. Demography is the science of population and the word “Demos” in Greek means population. Unless otherwise specified, population means totality of human beings (we also make use of the term such as cattle, lorry and vehicle population).

According to the Census of India, Ministry of Home Affairs, the decade of 2001 to 2011 is the 1st decade post Indian Independence, which added least number of people to the country's population. The percentage of decadal growth in the nation, for the first time, showed a decrease by 3.90 % since, the present Census of India 2011 has registered the rate to be 17.64 % from the rate of 21.54 % in the earlier Census conducted in the year 2001.

Among the total decadal growth rate, the rural areas of India grew at 12.18% whereas; the urban areas of the country grew at the rate of 31.80 % in the last Census decade. The state of Bihar showed the highest decadal growth rate in between the years

2001 to 2011. India is thus the second country in the world after China to cross 1 billion mark. It is now estimated that by 2050. India will most likely overtake China to become the most populous country on the earth.

It is this rising trend of population in our country. That is really a matter of concern. In this topic, an attempt is made to explain size and growth of population, demographic features of India's population, Impact of population growth on Economic development and population policies of the government of India.

1.5.2. Size and Growth of Population in India

India today possesses about 2.4 per cent of the total land area of the world but she has to support about 17 per cent of the world population. At the beginning of this century India's population was 236 million and according to 2001 census, the population of India is 1,027 million. A study of the growth rate of India's population can be made from the Table 1.8.

Table No.1.8: Growth of Population in India

Census Year	Population (in millions)	Increase or decrease (in millions)	Percentage Increase or decrease
1891	236		
1901	236	0.0	0.0
1911	252	(+) 16	(+) 5.7
1921	251	(-) 1	(-) 0.3
1891	1921	(+) 15	(+) 0.19
1931	279	(+) 28	(+) 11.0
1941	319	(+) 40	(+) 14.2
1951	361	(+) 42	(+) 13.3
1921	1951	(+) 110	(+) 1.22
1961	439	(+) 78	(+) 21.6
1971	548	(+) 109	(+) 24.8
1981	683	(+) 135	(+) 24.7
1951	1981	(+) 322	(+) 2.14
1991	846	(+) 161	(+) 23.9
2001	1029	(+) 183	(+) 21.5
2011	1210	(+) 181	(+) 17.64

Compound annual growth rate of Population

1891	1921	0.19
1921	1951	1.22
1951	1981	2.15
1981	1991	2.11
1991	2001	1.93
2001	2011	1.64

Source: Census of India 2001& 2011

A Study of growth rate of India's population falls into four phases:

1891-1921: Stagnant population

1921-1951: Steady growth

1951-1981: Rapid high growth

1981-2011: High growth with definite signs of slowing down

During the first phase of 30 years (1891 to 1921), the population of India grew from 236 million in 1891 to 251 million in 1921 i.e., just by 15 million. The compound annual growth rate was negligible i.e., 0.19 per cent per annum for the period. The growth of population was held in check by the prevalence of a high death rate against a high birth rate. Birth and death rates were more or less equal during this period. India was in the first stage of demographic transition in this period marked by stagnant population.

During the second phase of 30 years (1921 to 1951), the population of India grew from 251 million in 1921 to 361 million in 1951 i.e., by 110 million. The compound growth rate of population was 1.22 per cent per annum which can be considered as moderate. The main reason for the increase in population growth rate was a decline in death from about 49 per thousand to 27 per thousand, but compared with this, there was a very small decrease in birth rate. India had started its entry into the second phase of demographic transition during this period which marked a steady but low growth rate of population.

During the third phase of 30 years (1951 to 1981), the population of India grew from 361 million in 1951 to 683 million in 1981. In other words, there was a record growth of population by 322 million in a period of 30 years. This gives a compound annual growth rate of 2.14 per cent which is nearly double the growth rate of the previous phase.

During 1981 to 2011, India entered the fourth phase of high population growth with definite signs of slowing down. Total population increased from 683 million in 1981 to 1,210 million in 2011 indicating an increase of 77.2 per cent during the 30 year period. The annual average rate of growth of population during 1981-2011 was of the order 1.64 percent.

1.5.3. Demographic Features of India

The Census of India unleashes a vast source of data relating to the demographic profile of the country. The important aspects of demographic features are discussed below:

1. Density of population: The term density of population implies the average number of persons living per sq. km. From a small figure of 77 persons living per sq. km. in 1901, the density of the population of India rose to 90 per sq. km. in 1931 signifying an increase of only 17 per cent, but during the next 30 years, density went up to 142 persons per sq. km. indicating a sharp increase of about 58 per cent. But during 1961-81, density jumped to 216 per sq. km. in 1981 indicating an unprecedented increase of 52 per cent during the last 20 years. In 1991, the density of population rose to 267 per sq. km. and further shot up to 382 per sq. km. in 2011. However, density of population is very unevenly distributed. Kerala, West Bengal, Bihar, Tamil Nadu and Uttar Pradesh are some of the highly densely populated states, but Madhya Pradesh, Chhattisgarh Rajasthan, Himachal Pradesh, Jammu and Kashmir and Nagaland are, on the other hand, such states which have a low density of population. The density of population of the two union territories i.e. Delhi and Chandigarh were the highest in the country being 11,320 and 9,258 persons per sq. km

2. Sex Ratio: Sex ratio tries males. It is observed that there is a trend in favour of female population in western hemisphere whereas; in Asia and more particularly in India there is a trend in favour of male population. The numbers of females per 1000 males in India were 972 in 1901 and then gradually declined to 955 in 1921, 941 in 1961, 930 in 1971, 933 in 1981 and then 929 in 1991. Again in 2001, the numbers of females per 1000 males in India were 933. According to 2011 Census, it is 940. Among the states, Kerala has more females than males.

3. Rural – Urban Composition: The Ratio of rural-urban population of a country is an index of the level of industrialization of that country. The rural urban composition of India's population reflects the pattern of living of the country's population. In India, a majority of the population lives in rural areas. But there is a growing trend for a gradual shift of population from rural to urban areas. As per 1961 Census the total population of India was 439.2 million and the rural Population was 360.3 million and urban population was 78.9 millions. According to 2011 Census, the total population in India was 1,210.2 million with a rural population of 833.1 million (68.83%) and urban population of 377.1 (31.16%) millions. Thus, it is observed that although the size of urban population in India has been increasing gradually, the pace of urbanization in the country is considered still low.

4. Age Structure: An analysis of the age composition of the population can determine the proportion of labour force to the total population of the country. The age group of working population in India is considered as 15-59 years. This age group constituted 62.5 per cent of the population in 2011. Another significant segment is that of children who fall in the age group of 0-14 years. This accounted for 29.5 per cent of the population. The old people above 60 years are about 8.0 per cent of the population. This means that the burden of dependents on the population is excessive.

5. Life Expectancy: Expectancy of life refers to the average life of the inhabitants of a nation. Before independence, the expectancy of life was very low. For instance, in 1921 the expectancy of life was 19.4 years. In 1931 it was increased to 26.9 years. In 1991, it was 59 years and 63 years in 2001. As per 2011 Census, life expectancy is further increased to 67.01 years. The women and men life expectancies were at 68.33 years and 65.8 years respectively.

6. Literacy Rate: The quality of population of a country can be accessed on the levels of literacy attained by it. In India, the level of literacy which was only 18.3 per cent in 1951 gradually increased to 52.1 per cent by 1991. According to 2011 census the literacy rate in the country is 74.04 per cent, and 82.14 per cent and 65.46 per cent for male and female respectively. Highest literacy rate is recorded in the state of Kerala with 93.91 per cent and the lowest in Bihar with 63.82 per cent. The census data over the period shows that the literacy among males and females has been improved. However, the improvement is substantial in the case of females.

1.5.4. Population and Economic Development

The process of economic development involves the utilization of physical resources of a nation by the labour force of a country so that productive potential in a country is realised. In this effort of development there is no doubt that the labour force of the country makes a positive contribution, but it is equally true that rapidly growing population retards the process of development. The impact of rising population acting as a drag on economic resources is felt in a variety of ways. It would be of interest to examine the problem in this setting. In the case of underdeveloped countries, population growth has come in the way of their economic development. These countries have experienced slower growth in their per capita income because of the rapid growth in population.

1. Per capita Income: In India rapidly rising population is retarding factor in rising its per capita income. During 1950-51 and 1995-96, the net national product at factor cost (1980-81 prices) rose by 493 per cent, but on account of rises in population by 159 per cent, the per capita NNP rose only by 131 per cent. The annual average growth rate of the national income works out to 4.0 per cent (compound) and of per capita income only to 1.88 per cent. With decline in the rate of growth in population, the net increase in the

per capita income will rise, but a high growth rate of population is a retarding factor to raising the levels of per capita income in the country.

2. Food Supply: Rapidly growing population in a country can create serious food shortage. Due to high rate of growth of population in India, the per capita cultivated land declined from 1.11 acres in 1921 to 0.47 acres by 1991, indicating a fall of 58 per cent. In view of this declining land man-ratio, steps were taken to raise productivity. Consequently, we were able to increase the food grain production five times when compared to 1951 but there was small increase in per capita availability of food grains. According to economic survey 2018-19 the food grains production in India is 280 tonnes.

3. Burden of Unproductive Consumers: The population in the age group of 15-59 belongs to the “economically active” or working population and the population below the age of 15 and above the age of 59 belongs to dependent population (unproductive consumers). During the period 1961-2001 the number of non-working population ratio of working to non-working population in India has deteriorated from 43:57 in 1961 to 39:60.7 in 2001. By 2001 the number of non-working population in India has increased to 623 million from 464 million in 1981.

4. Unemployment: Rising population is accompanied a rise in the labour force in the country- The efforts of government have not been successful in tackling the problems of unemployment because of these large additions to the labour force The Ninth. Plan (1997-2002) has estimated the total backlog of unemployment as 36.8 million in 1996. According to approach paper 11th plan, unemployment rate as a proportion of the labour force increased to 8.3 per cent. The increase in unemployment both in absolute and relative terms indicates that during the last 60 years of planning, the five year plans were not able to absorb the net additions to the labour force not to speak of clearing the backlog of unemployment.

5. Burden of Social Expenditure: Increasing population needs heavy expenditure on education, health, transport facilities, housing etc: There is a heavy demand for such services as increasing population contains none of child population and hence demands higher expenditure on education. Moreover, this rising population in India is also increasing the burden of expenditure on medical care public health and housing.

6. Capital Formation: The rapid growth of population has also an adverse effect on capital formation. In India, the capital output ratio being 3.5, for raising the national income at the rate of 2.2 per cent (which is equal to the rate of growth of population) capital accumulation at the rate of 12 per cent (5.5×2.2) is very much essential.

1.5.5. Population Policy in India

India has been recognised as the first country in the world to officially adopt family planning programme in 1952, serious thinking about population growth was reflected in the Third Plan in terms of “the objective of stabilising the growth of population over a reasonable period.” Subsequently, targets were set in various policy documents. The National Population Policy announced in the year 1976.

The National Population Policy (2000): The NDA Government finally decided on 15th February 2000 to adopt the National Population Policy (2000) with a view to encourage two-child norm and aim at stabilising the population by 2046 A. D. The main features of the National Population Policy areas under:

The Government decided that the freeze on Lok Sabha seats imposed as per the 42nd Constitutional Amendment with 1971 census as the basis for deciding the number of seats which is valid up to 2001, is being extended till 2026. Besides this, National Population Policy listed the following measures to achieve a stable population by 2046.

1. Reduction of infant mortality rate below 30 per 1000 live births.
2. Reduction of maternal mortality rate to below 100 per 1,00,000 live births
3. Universal immunization
4. To achieve 80 per cent deliveries in regular dispensaries, hospitals and medical institutions with trained staff.
5. Access to information, containing AIDS, prevention and control of communicable diseases.
6. Incentive to adopt two-child small family norm
7. Facilities for safe abortions to be increased
8. Strict enforcement of Child Marriage Restraint Act and Pre-Natal Diagnostic Techniques Act,
9. Raising the age of marriage girls not earlier than 18, and preferably raising it to 20 years or more.
10. A special reward for women who marry after 21 and opt for a terminal method of contraception after the second child.
11. Health insurance cover for those below the poverty line who undergo sterilization after having two children. The Action Plan drawn for the next 10 crucial years included the following:
 - (a) Self-help groups at village panchayat levels comprising mostly of housewives will interact with healthcare workers and gram panchayats.
 - (b) Elementary education to be made free and compulsory
 - (c) Registration of marriage, pregnancy to be made compulsory along with births and deaths. The Government hopes to achieve the objective of population stabilisation by 2046 A.D.

1.6 Model Examination Questions :

1. Explain the structure of Indian Economy at the time of Independence?
2. Describe National Income Estimations in India?
3. Elucidate trends in National Income in India?
4. Explain the composition National Income in our country?
5. Explain the difficulties in estimating National Income?
6. Describe the types of Unemployment?
7. Explain causes for unemployment in India?
8. What are the measures you suggest to solve the unemployment Problem?
9. Elucidate demographic Features of India
10. Population growth is hindrance to Economic development Discuss

Short Type Questions :

1. Land Resources
2. Forest Resources
3. Water Resources
4. Size and Growth of Population
5. Population Policy 2000 in India
6. Density of population in India
7. Unproductive Consumers
8. Disguised Unemployment
9. Open Unemployment
10. Structural Unemployment

2



Indian Agriculture

- 2.1.1 Importance and Role of Agriculture
- 2.2.1 Agriculture Productivity
- 2.2.2. Trends in Agricultural Production
- 2.2.3. Causes of Low Productivity
- 2.3.1. Land Reforms
- 2.3.2. Abolition of Intermediaries
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- 2.3.4. Ceilings on Land Holdings
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- 2.4.1. Green Revolution.
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- 2.6.1. Agricultural Marketing in India
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- 2.6.3. Remedial Measures to Improve Agriculture Marketing
- 2.6.4. Regulated markets
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- 2.7.1. Agricultural Price Policy.
- 2.7.2. Objectives of Agricultural Price Policy
- 2.7.3. Evaluation of Agricultural Price Policy
- 2.7.4. Types of Agricultural Prices
- 2.8.1. Food Security in India.
- 2.8.2. Food Security Programmes
- 2.9 Model Examination Questions

2.0. Objective

The primary objective of this module is to understand importance and role of agriculture in our country. And know trends in agriculture production and productivity. You will also know in this module about Land Reforms, Abolition of Intermediaries, Tenancy Reforms, and Ceilings on Land Holdings, Defects in implementation of Land Reforms and Green Revolution in India. You will understand, Agriculture finance, Agriculture Marketing and its Price Policy as well as Food Security in India.

2.1.1. Importance and Role of Agriculture

Agriculture has always been the backbone of the Indian economy and despite concerted industrialisation in the last six decades; agriculture still occupies a place of pride. It provides employment to around 60 per cent of the total work force in the country. The significance of agriculture in the national economy can be best explained by considering the role of agriculture under different heads.

1. Share of Agriculture in the National Income: Figures provided by the Central Statistical Organisation (CSO) reveal that in 1950-51, the share of agriculture in GDP was around 55 per cent. The percentage share of agriculture in GDP declined and reached a level of 14.65 per cent in 2019-20. Two important facts must be emphasised here: 1) Agriculture contributed a major share of the national income in India at one time. 2) The share of agriculture in national income, however, has been decreasing continuously while the shares of the manufacturing and service sectors are increasing.

2. Indian Agriculture and Pattern of Employment: Agriculture dominates the economy to such an extent that a very high proportion of working population in India is engaged in agriculture. Data provided by the Census of India reveals that in absolute terms, agriculture provided employment to 98 million persons in 1951; the number of people working on land increased to 263 million in 2011. In terms of percentage, however, people working on land came down from 70 to 54.6 during the five decades between 1951 and 2011. In 2020, 41.49 percent of the workforce in India was employed in agriculture, even though the share of Indians working in agriculture is declining, it is still the main sector of employment.

3. Importance of Agriculture for Industrial Development: Indian agriculture has been the source of supply of raw materials to our leading industries. Cotton and jute textile industries, sugar, flour mills Vanaspati and plantations etc; all these depend on agriculture directly. There are many other industries which depend on agriculture in an indirect manner. Many of our small-scale and cottage industries like handloom weaving, oil crushing, rice husking, etc., depend upon agriculture for their raw materials.

4. Role of Agriculture in International Trade: Importance of Indian agriculture also arises from the role it plays in India's trade. Agricultural products tea, sugar, oilseeds, tobacco, spices, etc, constituted the main items of exports of India. Broadly speaking, the proportion of agricultural goods which were exported came to 50 per cent of our exports, and manufactures with agricultural content such goods as manufactured jute, cloth and sugar contribute another 20 per cent and the total comes to 70 per cent of India's exports in 1950-51. But with diversification of exports, more especially after the introduction of agricultural exports which were 18.5% in 1990-91 rose to 20.3% in 1996-97 and thereafter indicated a continuous decline and were of the order of only 12.9% in 2011-12 and 14.2% in 2013-14. The agricultural exports as a percentage of India's agricultural GDP has increased from 9.4 % in 2017-18 to 9.9 % in 2018-19.

5. Role of Agricultural Sector in Economic Planning: Importance of agriculture in the national economy is indicated by many facts. For example, agriculture is the main support for India's transport systems, secure bulk of their business from the movement of agricultural goods. Internal trade is mostly in agricultural products. Further, good crops implying large purchasing power with the farmers lead to greater demand for manufactures and, therefore, better prices. In other words, prosperity of the farmers is also the prosperity of industries. Likewise, bad crops lead to a depression in business. Generally, it is the failure in the agricultural front that has led to failure of economic planning in particular periods. Agricultural growth has direct impact on poverty eradication. It is also an important factor in containing inflation, raising agricultural wages and for employment generation.

6. Agricultural Development Essential for Economic Growth: The significance of agriculture in India arises also from the fact that the development in agriculture is an essential condition for the development of the national economy. Ragnar Nurkse argues that the surplus population in agriculture should be shifted to the newly started industries. Nurkse's thesis is that agricultural productivity will be increased on the one hand and on the other new industrial units would be set up with the use of surplus labour.

2.2.1. Agricultural Productivity

Agricultural efficiency can be defined as the ratio of output to the inputs into agricultural activities. These inputs may include the amount of manpower employed (or number of man-hours spent) and the cost of investment in terms of irrigation, fertilizers, seeds, pesticides, power, machines etc. Agricultural efficiency is reflected in productivity, one way to measure which is in terms of yield per hectare of land cultivated where intensive agriculture is practiced, and where heavy inputs and man-hours are employed. In these conditions, the yield per hectare may not be high.

The agricultural productivity may, alternatively, be measured in terms of yield per person employed. This type of productivity is high where extensive agriculture is practiced. This involves large areas, mechanised operations at every stage. In such conditions, the yield per hectare may not be very high. Agricultural productivity is affected by physical (physiographic, climate, soil, water), socioeconomic, institutional and organizational factors, besides the attitude of the farmers and their managerial skills. Knowledge of the agricultural productivity of a region helps in planning for the development of the region, and trying to increase productivity in weaker areas.

2.2.2. Trends in Agricultural Production in India

Since the introduction of economic planning in India, agricultural development has been receiving a special emphasis. It was only after 1965, i.e., from the mid-period of the Third Plan, special emphasis was laid on the development of the agricultural sector. Since then, a huge amount of fund was allocated for the development and modernization of this agricultural sector every year. All these initiatives have led to:

1. A steady increase in areas under cultivation
2. A steady rise in agricultural productivity
3. A rising trend in agricultural production.

1. Growth in Area: In India the growth in gross area under all crops has increased from 122 million hectares in 1949-50 to 151 million hectares in 1964-65 and then it increased to 168.4 million hectares in 2008- 09. Further, gross area under all food grains has increased from 99 million hectares in 1949-50 to 118 million hectares in 1964-65 and then to 123.2 million hectares in 2008-09. Similarly, the gross area under all non-food-grains has also increased from 23 million hectares in 1949-50 to 33 million hectares in 1964-65 and then to 45.2 million hectares in 2008-09

2. Agricultural Productivity: Agricultural productivity means, the average yield per hectare of land. After the introduction of modern agricultural technique along-with the adoption of hybrid seeds, extension of irrigation facilities and application of intensive method of cultivation in India, yield per hectare of all crops has recorded a steep rising trend. The average yield per hectare for all food-grains has recorded an increase from 5.5 quintals in 1949-50 to 7.6 quintals in 1964-65 and then to 18.98 quintals in 2008- 09 showing an annual growth rate of 1.4 per cent during 1950-65 and 2.4 per cent during 1965-2007.

3. A rising trend in agricultural production: During the post-green revolution period (1965-2009), the average yield per hectare in respect of rice and wheat has increased to 21.86 quintals and 28.91 quintals respectively. But the annual growth rate of coarse cereals increased by only 1.3 per cent and that of pulses of only 0.5 per cent during the

period 1967-2009. Among the non-food-grains, cotton and sugarcane achieved a modest growth rate of 2.0 per cent and 1.0 per cent respectively during 1950-65 and again to the extent of 2.4 per cent and 1.2 per cent respectively during 1967-2009.

If we compare the average yield per hectare of various crops in India with foreign countries then we find that India lags far behind the other developed countries of the world. In 1990- 91, the annual average yield of rice per hectare was only 17.5 quintals in India as against 41 quintals in U.S.A., 61.9 quintals in Japan and 54 quintals in China. Again, the annual average yield of wheat per hectare was only 22.7 quintals in India as against 68 quintals in Germany, 61 quintals in France and 30 quintals in China.

i) Increase in Food grain Production: As per Third Advance Estimates for 2019-20, total Food grain production in the country is estimated at record 295.67 million tonnes which is higher by 10.46 million tonnes than the production of food grain of 285.21 million tonnes achieved during 2018-19. However, the production during 2019-20 is higher by 25.89 million tonnes than the previous five years' (2014-15 to 2018-19) average production of food grain.

ii) Increase in Rice Production: Total production of Rice during 2019-20 is estimated at record 117.94 million tonnes. It is higher by 8.17 million tonnes than the five years' average production of 109.77 million tonnes. Production of Wheat during 2019-20 is estimated at record 107.18 million tonnes. It is higher by 3.58 million tonnes as compared to wheat production during 2018-19 and is higher by 11.02 million tonnes than the average wheat production of 96.16 million tonnes.

iii) Increase in Coarse Cereals Production: Production of Coarse Cereals estimated at record 47.54 million tonnes, is higher by 4.48 million tonnes than the production of 43.06 million tonnes achieved during 2018-19. Further, it is also higher by 4.50 million tonnes than the average production. Total Pulses production during 2019-20 is estimated at 23.01 million tonnes which is higher by 2.19 million tonnes than the Five years' average production of 20.82 million tonnes.

iv) Increase in Oilseeds production: Total Oilseeds production in the country during 2019-20 is estimated at record 33.50 million tonnes which is higher by 1.98 million tonnes than the production of 31.52 million tonnes during 2018-19. Further, the production of oilseeds during 2019-20 is higher by 4.10 million tonnes than the average oilseeds production.

v) Increase in Sugarcane Production: Total production of Sugarcane in the country during 2019-20 is estimated at 358.14 million tonnes. Production of Cotton is estimated at record 36.05 million bales (of 170 kg each) is higher by 8.01 million bales than the production of 28.04 million bales during 2018-19. Production of Jute & Mesta is estimated at 9.92 million bales (of 180 kg each).

2.2.3. Causes of the Low Productivity

Though the agricultural productivity in India-average yield per hectare-has improved but the full potential has to be realized over now. The main causes of low productivity are as follows:

1. Size of Holdings: The average size of holdings in India is very low, less than 2 hectares or 5 acres due to which no scientific cultivation with improved techniques and seeds can take place. Small sized holdings lead to great waste of time, labour, difficulty in proper utilization of irrigation facilities and irrigation among farmers.

2. Poor Techniques of Production: The Indian farmers have been using old and inefficient methods and techniques of farming. Only in the recent years, the farmers have started adopting improved implements like steel ploughs, sugarcane crushers, small pumping sets, harrows, fodder cutters etc. The Indian farmers do not have the means to purchase good quality seeds and better techniques of farming due to scarcity of funds.

3. Inadequate Irrigation Facilities: One of the basic causes for the weakness of Indian agriculture has been that most of the farmers throughout the country have to depend upon rainfall and very few of them can avail the facilities of artificial irrigation. Despite a vigorous programme of major and minor irrigation works since 1951, the ratio of irrigated land to total cultivated land is now about 33 per cent.

4. Pressure of Population on Land: The pressure of population on land is continuously increasing, whereas the number of people dependent on agriculture was 16.3 crore in 1901, it rose to 44.2 crore in 1981. Though additional land has been brought under cultivation since 1901, yet per capita cultivated land has declined from 0.44 hectares in 1921 to 0.29 hectares in 1961 and further to 0.21 hectares in 1991. Increasing pressure of population on land is partly responsible for the sub-division and fragmentation of holdings. The cultivated land (hectare per person) in India declined up to 0.14 in 2009 according to a World Bank report published in 2010.

5. Land Tenure System: A very important factor of low agricultural productivity was the absence of proper incentives. Under the Zamindari system, the cultivator was only a tenant who could be turned out of the land. Even though the Zamindari system has been abolished and tenancy legislations have been enacted yet the position of tenants is still far from satisfactory.

6. Lack of Credit and Marketing Facilities: On account of lack of marketing facilities and non--availability of loan on fair rate of interests, the cultivators are not able to invest the requisite resources in agriculture. This keeps the level of productivity on land and per cultivator low. Indian farmers do not get a fair return for their crops. As majority of the farmers are poor they cannot hold their crops for a long time so as to have a better price for their crops because they have to return the loans taken for purchasing seeds, fertilisers, water etc. Moreover inadequate storage facilities and chain of middle men make the marketing system more complex. Although there is government agency like Food Corporation of India for this but it handles only big and rich farmers. Cooperative Marketing Societies and Warehousing facilities are not developed.

7. Unreliable Monsoon: The Indian farmer is at the mercy of the Monsoon which can sometime bring very heavy rains and cause floods and sometimes dry spells that can lead to drought conditions. Also the amount of rainfall in a particular season is not dependable.

8. Soil Erosion: In a land of heavy rains, removal of natural vegetation can be disastrous. It leads to wide-spread soil-erosion. The land has been under cultivation for over 5000 years and if it is not taken care of, it loses its fertility reducing its yield. Large tracts of fertile land suffer from soil erosion by wind & water.

9. Human Factors: Most farmers do not own the land they cultivate. The land is owned by the absentee landlords who are indifferent to land improvement and the plight of the farmers. Poverty is serious problem. Farmers are often burdened with inherited debts. They cannot afford to use modern equipments and buy better seeds. Moreover they do not have security against the crop failure.

10. Fertilizer and Biocides: Indian soils have been used for growing crops over thousands of years without caring much for replenishing. This has led the farmers to depend on minerals. The chemical fertilizers are costly and often beyond the reach of the poor farmers.

2.3.1. Land Reforms

Productivity in agriculture is mainly dependent on two sets of factors; technological and institutional. Among the technological factors are the use of agricultural inputs and methods such as improved seeds, fertilisers, improved ploughs, tractors, harvesters, irrigation, etc., which help to raise productivity, even if no land reforms are introduced. The institutional reforms include the redistribution of land ownership in favour of the cultivating classes so as to provide them a sense of participation in rural life, improving the size of farms, providing security of tenure, regulation of rents, etc.

In other words, the institutional factors, such as the existence of feudal relations, small size of farms, sub-division and fragmentation, insecurity of tenancy rights, high rents, etc., act as disincentives to the peasantry to raise production. They weaken the capacity of the farmers to save and invest in agriculture as also to enjoy the fruits of their labour. Consequently, two schools of thought emerged. The Socialists believe that the existence of feudal or semi-feudal relations was the real cause of backwardness and poverty in rural communities. The emancipation of the peasantry from the bondages of institutional depressors will unleash forces which shall automatically raise levels of production in agriculture.

The other school of thought believes that agricultural productivity is purely a technological phenomenon and that it can be raised by the application of superior agricultural methods. Thus, whereas the key to higher productivity lies in technological change according to one school, it lies in institutional reform according to the other. Quite recently, both the schools of thought are converging and opinion has come to centre round the idea that land reforms and technological change are not mutually exclusive factors but are complementary in the process of agricultural development. It is held that technological change can work more effectively in a congenial agrarian structure and in this way the process of development can be accelerated.

The purpose of land reforms is, therefore, twofold. On the one hand, it aims to make more rational use of the scarce land-resource by affecting condition of holdings, imposing ceilings and floors on holdings so that cultivation can be done in the most economical manner, i.e., without any waste of labour and capital; on the other, it is a means of redistributing agricultural land in favour of the less privileged classes, and of improving the terms and conditions on which land is held for cultivation by the actual tillers, with a view to ending exploitation.

2.3.2. Abolition of Intermediaries

Some steps were taken abolition of intermediaries earlier in India, the actual abolition of intermediaries started in 1948 with the enactment of legislation in Madras. Legislation was passed in all states, but for a few minor tenures and inams as in Assam, Gujarat, Madras and Maharashtra. As a result of the conferment of rights, about 30 lakh tenants and share-croppers acquired ownership rights over a total cultivated area of 62 lakh acres throughout the country. While the aim was to abolish intermediaries between the 'tiller and the State,' in actual practice the legislative enactments equated intermediaries with Zamindars and, consequently, the legislation left a class of rent-receivers and absentee landlords under ryotwari untouched.

Compensation to Intermediaries unlike Communist countries, abolition of intermediaries was not done in India without compensation. The Congress Party which assumed power after independence was committed to the payment of compensation to the landlords. Although the makers of the Constitution provided for compensation they did not clearly mention 'just and equitable compensation.' Consequently, the Zamindari Abolition Acts were challenged in the High Courts and later taken to the Supreme Court for adjudication.

The Supreme Court while upholding the right of the legislatures to acquire lands for a public purpose ruled that compensation is a justifiable issue. The rates of compensation, the ceiling limit of compensation and even the principles determining compensation were revised and the landlords were quite successful in getting equitable and in some cases more than equitable compensation. The basis and rate of compensation varied from state to state. Compensation was fixed as a multiple of net income of the proprietor at the time of expropriation.

The compensation was, however, to be paid in cash or in bonds. These bonds were to be redeemed in equal installments spread over a long period ranging between 10 to 30 years in various states. The big proprietors were to be given bonds but the comparatively small proprietors were to be paid in cash. The ex-intermediaries were given compensation amounting to 670 crores in cash and in bonds.

2.3.3. Tenancy Reforms

Under the Zamindari and Ryotwari systems, tenancy cultivation had been quite common in India. Tenancy cultivation may be done by small proprietors who find that they have an insufficient quantity of land or it may be carried on by landless labourers. Sometimes, the tenants holding land from an intermediary may sublet it for cultivation. Broadly speaking, tenants are divided into three categories (1) Occupancy or permanent tenants, (2) Tenants-at-will or temporary tenants, and Sub-tenants.

1. Occupancy or permanent tenants: The rights of tenancy of the occupancy tenants are permanent and heritable. They can also receive compensation from the landlords in case they make some improvements on land. They enjoy a fixity and security of tenure which makes them the virtual owners of land. So, for all practical purposes, occupancy tenants are treated as land owners.

2. Tenants-at-will and Subtenants: The position of tenants-at-will and that of subtenants is extremely weak. They are subject to ruthless exploitation. Frequent enhancement of rent, evictions on minor pretexts of several kinds, extractions and begar are some of the popular ways of exploitation. On several occasions, the peasants had to forego even two-thirds of the produce as rent. A situation like this coupled with insecurity necessitates tenancy reforms.

Under this broader step, three inter-related reforms protecting the land-tenants were affected:

1. Regulation of rent so that a fixed and rational rate of rent could be paid by the share-croppers to the land owners.
2. Security of tenure so that a share-cropper could feel secure about his future income and his economic security.
3. Ownership rights to tenants so that the landless masses could get the final rights for the land they plough 'tiller is the owner of the soil'.

Tenancy reforms provided tenants with rights, but only on 4 percent of the total operated areas in the country i.e. 14.4 million hectares of operated area by 11 million tenants by 1992. Redistribution of ownership rights of land took place, but only up to 2 per cent of the total operated area in the country i.e. less than 2 million hectares among the 4.76 million people by 1992. Taken together, the whole process of land reforms could benefit only 6 per cent of the operated area of the country with a negligible socio-economic positive impact. It was the failure of land reforms which made the government easily attracted towards the new policy of the Green Revolution.

2.3.4. Ceilings on Land Holdings

Land reforms in India had envisaged that beyond a certain specified limit, all lands belonging to the landlords would be taken over by the state and allotted to small proprietors to make their holdings economic or to landless labourers to meet their demand for land. Among all resources, the supply of land is the most limited and the claimants for its possession are extremely numerous. It is, therefore, obviously unjust to allow the exploitation of any large surface of land by single individual unless other overwhelming reasons make this highly desirable. Moreover, in the context of the current socio-political climate, redistribution of land would rather appear to be imperative. Thus, the case for pursuing a policy of imposition of land ceiling rests on the following grounds:

1. In the rural sector, land is the principal source of income. If land, the fountainhead of income, benefits only a minor fraction of the rural population, the whole structure of land ownership fails to meet the ends of social justice. The best course of bringing a reduction in inequalities of income is to bring about a reduction in inequalities of land-ownership.

2. A policy of application of capital-intensive methods in Indian agriculture will lead to unemployment on a massive scale. Consequently, the Indian government would like to create a large number of small peasant proprietors. According to Professor Lewis, the size of farm is not very material in securing high yields. The experience of Japan, a country of small farms, justifies that labour-intensive methods can result in higher productivity per acre.

Legislation for ceiling on existing holdings and unit of application has been enacted in two phases. During the first phase which lasted up to 1972, ceiling legislation largely treated land holder as the unit of application. After 1972, it was decided to have family as the basis of holding. Further, the ceiling limit was also reduced to bring about a more equitable distribution of this scarce asset.

The imposition of ceiling on existing holdings is a knotty problem. In this case, a reorganization of the present land system has to be effected. For this, a thorough verification of ownership rights has to be made. With it are connected a good many problems, viz., mala fide transfers, exemptions and disposal of surplus land.

The purpose of ceiling legislation, logically speaking, was to ration out land, the scarcest yet the most basic asset in Indian rural life, among those who were actual tillers, viz., landless labourers, share-croppers or small holders. This could be done by imposing a limit on the possession of land by big holders. Apart from the objection by landlord classes against ceiling legislation, a very large number of loopholes were left in the ceiling legislation.

Consequently, evasion was possible even within the legal provision. The natural result of this was that very little surplus could be acquired after the imposition of ceiling. The intentions of land reform and the provision of ceiling were thus watered down in the process of implementation.

Secondly, law provided a number of exemptions for sugarcane farms, orchards, mango groves, grazing lands, and lands for charitable and religious trusts, cattle breeding farms. All these provisions of exemption were used by the vested interests to evade ceiling on holdings.

Thirdly, the judgment of the Supreme Court that compensation should be paid at market value added another dimension to the problem in favour of vested interests. On

26th August 1974, the Parliament passed unanimously the 34th amendment to 9th Schedule of the Constitution and thus took the land ceiling law away from judicial review.

Fourthly, even when ceiling has been imposed on a family basis, the definition of family includes husband, wife and 3 minor children. For instance, if a ceiling of 15 acres has been provided for a family and there are two major children, then the total land that can be held by the family is 45 acres, 15 acres for the family and 15 acres for each of the two major children. This is obviously unjust.

The ceiling of land holdings was never implemented properly. In the words of Ladenjinsky “while officially the states accepted the ceiling programmes, they rejected them in practice.”

2.3.5. Reasons for Failure of Land Reforms

Land reform programmes were started with a thunderous enthusiasm, but soon the vitality of this enthusiasm was lost and the implementation of land reforms became a very tame affair. There is no doubt that land reforms were conceived broadly in a proper perspective but being riddled with loopholes, they have brought little justice to the rural people.

The Planning Commission Task Force headed by Mr. P.S. Appu mentions the following as the principal reasons for poor implementation of land reforms: lack of political will; absence of pressure from below because the poor peasants and agricultural workers are passive, unorganised and inarticulate; lukewarm and often apathetic attitude of the bureaucracy, absence of up-to date land records, and legal hurdles in the way of implementation of land reforms.

The Task Force categorically concludes: “In a society in which the entire weight of Civil and Criminal laws, judicial pronouncements and precedents, administrative tradition and practice is thrown on the side of the existing social order based on the inviolability of private property, an isolated law aiming at the restructuring of property relation in the rural areas has little chance of success. And whatever little chance of success was there completely evaporated because of the loopholes in the laws and protracted litigation.”

Out of the many reasons forwarded by the experts responsible for the failure of the land reforms in India, the following three could be considered the most important ones:

1. Land in India is considered a symbol of social prestige, status and identity unlike the other economies which succeeded in their land reform programmes, where it is seen as just an economic asset for income-earning.
2. Lack of political will which was required to affect land reforms and make it a successful programme.
3. Rampant corruption in public life, political hypocrisy and leadership failure in the Indian democratic system.

2.4.1. Green Revolution

The term “Green Revolution” was first used by William S. Gaud, the administrator of the U.S. Agency for International Development (USAID), in a speech on 8 March 1968. The Green Revolution is the set of research technology transfer initiatives occurring between 1950 and the late 1960s that increased agricultural production worldwide, beginning most markedly in the late 1960s. The initiatives resulted in the adoption of new technologies, including high-yielding varieties (HYVs) of cereals, especially dwarf wheat and rice. It was associated with chemical fertilizers, agrochemicals, and controlled water-supply and newer methods of cultivation, including mechanization. All of these together were seen as a ‘package of practices’ to supersede ‘traditional’ technology and to be adopted as a whole. The key elements of the revolution include:

- 1) Adoption of modern scientific methods of farming.
- 2) Use of high yielding varieties of seeds
- 3) Proper use of chemical fertilizers,
- 4) Consolidation of land holdings.

Both the Ford Foundation and the Rockefeller Foundation were heavily involved in its initial development in Mexico. One key leader was Norman Borlaug, the “Father of the Green Revolution”, who received the Nobel Peace Prize in 1970. The basic approach was the development of high-yielding varieties of cereal grains, expansion of irrigation infrastructure, modernization of management techniques, distribution of hybridized seeds, synthetic fertilizers, and pesticides to farmers.

Since the mid-1960’s, the traditional agricultural practices are gradually being replaced by modern technology and farm practices in India and a veritable revolution is taking place in our country. Intensive Agriculture Development program (IADP) was the first major experiment of Indian government in the field of agriculture and it was also known as a "package programme" as it was based upon the package approach. The programme was launched in 1960-61. The core philosophy was to provide loan for seeds and fertilizers to farmers. Intensive Agriculture Development program was started with the assistance of Ford Foundation as pilot basis in one district of 7 states at that time. These 7 districts were: 1. Thanjavur (Tamil Nadu), 2. West Godavari (Andhra Pradesh) 3. Shahabad (Bihar), 4. Raipur (Madhya Pradesh), 5. Aligarh (Uttar Pradesh), 6. Ludhiana (Punjab), 7. Pali (Rajasthan) Later, the High-Yielding Varieties Programme (HYVP) was also added and the strategy was extended to cover the entire country. This strategy has been called by various names: modern agricultural technology, seed-fertiliser-water technology, or simply green revolution.

As a result of the new agricultural strategy, area under improved seeds has gone up since 1966. The new varieties are of a short-term duration and consequently, instead of growing one crop, two crops and sometimes, even three crops are grown. In the case of

wheat, unprecedented enthusiasm has prevailed among farmers in Punjab, Haryana, Delhi, Rajasthan and Western U.P. for the new Mexican varieties like Lerma Rojo, Sonara-64, Kalyan and P.V. 18 and a situation developed in which the demand for seeds by the farmers exceeded the supply.

Traditional agriculture relies heavily on indigenous inputs such as the use of organic manures, seeds, simple ploughs and other primitive agricultural tools, bullocks, etc. Modern technology, on the other hand, consists of chemical fertilisers, pesticides, improved varieties of seeds including hybrid seeds, agricultural machinery, extensive irrigation, use of diesel and electric power, etc. Since 1966, the use of modern agricultural inputs has increased at a compound rate of 10 per cent per annum in contrast to the traditional inputs rising at the rate of only one per cent per annum during the same period.

The new agricultural technology uses such resources like fertilisers, pesticides, agricultural machinery, etc., which are produced outside the agricultural sector. As a result, industries supplying the modern farm inputs are growing at a rapid rate. Massive programmes of farm mechanisation and irrigation have also led to an increase in the consumption of electricity and diesel in rural areas.

2.4.2. Impact of Green Revolution

Like other developing countries, Green Revolution has influenced the economy and way of life in India to a great extent as is evident from the following points:

1. Increase in Agricultural Production: The introduction of Green Revolution in 1967-68 has resulted in phenomenal increase in the production of agricultural crops especially in food-grains. From 1967 onwards, the Green Revolution aimed at bringing about a Grain Revolution. Among the food grains too, it is the wheat crop which drew maximum benefit from Green Revolution. On account of this reason, it is said that the Green Revolution in India is largely the Wheat Revolution.

2. Prosperity of Farmers: With the increase in farm production the earnings of the farmers also increased and they became prosperous. This has, especially, been the case with big farmers having more than 10 hectares of land.

3. Reduction in import of food-grains: The main benefit of Green Revolution was the increase in the production of food-grains, as a result of which there was a drastic reduction in their imports. Sometimes we are in a position to export food-grains also.

4. Capitalistic Farming: Big farmers having more than 10 hectares of land have tended to get the maximum benefit from Green Revolution technology by investing large amount of money in various inputs like HYV seeds, fertilizers, machines, etc. This has encouraged capitalistic farming.

5. Ploughing back of profit: The introduction of Green Revolution helped the farmers in raising their level of income. Wiser farmers ploughed back their surplus income for improving agricultural productivity. This led to further improvement in agriculture.

6. Industrial Growth: Green Revolution brought about large scale farm mechanisation which created demand for different types of machines like tractors, harvesters, threshers, combines, diesel engines, electric motors, pumping sets, etc. Besides, demand for chemical fertilizers, pesticides, insecticides, weedicides, etc. also increased considerably.

7. Rural Employment: While on one hand, large scale unemployment was feared due to mechanization of farming with the introduction of Green Revolution technology in India, there was an appreciable increase in the demand for labour force due to multiple cropping and use of fertilizers.

8. Change in the Attitude of Farmers: The Indian farmer had remained illiterate, backward and traditional and had been using conventional methods of cultivation since the early times. But Green Revolution has brought about a basic change in his attitude towards farming.

2.5.1. Types of Agricultural Finance

The financial requirements of the Indian farmers can be classified into three types depending upon the period and the purpose for which they are required: Period of Credit.

1. Short-period Credit: Farmers need funds for short periods of less than 15 months for the purpose of cultivation or for meeting domestic expenses. For example, they want to buy seeds, fertilisers, fodder for cattle, etc. They may require funds to support their families in those years when the crops have not been good or adequate for the purpose. Such short-period loans are normally repaid after the harvest.

2. Medium period Credit: The farmers require finances for medium period ranging between 15 months and 5 years for the purpose of making some improvement on land, buying cattle, agricultural implements, etc. These loans are larger than short-terms loans and can be repaid over longer periods of time.

3. Long period Credit: The farmers need finances for the purpose of buying additional land, to make permanent improvements on land, to pay off old debt and to purchase costly agricultural machinery. These loans are for long periods of more than 5 years.

Productive and Unproductive Credit: We can further classify the credit requirements of farmers into two types—productive and unproductive loans. The former include loans to (1) buy seeds, fertilisers, implements, etc. (2) to pay taxes to the Government and (3) to make permanent improvements on land, such as digging and deepening of wells, fencing of land, etc. All these forms of credit help the farmers in their agricultural operations or

in improving their land. The Indian farmers often borrow for unproductive purposes too, such as for celebration of marriages, births and deaths, for litigation etc. Unproductive loans raised at exorbitant rates of interest are highly improper and unjustified.

2.5.2. Source of Agricultural Finance There are two sources of Agricultural finance available to the farmers I. Non-institutional finance II. Institutional or Private finance. Institutional finance refers to loans provided to farmers by co-operative societies and co-operative banks, and commercial banks including regional rural banks (RRBs). Non-institutional or private sources include money-lenders, traders and commission agents, relatives and landlords.

Non-institutional sources, money-lenders landlords, traders etc. accounted for 93 per cent of the total credit requirements in 1951-52 and institutional sources including the Government accounted for only 7 per cent of the total credit needs in that year. The All India Debt and Investment Survey (1981), estimated that the share of non-institutional sources had slumped to about 37 per cent in 1981, moneylenders accounting for barely 16 per cent; the share of institutional credit, however, had jumped to 63 per cent, co-operatives contributing 30 per cent and commercial banks about 29 per cent.

I. Non-institutional Sources

1. Moneylenders: In India majority cultivators depend upon the money-lenders for their requirements of cash. There are many reasons for the predominance of the village money-lenders in rural areas even now.

1. The money-lenders freely supplies credit for productive and non-productive purposes, and also for short-term and long-term requirements of the farmers.
2. They are easily accessible and maintain a close and personal contact with the borrower, often having relations with family extending over generations.
3. Their methods of business are simple.
4. They have local knowledge and experience and, therefore, can lend against land as well as against promissory notes. They know how to protect themselves against default, through legal and illegal methods.

2. Traders and commission agents: Traders and commission agents supply funds to farmers for productive purposes much before the crops mature. They force the farmers to sell their produce at low prices and they charge a heavy commission for their dealings. This source of finance is particularly important in the case of cash crops like cotton, groundnut, tobacco, etc., and in the case of fruit orchards like mangoes. Traders and commission agents may be bracketed with money-lenders, as their lending to farmers is also at exorbitant rates and has other undesirable effects too.

3. Relatives: Farmers often borrow from their own relatives in cash or kind in order to tide over temporary difficulties. These loans are generally contracted in an informal manner; they carry low or no interest and they are returned soon after the harvest.

4. Landlords: Farmers, particularly small farmers and tenants, depend upon landlords to meet their financial requirements. This source of finance has all the defects associated with money-lenders, traders and commission agents. Interest rates are exorbitant. Often the small farmers are cheated and their lands are appropriated. The landless labourers are forced to become bonded slaves.

II. Institutional credit :

Institutional finance is not exploitative and the basic motive is always to help the farmer to raise his productivity and maximise his income. The rate of interest is not only relatively low but can be different for different groups of farmers and for different purposes. The farmers require not only credit but also guidance in the planning of their agricultural operations like the use of seeds, fertilisers, pesticides. Since independence, a multi-agency approach consisting of co-operatives, commercial banks and regional rural banks, known as institutional credit, has been adopted to provide cheaper and adequate credit to farmers. The major policy in the sphere of agricultural credit has been its progressive institutionalisation for supplying agriculture and rural development programmes with adequate and timely flow of credit to assist weaker sections and less developed regions.

1. Co-Operative Credit Societies: Indian planners considered co-operation as an instrument of economic development of the disadvantaged, particularly in the rural areas. They saw in a village panchayat, a village co-operative and a village school, as the trinity of institutions on which a self-reliant and just economic and social order was to be built. A co-operative credit society, commonly known as the primary agricultural credit society (PACS) may be started with ten or more persons, normally belonging to a village. The value of each share is generally nominal so as to enable even the poorest farmer to become a member. Primary Agricultural Credit Societies (PACS) are the grass root level arms of the short-term cooperative credit structure. PACS deal directly with farmer-borrowers, grant short term and medium term loans and also undertake distribution and marketing functions.

2. Commercial Banks: An important argument in support of bank nationalisation was that commercial banks had kept themselves aloof from the problems of agriculture and

had remained largely indifferent to the credit needs of farmers for agricultural operations and land improvement. When social control of banks was introduced in 1967, a rapid expansion in bank branches in rural areas was started. By July 1969, all commercial banks had over 1,860 branches in rural and semi-urban areas; this number had increased to over 30,585 by June 2006.

3. Regional Rural Banks: One of the important points of the 20-point economic programme of Mrs. Indira Gandhi during Emergency was the liquidation of rural indebtedness by stages and provides institutional credit to farmers and artisans in rural areas. It was in pursuance of this aspect of the New Economic Programme that the Government of India setup regional rural banks (RRB). The main objective of the RRBs is to provide credit and other facilities particularly to the small and marginal farmers, agricultural labourers, artisans and small entrepreneurs so as to develop agriculture, trade, commerce, industry and other productive activities in the rural areas. Initially, five regional rural banks were set up on October 2, 1975 at Moradabad and Gorakhpur in Uttar Pradesh, Bhiwani in Haryana, Jaipur in Rajasthan and Malda in West Bengal. Each regional rural bank had an authorised capital of 1 crore, and issued and paid-up capital of 25 lakhs. The share capital was subscribed by the Central Government (50%), the State Government concerned (15%), and the sponsoring commercial bank (35%).

4. NABARD: Since its inception, RBI had shown keen interest in agricultural credit and maintained a separate department for this purpose. RBI extended short-term seasonal credit as well as medium-term and long-term credit to agriculture through State level co-operative banks and land development banks. At the same time, RBI had also set up the Agricultural Refinance Development Corporation (ARDC) to provide refinance support to the banks to promote programmes of agricultural development, particularly those requiring term credit. With the widening of the role of bank credit from “agricultural development” to “rural development” the Government proposed to have a more broad-based organisation at the apex level to extend support and give guidance to credit institutions in matters relating to the formulation and implementation of rural development programmes. A National Bank for Agriculture and Rural Development (NABARD) was, set up in July 1982.

2.6.1. Agricultural Marketing in India

Marketing of their produce is the most important activity of the farmers. This is particularly true in the case of small farmers who have small surpluses for marketing. There are many ways by which the farmer may dispose of his surplus produce.

1. The first and the most common method is to sell away his surplus produce to the village money-lender-cum-trader, who may buy it either on his own or as an agent of a bigger merchant of the neighboring 'mandis' town. It is estimated that in Punjab, 60 per cent of wheat, 70 per cent of oils and 35 per cent of cotton are sold in the village itself.
2. The second method adopted by the Indian farmer is to dispose of his produce in the weekly village markets, known in Hindustani as the 'haat'. Besides, fairs are held once a year in important villages or towns in connection with religious festivals. In 'haats' and fairs, the farmers bring their produce as well as livestock and sell them.
3. The third method of agricultural marketing is through the mandis in small and large towns. The mandis may be located at a distance of several miles and, therefore, the farmer has to make special effort to carry his produce to the mandis. In the mandis, there are brokers or 'dalals' who help the farmers to dispose of their produce to the wholesalers known as 'arhatiyas'.

2.6.2. Defects of Agricultural Marketing

The position of agricultural marketing in India is still deplorable. The major defects of the system are the following:

- 1. Inadequate Storage and Warehousing Facilities:** The average Indian farmer does not have adequate storage facilities. Moreover, there is no satisfactory warehousing facility in the market. For these two reasons the farmer has to sell his produce immediately after the harvest. He cannot wait to obtain better prices in the future. More-over, due to lack of storage facilities, farmers are unable to obtain loans from co-operative marketing societies or even commercial banks against the security of the stored output.
- 2. Lack of Adequate Transport Facilities:** The road conditions in rural areas are really very bad. Even the rich cultivators, having surplus to dispose off, are often not interested in going to the mandis. Most rural roads are un-metalled and cannot be used during the monsoon season.
- 3. Lack of Information:** The market for agricultural products in India is not perfectly competitive in the sense that the farmers do not usually get adequate information about the price that prevail in big and organised markets. Due to lack of communication

facilities, the information about market prices rarely reaches to the farmers. Since most farmers are illiterate and ignorant they take at face value whatever price rules in all parts of the market.

4. Absence of Grading: As a general rule, there is hardly any grading of the commodities to be marketed. Of course, the British Government passed the Agricultural Produce (Grading and Marketing) Act in 1937 to solve this problem. But nothing really has happened. As per the Act, licenses are issued on a selective basis to reliable merchants, under the supervision and control of the Government staff. The graded commodities are subsequently passed on to the market under the label of “AGMARK”.

5. A Long Chain of Intermediaries: The number of middlemen and intermediaries between the farmer and the final consumer of most agricultural commodities is very large. Therefore, the total margin going to the traders is quite a large part of the market price.

6. Unethical Practices: Many fraudulent practices are observed in rural markets. The entire method of transaction is against the interest of the farmer. In the mandis, the farmer has to approach a broker to be able to dispose of his produce to the arhitiya. These two intermediaries often use code words to settle the price under cover and not in open. Moreover, false weights and measures are used and unnecessary deduction is made from the quoted price on the pretention that his produce is of inferior quality. Thus, the farmer is exploited in various ways and, the whole method of transaction is against the interest of the farmer.

7. Multiplicity of Charges: There are multiplicities of charges on the seller. Some of these are legitimate such as commission, carriage and weightment, while others are not, such as charges for the arhitiya buyers’ servants and apprentices, charity, religious festival and so on. In each case the seller has to pay more than the buyer. Farmers are also to pay various indirect taxes such as octroi, terminal taxes and municipal tolls.

8. Lack of Proper Marketing Facilities: In very-recent times, the quantum of marketed surplus has increased significantly in certain areas due to the spread of Green Revolution. But this has not been supported by corresponding increase in market yards and other ancillary facilities. Consequently, the farmer has been the lone sufferer.

9. Debt Obligation and Distress Sales: Finally, the average farmer is almost always in debt. So he cannot wait after the harvest so as to obtain better prices in future. He has to make distress sales to the moneylender or the trader immediately after the harvest, for clearing his debt. So the main point is that the farmer has to sell his produce at the wrong time, at a wrong place and at an unfavourable price.

2.6.3. Remedial Measures to Improve Agricultural Marketing

India's agricultural marketing system having number defects; hence the farmer does not get a fair deal from the market. However, his condition can be improved by removing the defects. The following measures may be taken to improve the present system of agricultural marketing in India:

1. Regulated Markets: Regulated markets may be established with a view to eliminating un-healthy and unethical trade practices and reducing various marketing charges with a view to benefitting the poor cultivator. Keeping in view Quit, number of regulated markets has been set up in various States to safeguard the interest of the farmers.

2. Expansion of Market Yards: This is a vital necessity. This must be supported by a corresponding expansion of ancillary facilities in the various existing markets and setting up new markets and market yards for handling the phenomenal increase in market arrivals, particularly in those areas where the Green Revolution has occurred (viz., Punjab, Haryana and western U.P.).

3. Cooperative Marketing Societies: In India, the co-operative marketing structure consisted of more than 7,000 co-operative marketing societies during 1999-00, covering all important agricultural markets in the country.

4. Storage Facilities: An extension of storage facilities at the farm land and Storage and Warehousing Corporation, with a view to constructing and managing a network of warehouses in all towns and mandis. The co-operative societies get necessary financial and technical assistance from the Government for promoting warehouses in villages. Moreover, the National Co-operative Development Corporation has been set up for planning, promoting and financing the programme of augmenting storage capacity of co-operatives at various levels.

5. Credit: Steps may be taken to provide cheap credit to farmers, especially from institutional sources like commercial banks and co-operatives. Co-operative societies are providing credit facilities to farmers with a view to improving their economic conditions, protecting them from the exploitative practices of village money-lenders and for helping them to get reasonable prices for their produce.

6. Transport Facilities: Expansion of transport facilities between the villages and mandis seems to be the need of the hour. Rural transport has been given emphasis in the five year plans and quite some progress has been made in this direction.

7. Other Measures: Various other measures taken include Prompt supply of market information through published documents and T.V. programmes, standardization and grading to ensure quality to consumers and better prices to producers.

2.6.4. Regulated Markets

The purpose of a regulated market is to eliminate unhealthy market practices, to reduce marketing charges and to ensure fair prices and in general, to protect the interests of farmers. All the States had passed legislation known as State Agricultural Produce Marketing (Development and Regulation) Act for the establishment of regulated markets. In 1951, there were more than 200 regulated markets in India and by the end of the Second Five-Year Plan, i.e., in 1961, there were nearly 1,000 regulated markets. By the end of March 1998 over 7,060 agricultural markets in the country had been regulated.

The market committee fixes the market charges, such as the commission to be charged. It ensures that no dalal represents either the buyer or the seller. It prevents unauthorized deductions from the price paid to the farmer and ensures that correct weights and measures are always used. The committee hears all the complaints and settles them. In cases of dispute, it arranges for arbitration.

The chairman and Vice-Chairman of the Committee are from the farming community. The committee is responsible for the licensing of brokers and weigh men. It is vested with powers to punish anyone who is found guilty of dishonest and fraudulent practices. The system of regulated markets has been found to be very useful in removing fraudulent practices followed by brokers and commission agents and in standardising market practices. They have helped farmers to secure fair prices for their produce and to come to the market without fear of being cheated. They have helped in using standard measures and weights throughout the country. Hence it is the policy of the government to convert all markets in the country into the regulated type. Regulated markets aim at the development of the marketing structure to:

1. Ensure remunerative price to the producer of agricultural commodities.
2. Narrow down the price spread between the producer and the consumer.
3. Reduce non-functional margins of the traders and commission agents.

To achieve these objectives, the Government went for comprehensive and rapid expansion of regulated marketing system. Considerable success has been achieved in States like Punjab and Haryana, where regulated markets have been established in major producing areas, with linked up satellite markets in the rural growth. The regulated marketing system has also proved a good source of generating income for the marketing boards and for use in rural infrastructure. The regulated market complex also includes facilities for grading and for monitoring of prices. The regulated markets are set up especially in areas where commercial crops like cotton, jute, tobacco and important non-traditional crops are produced and sold in weekly markets and 'hats'. Co-operative marketing and distribution and banking are also linked with the regulated markets.

These markets have proved a boon for farmers over the years even since they are being set up since 1951. The government also promotes organised marketing of agricultural commodities in the country through a network of regulated markets. There are 7161 Wholesale Regulated Markets in the country as on 31.3.2001. Besides, there are also 7293 Wholesale Markets and 27,294 Rural Periodic. According to a presentation made in 2019 by the union agricultural ministry, 17 states have deregulated fruits and vegetables from Agricultural Produce Market Committees (APMCs) and as many as 19 states have provisioned contract farming into APMC Acts. Given that APMCs have been state government legislations, there is lack of uniformity in India.

2.6.5. Co-operative Marketing

Before 1954, separate co-operative marketing societies were established as distinct from the cooperative credit societies. Since 1954, however, multipurpose societies have been started with the purpose of giving credit to the farmers and marketing their surplus produce. The co-operative marketing society functions in the following manner:

The members of the society agree to sell their surplus produce to the society. As soon as they supply the produce to the society, they get an advance to carry on with their agricultural operations. The society collects the produce of all the members as also of the non-members of the village who are willing to sell their produce, often processes the produce and then disposes it of in the mandis. It does away with many of the middlemen. If the current prices are not favourable and if it is anticipated that prices may rise in the future, the society may decide to stock the commodity. As soon as the produce is sold, the society pays the farmers the balance of the amount due to them. An important feature of the marketing society is that it is managed by paid staff. Usually a society covers a number of villages so that it may be effective and successful.

Advantages of Co-operative Marketing Societies

In some of the Western countries, co-operative marketing has been extremely successful. Denmark has been well-known throughout the world for cooperative marketing of dairy products. Many advantages are claimed for agricultural marketing on cooperatives basis. They are:

1. The marketing society substitutes collective bargaining in place of individual bargaining.
2. It advances loans to the farmers and enables them to wait for better prices.
3. It can have its own storage and warehousing facilities, it can thus remove the damage to agricultural produce through rats, ants, dampness etc.

4. It can arrange to have quick and cheap transport and sometimes it can even have its own transport.
5. It can encourage the farmers to produce graded and standardized products.
6. It can control the flow of supplies and thus influence the prices.
7. It can eliminate many of the middlemen and thus remove their large-profit margins.
8. Apart from selling the product of the farmers it can supply them such essential goods as seeds, fertilisers, implements etc. Thus the co-operative marketing society is probably the best method to reorganise rural marketing and promote planned growth of our rural areas.

2.7.1. Agricultural Price Policy

Agricultural price policy plays a pioneer role in the economic development of a country. It is an important instrument for providing incentives to farmers for motivating them to go in for production oriented investment and technology. In a developing country like India where majority of the population devotes 75 per cent of their expenditure on food alone and where majority of the population is engaged in agricultural sector, prices affect both income and consumption of the cultivators. The Government of India announces each year procurement or support prices for major agricultural commodities and organizes purchase operations through public agencies.

Undoubtedly, violent fluctuations in agricultural prices have harmful results. For instance, a steep decline in the price of particular crop in few years can inflict heavy losses on the growers of that crop. This will not only reduce the income but also dampen the spirit to cultivate the same crop in the coming year. If this happens to be a staple food item of the people, supply will remain below the demand. This will force the Govt. to fill the gap by restoring imports. If, on the other hand, prices of a particular crop increase rapidly in the particular period, then the consumer will definitely suffer. In case, the prices continuously increase for the particular crop, this can have disastrous effect on the sector of the economy.

2.7.2. Objectives of Agricultural Price Policy

The objectives of agricultural price policy vary from country to country depending upon the place of agriculture in national economy. Generally, in developed countries, the major objective of price policy is to prevent drastic fall in agricultural income while in developing economies it is to increase the agricultural production. Its main objectives are summarized below:

1. To Ensure Relation between Prices of Food-grains and Agricultural Goods:

The foremost objective of agricultural price policy is to ensure the appropriate relationship between the prices of food grains and nonfood grains and between the agricultural commodities so that the terms of trade between these two sectors of the economy do not change sharply against one another.

2. To Watch Interests of Producers and Consumers: To achieve the balance between the interest of producers and consumers, price policy should keep a close eye the fluctuations within maximum and minimum limits.

3. Relation between Prices of Crops: The price policy should be such which may sustain the relationship between the prices of competing crops in order to fulfill the production targets in respect of different commodities in accordance of its demand.

4. To Control Seasonal Fluctuations: Another object of price policy is to control cyclical and seasonal fluctuations of price rise to the minimum extent.

5. Integrate the Price: The agricultural price policy should also aim at to bring the greater integration of price between the various regions in the country so that regular flow of marketable surplus could be maintained and exports of farm products stimulated regularly.

6. Stabilize the General Price: To stabilize the general price level, it should aim at increasing the public outlay to boost economic development in the country.

7. Increase in Production: The agricultural price should aim at to raise the production of various commodities in the country. Therefore, it must keep balance between output and input required by the cultivations.

2.7.3. Evaluation of Agricultural Price Policy

The draft on agricultural policy envisages 3.5 per cent annual growth in agriculture as compared to 2.6 per cent growth rate registered since independence. The draft of the National Agricultural Policy circulated for comments has secured broad agreements from all the State Government, central ministries and Agricultural Universities.

But its adoption by the Government at this moment might create new problems for the Union Agriculture Ministry and the Planning Commission for its inclusion within the already launched Ninth Plan. Thus under the present circumstances, the adoption of the draft agricultural policy by the Government may take some time for making necessary adjustment with the agriculture component of the Ninth Plan. In short the draft agricultural policy has offered a detailed framework of policy initiative required for the agricultural sector on a long term perspective. By introducing a favourable price and trade regime, the policy has created a suitable environment for the sector.

The thrust of the policy is to make the sector a viable and profitable for the nation. Thus the new policy is expected to improve the quality of life in villages and can reduce the gap in the social welfare facilities between rural and urban areas and create sufficient gainful employment opportunities on a self-sustaining basis.

Moreover, new agricultural policy 2000 proposed to accord the status of industry. The new agricultural policy resolution would bestow the same benefits to agriculture as were being enjoyed by the industry but care should be taken to ensure that agriculturists were not subjected to the regulatory and tax collection machinery of the Government.

Thus the draft agricultural policy was intended for the progress and welfare of farmers. The Agricultural Ministry has also given stress on drip irrigation projects so that agriculture did not suffer. Attention was also being paid to watershed management, soil conservation environment and other aspects which would benefit agriculture. Besides, the benefits of liberalisation and technology transfer should reach to the farmers.

This is the first ever national agriculture policy (2000) of India and seeks to actualise the vast untapped growth potential of Indian agriculture, strengthen rural infrastructure to support faster agricultural development, promote value addition, accelerate the growth of agro business, create employment in rural areas, secure a fair standard of living for the farmers and agricultural workers and their families, discourage migration to urban areas and face the challenges arising out of economic liberalization and globalisation.

2.7.4. Types of Agricultural Prices

1. Minimum Support Price: Minimum Support Price (MSP) is a form of market intervention by the Government of India to insure agricultural producers against any sharp fall in farm prices, a guarantee price to save farmers from distress sale. The MSPs are announced at the beginning of the sowing season for certain crops on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACP, 1985). The major objectives are to support the farmers from distress sales and to procure food grains for public distribution. In case the market price for the commodity falls below the announced minimum price due to bumper production and glut in the market, government agencies purchase the entire quantity offered by the farmers at the announced minimum price. Commencing with 'wheat' for the 1966–67, currently the MSPs are announced for 23 commodities including seven cereals (paddy, wheat, barley, jowar, bajra, maize and ragi) five pulses eight oilseeds. The MSPs are fixed at incentive level, to fulfill the following purposes:

1. To induce more investment by farmers in the farm sector.
2. To motivate farmers to adopt improved crop production technologies.
3. To enhance production and thereby farmers, income.

In the absence of such a guaranteed price, there is a concern that farmers may shift to other crops causing shortage in these commodities. The agricultural price policy in India emerged in the backdrop of food scarcity and price fluctuations provoked by drought, floods and international prices for exports and imports. Aimed at making farming remunerative the Government announced to fix the MSP for crops 50 per cent above their production cost since 2018–19. The new MSP is fixed by the CACP over the Cost A2+Fl (where, Cost A2 includes all paid out costs borne by the farmer on seeds, fertilisers, pesticides, hired labour, leased-in land, fuel, irrigation, etc. and the Fl is imputed cost of unpaid family labour). While farm activists demand it to be fixed over the Cost C2.

2. Procurement Prices: In 1966–67, the Government of India announced a ‘procurement price’ for wheat, a bit higher than its MSP (the purpose being security of food procurement for requirement of the PDS). The MSP was announced before sowing, while the procurement price was announced before harvesting, the purpose was to encourage farmers to sell a bit more and get encouraged to produce more. But this increased price hardly served the purpose as a suitable incentive to farmers. It would have been better had it been announced before sowing and not after harvesting. That is why since the fiscal 1968–69 the government announced only the MSP, which is also considered the effective procurement price.

3. Issue Price: The price at which the government allows off take of food grains from the FCI (the price at which the FCI sells its food grains). The FCI has been fetching huge losses in the form of food subsidies. The food grains procured are transported to the godowns of the FCI located across the country. From here they head to the sale counters, to the TPDS or Open Market Sale. The transportation, godowning, the cost of maintaining the FCI, carriage losses, etc., make the food grains costlier (the additional

2.8.1. Food Security in India

World Development Report (1986) defined food security as “access by all people at all times to enough food for an active, healthy life.” Food and Agriculture Organisation (FAO, 1983) defined food security as “ensuring that all people at all times have both physical and economic access to basic food they need.” From these definitions, the following points emerge:

1. Food security involves adequate physical availability of food to the entire population in a country.
2. People have enough purchasing power so that they can acquire the food they need.
3. For healthy life, the food available should be adequate in quality as well as quantity to meet nutritional requirements.
4. A nation may acquire self-sufficiency in food at a point of time, but the concept of food security necessitates that, timely, reliable and nutritionally adequate supply of food should be available on a long-term basis.

The National Food Security Act, 2013 (NFSA 2013) converts into legal entitlements for existing food security programmes of the Government of India. It includes the Midday Meal Scheme, Integrated Child Development Services scheme and the Public Distribution System. In 2017-18, over Rs 1500 billion (7.6% of the government's total expenditure) have been allocated to provide food subsidies under the Targeted Public Distribution System (TPDS). The NFSA 2013 also recognizes maternity entitlements. Pregnant women, lactating mothers, and certain categories of children are eligible for daily free cereals.

The Indian planners, right from the beginning, realised the need to attain self-sufficiency in foodgrains as one of the important goals of planning. The Government of India under Prime Minister Indira Gandhi went in for seed-water-fertiliser policy popularly known as the green revolution. This policy ushered in a revolution in food production in India and dispensed with food grains imports altogether. India achieved self-sufficiency in food grains by the year 1976.

Self-Sufficiency at the National Level: Self-Sufficiency at the National Level Ninth Plan (1997-2002) discussed the problem of food security at the national level and at the household level. The Planning Commission states: "An approach to national food security, which relies largely on domestic production of food needed for consumption as well as for building buffer stocks, can be described as a strategy of self-sufficiency."

Food security at the local level: Food security at the local level or at the household level implies having physical and economic access to food articles that are adequate in terms of quantity, quality and affordability. This raises the question of prices of food articles and the purchasing power in the hands of the population.

Food Security and Nutrition: During the last 50 years, there has been substantial reduction in moderate and severe under-nutrition in children and some improvement in nutritional status of all segments of population. Milder forms of chronic energy deficiency still persists in many parts of the country; serious malnutrition and even widespread starvation among children and the aged has become common in tribal belts in Maharashtra and Orissa, essentially because there is no purchasing power. Under-nutrition is a problem among:

- 1) Pregnant and lactating women.
- 2) One-third of the new-borne still weigh less than 2.5 kg at birth.
- 3) Less severe forms of Vitamin-A deficiency exist which may result in blindness in certain cases.
- 4) Universal access to iodised salt has not been achieved and there has not been marked reduction in iodine disorders.
- 5) No decline in prevalence or severity of anemia and its health consequences due to iron deficiency.

2.8.2. Food Security Programmes

1. Public Distribution System (PDS): To help the poor sections, the Government introduced the Public Distribution System (PDS) and adopted dual price mechanism. At the PDS outlet, the issue price of food articles was kept lower than the market price to enable the poor to purchase subsidized food. But due to political pressures, the Government adopted a universal PDS, rather than a targeted PDS focused on the poor. The result was the non-poor also began to benefit from the PDS and the poor especially the migrant poor, were not able to take full advantage of the PDS supplies. The Public Distribution System which was conceived as a key mechanism in the Government's food security system did not achieve the desired results.

2. Applied Nutrition Project (ANP): Applied Nutrition Project introduced in 1963 was intended to promote production of protected food such as vegetables and fruits and ensure their consumption by pregnant and nursing mothers and children. Special Nutrition Programme (SNP) was started in 1970 with the objective of providing 500 K Cal and 25 grams of protein to expectant and nursing mothers and 300 K Cal and 10 grams of protein to children six days in a week.

3. Integrated Child Development Services Scheme (ICDS): ICDS started in 1975 was intended to provide food supplementation to children and pregnant/nursing women. The Ninth Plan reviewing ICDS mentions: "Experience gained during the last two decades indicates that the neediest may not access to the facility and even when they do, the food provided acts more as a substitute than as a supplement." The ICDS programme as of 1996 covers 4,200 blocks with 5.92 lakh anganwadi in the country. The number of beneficiaries shot up to 18.5 million children and 3.7 million mothers in 1996. Review of the ICDS programme revealed: "While 25 per cent of nursing mothers in ICDS areas introduced semisolid supplements to their breast-fed infants at 6 months, only 19 per cent did so in non-ICDS areas. These evaluations have shown the gains in terms of improvement in nutritional status from the ICDS programme have not been impressive."

4. Mid-day Meal Programme: Mid-day Meal Programme was introduced for children between ages of 2-14 attending balwadis/schools. This programme has been renamed as Nutritional Support to Primary Education and implemented in 1975 to universalize primary education. By 2003-04, the programme covered nearly 10.6 crore children. While the mid-day meal programme has been largely successful in Tamil Nadu, Karnataka and other South Indian states, it was initially a failure in most North Indian states. Thereafter, it has been increasing and we find that total cost per meal reached rupees 3.59 for primary students and rupees 5.38 for upper primary students (2013-14). Under MDMS for children of Primary classes, a cooked mid-day meal consists of 100 grams of food grain, 20 grams of pulses, 50 grams of vegetables and 5 grams of oil/fat to children

to provide 450 calories of energy and 12 grams of protein. For children of upper primary classes, it consists of 150 grams of food grain, 30 grams of pulses, 75 grams of vegetables and 7.5 grams of oil/fat to provide 700 calories of energy and 20 grams of proteins. In 2013-14, total expenditure on the scheme was Rs. 10927.21 crores with benefit extending to 10.8 crore children. Total food grain allocated under the scheme was 29.77 tonnes.

2.9. Model Examination Questions

Essay Type Questions :

1. Explain the importance of Indian agriculture sector
2. Explain the causes for low productivity in Indian agriculture sector and suggest measures to increase agriculture productivity
3. Discuss in detail about the land reforms in India
4. Explain about the green revolution programs in India
5. Discuss various sources of agricultural finance
6. Explain the defects of agricultural marketing in India and suggest remedial measures to improve the conditions in agricultural marketing
7. Explain the objectives of agricultural price policy in India
8. Explain various types of agricultural prices in India
9. Write a note on recent changes in agricultural price policy in India
10. Write an essay on food security in India

Short Answer Questions :

1. Trends in agricultural productivity in India
2. Abolition of intermediaries act
3. Tenancy acts/ reforms
4. Land ceiling act
5. Causes for failure of land reforms in India
6. Types of agricultural finance
7. Regulated markets
8. Cooperative markets
9. Food security programs in India

3



Indian Industry and Services

- 3.0 Objective
 - 3.1.1. Role and Importance of Industrialization.
 - 3.2.1. Trends in Industrial Production
 - 3.3.1. Industrial Policy
 - 3.3.2. Industrial Policy Resolutions 1948
 - 3.3.3. Industrial Policy Resolutions 1956
 - 3.3.4. Industrial Policy Resolutions 1991
 - 3.4.1. The Role of Public Sector in Economic Development
 - 3.4.2. The Role of Private Sector in Economic Development
 - 3.4.3. Formal and Informal Sectors
- 3.5 Model Examination Questions

3.0. Objective

The primary objective of this module is to familiarize you with the industrial policies in our country. You will understand the role and importance of industrialisation, and Industrial Policy Resolutions of 1948, 1956 and 1991. You will also know the role of public and private sectors in economic development of our country. You will also understand the difference between formal and informal sectors in our economy.

3.1.1. Role and Importance of Industrialization

Industrialization is regarded essential for rapid development of the country since industrial revolution. The countries which merely rely on agriculture have remained under developed, whereas nations which developed industries achieved high rates of development. The advanced countries encourage industrialization on large scale and transferred advantages to agriculture. They achieved balance of growth in various sectors of economy. We examine the role and importance of industrialisation as follows:

1. Leading Sector to Economic Growth: Industrialization is considered crucial to development strategy as it lifts out stagnation. It brings forth both backward and forward linkage effort. The success of western countries followed by an Asian country, Japan is the standing instance of what industrialization can do to a nation. Similarly, in the words of Pt. Nehru, Real progress must ultimately depend on industrialization. Throughout the world, industrialization has indeed become the magic word of the mid twentieth century.”

2. Synonymous to Industrialization: It comprises the development of industry, trade, transport, power, agriculture and mining etc. It leads to spectacular progress of all-round and raising the level of living. In a way, real progress of an economy depends largely on industrialization.

3. Gainful Employment Opportunities: No wonder, industrial development can greatly increase gainful employment opportunities especially in less developed countries. Generally, these countries are characterised by the existence of surplus labour. Thus, it opens avenues for employing the surplus labour.

4. Raising Productivity: The modern industry can directly or indirectly helpful to raise productivity of the economy. This is due to better organisation and technology. Moreover, it is accompanied by the expansion of tertiary sector. Again it improves productivity of the agricultural sector by providing it with improved and scientific inputs.

5. Development of Agricultural Sector: In fact, agriculture and industry are the two arms of an economy. Both are interdependent and the development of one sector promotes the other. This interdependence relates to:

- 1) Supply of raw material and inputs from agriculture to industry and vice versa.
- 2) Supply of wage goods to industrial sector.
- 3) The supply of materials for building up economic and social overheads in the agricultural sector.
- 4) The supply of basic consumption goods to the agricultural population.
- 5) The application of science and technology in agriculture sector induces innovations in respect of industrial products which are used for agricultural production.

6. Greater Useful for Foreign Trade: The natures of foreign trade also undergo a change with industrialization of the country. It has been noticed that foreign trade of less developed countries is dominated by primary products but industrial development may lead to a change in the composition and direction. This is clear from the fact that India witnessed a spectacular increase in non-traditional items of export on account of industrial development.

7. Favourable Balance of Payments: Another crucial role played by industrialization is that it promotes exports resulting in favourable balance of payments. Generally, balance of payments is most unfavorable in the early stages of development due to import of technology, capital goods and raw-materials. With industrialization there is generation of export surplus.

8. Higher National Income and Per Capita Income: There is proper utilization of natural resources with the adoption of latest and modern techniques of production. It leads to higher national income and per capita income, increased employment and greater production which further leads to national prosperity.

9. Capital Formation: Industrialization promotes capital formation as crucial catalyst of economic prosperity. Truly, industrial development brings in good profit and more income which in turn leads to greater saving and investment. One of the reasons of Japan's industrialization is that it ranks first so far as capital formation is concerned.

10. Sign of Higher Standard of Living and Social Change: A country cannot produce goods and services of high quality in order to attain decent living standard without the progress of industrial sector. In other words, industrialization has been regarded as a vital instrument for eradicating poverty and misery of poor lots. In addition to it, occupational mobility of labour, developed communication, education and infra-structure are associated with industrialization. In turn, it leads to social change in the country.

11. Useful for Defense: Industrial development is also helpful for the defense of a country. The more an industrialized country, more arms and ammunition it can produce and strengthen its defense.

12. Specialization and Division of Labour: Industrialization involves the organization of production in business enterprises which is characterised by specialization and division

of labour. In fact, specialization is based on the application of modern technology which is a supplement to human efforts and motivates for the objectives of minimizing costs per unit and maximizing return. Therefore, industrialization results in all round progress of the country.

3.2.1. Trends in Industrial Production

The story of economic growth is half-documented without narrating the story of industry-infrastructure nexus. India, being home to more than 133 crore people, needs to build a robust industry with a buoyant and resilient infrastructure. The Index of Industrial Production is a measure of industrial performance which sheds some light on where we stand in terms of industrial growth. The Index of Industrial Production (IIP) assigns a weight of 77.63 per cent to manufacturing sector, 14.37 per cent to mining sector and 7.99 per cent to electricity sector. The industrial growth rate in terms of IIP was 3.6 per cent in 2018-19 as compared to 4.4 per cent in 2017-18. The Mining, Manufacturing and Electricity sectors registered positive growth rates of 2.9 per cent, 3.6 per cent and 5.2 per cent respectively in 2018-19 (Refer Table No 3.1).

Table No. 3.1. Growth of Industry Real Gross Value Added

Sector/UBC	Weight	2016-17	2017-18	2018-19
Sectoral Classification				(P)
Mining	14.3725	5.3	2.3	2.9
Manufacturing	77.6332	4.4	4.6	3.6
Electricity	7.9943	5.8	5.4	5.2
General Index	100.00	4.6	4.4	3.6
Used Based Classification (UBC)				
Primary goods	34.0486	4.9	3.7	3.5
Capital goods	8.2230	3.2	4.0	2.8
Intermediate goods	17.2215	3.3	2.3	-0.5
Infrastructure/Construction goods	12.3384	3.9	5.6	7.5
Consumer durable	12.8393	2.9	0.8	5.5
Consumer non-durable	15.3292	7.9	10.6	3.9

Source: CSO (P) Provisional (Economic Survey 2018-19)

In terms of use-based classification of IIP, the index of infrastructure/construction goods remained higher at 7.5 per cent in 2018-19 driven by the healthy performance of cement and steel sectors (Table No 3.1). Large scale public spending has boosted the demand for these sectors. Primary goods and consumer non-durables have registered a positive growth rate of 3.5 per cent and 3.9 per cent in 2018-19 respectively. On the other

hand, the capital goods sectors registered a moderate growth of 2.8 per cent in 2018-19 which is indicative of shortfall in investment activities. Overall investment as indicated by the real gross fixed capital formation has increased by 10 per cent in 2018-19. But its share in GDP at current prices is estimated to be only marginally higher at 29.3 per cent during 2018-19. Within consumer goods, consumer durables have shown improved performance with a growth of 5.5 per cent in 2018-19.

Table No 3.2 Gross Value Added in Industry Sector

Sectors	Growth Rate of GVA at Constant Prices (in Per cent)			Share of GVA at Current Prices
	2016-17	2017-18	2018-19(P)	2018-19(P)
Mining & Quarrying	9.5	5.1	1.3	2.4
Manufacturing	7.9	5.9	6.9	16.4
Electricity, Gas, Water Supply & Other Utility Services	10.0	8.6	7.0	2.8
Construction	6.1	5.6	8.7	8.0
Industry	7.7	5.9	6.9	29.6
Source: Central Statistical Office (Economic Survey 2018-19) P: Provisional Estimates				

Industry plays a decisive role in determining the overall growth of an economy. The industrial sector performance during 2018-19 has improved as compared to 2017-18. As per the provisional estimates of the Annual National Income 2018-19 released by Central Statistics Office (CSO), the growth of industry real Gross Value Added (GVA) was higher at 6.9 per cent in 2018-19 as compared to 5.9 per cent in 2017-18 (Table 3.2). Construction and manufacturing sectors have experienced 8.7 per cent and 6.9 per cent growth rate respectively during 2018-19. The mining and quarrying sector has experienced sluggish growth in 2018-19 as compared to 2017-18.

Table No. 3.3. Growth in Production of Eight Core Industries(Per cent)

Sector	Weight	2016-17	2017-18	2018-19 (P)
Coal	10.3335	3.2	2.6	7.4
Crude Oil	8.9833	-2.5	-0.9	-4.1
Natural Gas	6.8768	-1.0	2.9	0.8
Refinery Products	28.0376	4.9	4.6	3.1
Fertilizers	2.6276	0.2	0.03	0.3
Steel	17.9166	10.7	5.6	4.7
Cement	5.3720	-1.2	6.3	13.3
Electricity	19.8530	5.8	5.3	5.2
Overall Index	100.0000	4.8	4.3	4.3

Source: CSO (P) Provisional (Economic Survey 2018-19)

The Index of eight core industries measures the performance of Coal, Crude Oil, Natural Gas, Petroleum Refinery Products, Fertilizers, Steel, Cement and Electricity. The eight core industries comprise about 40.3 per cent weight in the IIP. The overall Index of eight core industries registered a growth rate of 4.3 per cent in 2018-19 similar to the increase achieved in 2017-18. The production of Coal, Steel, Cement, Electricity, Refinery Products, Natural Gas and Fertilizers registered positive growth rate in 2018-19 with Cement and Coal registering a higher growth rate of 13.3 per cent and 7.4 per cent respectively (Table 3.3).

3.3.1. The Industrial Policy

The concept of “industrial policy” is comprehensive and it covers all those procedures, principles, policies, rules and regulations which control the industrial undertakings of a country and shape the pattern of industrialisation. It incorporates fiscal and monetary policies, the tariff policy, labour policy and Government’s attitude not only towards external assistance but the public and private sectors also.

Many of the western economies have already written their success stories of industrialisation leading to accelerated growth and development by the time India became an independent economy. Independent India needed to rejuvenate its economy from a completely dilapidated state. The country had many tasks in front of it—the abject mass poverty, shortage of foodgrains, healthcare, etc., calling for immediate attention. The other areas of attention included industry, infrastructure, science and technology and higher education, to name a few. All these areas of development required heavy capital investment as they had been severely avoided by the colonial ruler for the last 150 years or so. Increasing the growth of the economy and that too with a faster pace was the urgent need of the economy. Looking at the pros and cons of the available options, India decided that the industrial sector should be the ‘prime moving force’ of the economy, the logical choice for faster growth.

The secondary sector will lead the economy, was well-decided in the 1930s itself by the dominant political forces among the freedom fighters. As the government of the time had decided upon an active role for the governments in the economy, naturally, the industrial sector was to have a dominant state role, the expansion of the government-owned companies to glorious heights. In many ways the development of the Indian economy has been the development of the government sector.

Once this idea of state’s role in the economy went for a radical change in the early 1990s with the process of economic reforms, the hangover or the drag of it is still visible on the economy. The industrial policies which the governments announced from time to time basically moulded the very nature and structure of the economy.

3.3.2. Industrial Policy Resolution, 1948

Announced on 8 April, 1948 this was not only the first industrial policy statement of India, but also decided the model of the economic system i.e., the mixed economy too. Thus, it was the first economic policy of the country. The Industrial Policy Resolution 1948 contemplated a mixed economy, reserving a sphere for the private sector and another for public sector. The industries were divided into four broad categories.

1. The manufacture of arms and ammunition, the production and control of atomic energy, and the ownership and management of railway transport were to be the exclusive monopoly of the Central Government.
2. The second category covered coal, iron and steel, aircraft manufacture, ship-building, manufacture of telephone, telegraphs and wireless apparatus etc. New undertakings in these industries could henceforth be undertaken only by the State.
3. The third category was made up of industries of such basic importance that the Central Government would feel it necessary to plan and regulate them.
4. A fourth category, comprising the 'remainder of the industrial field', was left open to private enterprise, individual as well as co-operative. The main thrust of the (1948) Industrial Policy was to lay the foundation of a mixed economy in which both private and public enterprises would march hand in hand to accelerate the pace of industrial development.

3.3.3. Industrial Policy Resolution, 1956

Since the adoption of 1948 Resolution, significant development took place in India. Economic planning had proceeded on an organised basis and the First Five-Year Plan had been completed. Parliament had accepted 'the socialist pattern of society' as the basic aim of social and economic policy. These important developments necessitated a fresh statement of industrial policy. A second Industrial Policy Resolution was adopted in April, 1956, replacing the Resolution of 1948. The Industrial Policy of 1956 is known as the economic constitution of the country. The new industrial policy of 1956 had the following major provisions.

1. Reservation of Industries: A clear-cut classification of industries (also known as the Reservation of Industries) was affected with three schedules:

Schedule A: This schedule had 17 industrial areas, those which were to be an exclusive responsibility of the state. The industries set up under this provision were known as the Central Public Sector Undertakings (CPSUs) later getting popularity as 'PSUs'. Those are: 1) Arms and ammunition and allied items of defence equipment 2) Atomic energy 3) Iron and Steel 4) Heavy castings and forgings of iron and steel 5) Heavy plant and

machinery required for iron and steel production, for mining, for machine tool manufacture and for such other basic industries as may be specified by the Central Government 6) Heavy electrical plant including large hydraulic and steam turbines.7) Coal and lignite 8) Mineral oils 9) Mining of iron ore, manganese ore, chrome-ore, gypsum, sulphur, gold and diamond 10) Mining and processing of copper, lead, zinc, tin, molybdenum and wolfram 11) Minerals specified in the Schedule to the Atomic Energy (Control of Production and Use) Order, 1953 12) Aircraft 13) Air transport 14) Railway Transport 15) Ship Building 16) Telephones and telephone cables, telegraph and wireless apparatus (excluding radio receiving sets) 17) Generation and distribution of electricity.

Schedule B: There were 12 industrial areas put under this schedule in which the state governments were supposed to take up the initiatives with a more expansive follow up by the private sector. This schedule also carried the provisions of compulsory licencing. It should be noted here that neither the states nor the private sector had monopolies in these industries unlike Schedule A, which provided monopoly to the Centre.

Schedule C: All industrial areas left out of Schedules A and B were put under this in which the private enterprises had the provisions to set up industries. Many of them had the provisions of licencing and have necessarily to fit into the framework of the social and economic policy of the state and were subject to control and regulation in terms of the Industries Development and Regulation (IDR) Act and other relevant legislations.

2. Provision of Licencing: One of the most important developments of independent India, the provision of compulsory licencing for industries, was covered in this policy. All the schedule B industries and a number of schedule C industries came under this provision. This provision established the so-called 'Licence-Quota-Permit' in the economy.

3. Expansion of the Public Sector: Expansion of the public sector was pledged for the accelerated industrialisation and growth in the economy, glorification of government companies did start with this policy. The emphasis was on heavy industries.

4. Regional Disparity: To tackle the widening regional disparity, the policy committed to set up the upcoming PSUs in the comparatively backward and underdeveloped regions/ areas in the economy.

5. Emphasis on Small Industries: There was emphasis on small industries as well as the khadi and village industries.

6. Agricultural Sector: The agricultural sector was pledged as a priority.

3.3.4. Industrial Policy Resolutions 1991

The industrial policies of past which were shaped the nature and structure of the Indian economy. The Government of India decided to change the very nature of the industrial policy which will automatically lead to change in the nature and scope of the economy. The Congress Government led by Mr. Narsimha Rao announced the new industrial policy in July 1991. With this policy the government kick started the very process of reform in the economy that is why the policy is taken more as a process than a policy.

Background: India was faced with severe balance of payment crisis by June 1991. Basically, in early 1990s, there were inter-connected set of events, which were growing unfavourable for the Indian economy:

1. Due to the Gulf War (1990–91), the higher oil prices were fastly depleting India's foreign reserves.
2. Sharp decline in the private remittances from the overseas Indian workers in the wake of the Gulf War, especially from the Gulf region.
3. Inflation peaking at nearly 17 per cent
4. The gross fiscal deficit of the Central Government reaching 8.4 per cent of the GDP.
5. By the month of June 1991, India's foreign exchange had declined to just two weeks of import coverage.

India's near miss with a serious balance of payments crisis was the proximate cause that started India's market liberalisation measures in 1991 followed by a gradualist approach. As the reforms were induced by the crisis of the BoP, the initial phase focussed on macroeconomic stabilisation while the reforms of industrial policy, trade and exchange rate policies, foreign investment policy, financial and tax reforms as well as public sector reforms did also follow soon. The financial support India received from the IMF to fight out the BoP crisis of 1990–91 were having a tag of conditions to be fulfilled by India. The new industrial policy, announced by the government on 23 July, 1991 had initiated a bigger process of economic reforms in the country, seriously motivated towards the structural readjustment naturally obliged to 'fulfill' IMF conditionalities. The major highlights of the policy are as follows:

1. De-reservation of the Industries: The industries which were reserved for the Central Government by the Industrial Policy Resolution, 1956, were cut down to only eight. In coming years many other industries were also opened for private sector investment. At present there are only two industries which are fully or partially reserved for the Central Government:

- 1) Atomic energy and nuclear research and other related activities, i.e., mining, use management, fuel fabrication, export-import, waste management, etc., of radioactive minerals.
- 2) Railways.

2. De-licencing of the Industries: The number of industries put under the compulsory provision of licencing belonging to Schedules B and C as per the Industrial Policy Resolution 1956, were cut down to only 18. Reforms regarding the area were further followed and presently there are only four industries, which carry the burden of compulsory licencing:

- 1) Aero space and defence related electronics
- 2) Gun powder, industrial explosives and detonating fuse
- 3) Dangerous chemicals
- 4) Tobacco, cigarette and related products

3. Abolition of the MRTP Limit: The MRTP limit was Rs.100 crore so that the mergers, acquisitions and takeovers of the industries could become possible. In 2002, a competition Act was passed which has replaced the MRTP Act. In place of the MRTP commission, the Competition Commission has started functioning.

4. Promotion to Foreign Investment: Functioning as a typical closed economy, the Indian economy had never shown any good faith towards foreign capital. The new industrial policy was a path breaking step in this regard. Not only the tough FERA was committed to be diluted, but the government went to encourage foreign investment (FI) in both its form, direct and indirect. The direct form of FI was called as the foreign direct investment (FDI) under which the MNCs were allowed to set up their firms in India in the different sectors varying from 26 per cent to 100 per cent ownership. The indirect form of foreign investment (i.e., in the assets owned by the Indian firms in equity capital) was called the portfolio investment scheme (PIS) in the country, which formally commenced in 1994. Under the PIS the foreign institutional investors (FIIs) having good track record are allowed to invest in the Indian security/stock market. The FIIs need to register themselves as a stock broker with SEBI. It means India has not allowed individual foreign investment in the security market still, only institutional investment has been allowed till now.

5. FERA Replaced by FEMA: The government committed in 1991 itself to replace the draconian FERA with a highly liberal FEMA, which came into effect in the year 2000–01 with a sun-set clause of two years.

6. Location of Industries: Related provisions were simplified by the policy which was highly cumbersome and had time-consuming process. Now, the industries were classified into 'polluting' and 'non-polluting' categories and a highly simple provision deciding their location was announced:

- 1). Non-polluting industries might be set up anywhere.
- 2). Polluting industries to be set up at least 25 kms away from the million cities.

7. Compulsion of Phased Production Abolished: With the compulsion of phased production abolished, now the private firms could go for producing as many goods and models simultaneously. Now the capacity and capital of industries could be utilised to their optimum level.

The picture presented by the New Industrial Policy of 1991 was taken by many experts, the opposition in the Parliament and even the public figures as well as the business and industry of the country as a 'rolling back' of the state. The glorious role given to the state by the Nehruvian economy seemed completely toppled down.

This is why experts have suggested that only assuming that reforms will benefit the masses will not be enough to make it happen politically, but the governments, the administrative agencies and the economists all need to link it positively to mass welfare, it might require to create a popular climate and form the political coalitions in favour of the argument that privatisation and accordingly restructured labour laws are basically aimed at creating jobs, better job prospects, alleviating poverty, enriching education and providing healthcare to the masses. In the coming times, the government went from one to another generation of the reforms, setting new targets and every time trying to make reforms socio-politically possible.

3.4.1. The Role of Public Sector in Economic Development

In a developing economy like India, some industries had to be brought within public ownership and control, for otherwise rapid growth of the economy was thought to be impossible. Nationalising some of the industrial, banking and insurance units and starting new units was expected to help in speeding up the rate of economic growth. Therefore, public enterprises became an essential part of the economic development in the context of economic planning in India.

After the attainment of independence and the advent of planning, there has been a progressive expansion in the scope of the public sector. The passage of Industrial Policy Resolution of 1956 and the adoption of the socialist pattern of society as our national goal further led to a deliberate enlargement of the role of public sector.

To understand the role of the public sector, we must have a comprehensive view of the entire public sector. We should include besides autonomous corporations, the departmental enterprises. While doing so, not only the enterprises owned and run by the Central Government be covered, but the enterprises run by the State Governments and local bodies should also be included.

It would not be appropriate to use any single measure to estimate the role of the public sector in the Indian economy; rather it would be desirable to use a few indicators, e.g., employment, investment, value of output, national income generated, savings, capital formation and capital stock.

1. Rate of Economic Development and Public Enterprises: The justification for public enterprises in India was based on the fact that the rate of economic development is planned by the government was much faster than could be achieved by the private sector alone. In other words, the public sector was essential to realise the target of the high rate of development deliberately fixed by the government.

2. Pattern of Resource Allocation and Public Enterprises: The main reason for the expansion of the public sector lies in the pattern of resources allocation decided upon under the plans. In the Second Plan the emphasis was shifted to industries and mining, mainly basic and capital goods industries to be developed under the aegis of the public sector. Thus more resources for industrialisation were funneled through the public sector. Under these circumstances, "It is inevitable, that the public sector must grow not only absolutely but also relatively to the private sector."

3. Removal of Regional Disparities through Public Enterprises: Another important reason for the extension of the public sector was the anxiety for balanced development in different parts of the country and to see that there were no serious regional disparities. Public enterprises of the Central Government were set up in those regions which were underdeveloped and where local resources were not adequate. Good examples are the setting up of the three steel plants at Bhilai, Rourkela and Durgapur and the Neyveli Project in Chennai which were meant to help industrialise the regions surrounding the projects.

4. Sources of Funds for Economic Development: Initially, state was an important source of funds for development. The surplus of government enterprises could be re-invested in the same industries or used for the establishment and expansion of other industries. It may be noted that private sector industries can also plough back whole or substantial amounts of their profits for expansion. However, profits in private enterprises are declared as dividends among shareholders. This would only create inequalities among people. But profits of public sector industries can be directly used for capital formation.

5. Socialistic Pattern of Society: The socialistic pattern of society calls for extension of public sector in two ways. For one thing, production will have to be centrally planned as regards the type of goods to be produced, the volume of output and the timing of their production. It may be comparatively easy to achieve this through the public sector rather than through private sector.

6. Limitations of the Private Sector: The behaviour and attitude of the private sector itself was an important factor responsible for the expansion of the public sector in the country. The private sector was not in a position to mobilise resources where huge investment is needed. This was understandable but the private sector was unwilling to take even the normal risks of business.

The establishment of the public sector was aimed at the fulfillment of our national goals, viz., the removal of poverty, the attainment of self-reliance, reduction in inequalities of income, expansion of employment opportunities, and removal of regional imbalances, acceleration of the pace of agricultural and industrial development.

But the passage of time the Government of India, reducing the role of the public sector and started the process of opening more and more areas for the private sector. The Industrial Policy of 1991 started the process of delicensing of industries. This process of deregulation was aimed at enlarging competition and allowing new private firms to enter the market. The main aim was to abolish the licence-permit Raj and establish the rule of the market.

3.4.2. The Role of Private Sector in Economic Development

India is a capitalistic biased mixed economy. It is needless to say, what important role private sector plays for the economic development of the country. Contributions of Private Sector are Listed Below:

1. Most Important Sector: In spite of huge progress of the public sector during the plan period, the importance of private sector is tremendous in the India economy. On the basis of the data available for the country's industrial development, the number of private sector companies in 2001-02 was 1,10,634 in compare to the total number companies of 1,28,549. In other way 86.1% of the total companies were under the control of private sector in compare to only 14,947 (11.6%) companies under public sector.

2. Employment Generation: Private sector plays a dominant role for generating employment opportunities inside the country. A huge number of large scale, small scale and cottage scale units are under the control of private sector. It proves that small scale and cottage scale industries contribute four times more employment in compare to large scale industries. According to 2001-02 statistics, as far as employment is concerned, the share of private sector was 51.2% against 44.3% of the public sector.

3. Helpful for Development: in a country private sector plays a dominant role in economic development. It enhances the process of industrialisation. All the private entrepreneurs are worked for profit motive. They actually played a leading role for the introduction of new commodities, new techniques of production, new plants equipment's and machineries. Private entrepreneur has innovative ideas and always modifies the total method of production. After the introduction of new industrial policy in 1991, in India private sector leads a vital role in country's industrial development.

4. Contribution to Agriculture: India is an agro based economy. The share of agriculture and its allied activities like fishing, poultry, cattle rearing, animal husbandry, and dairy farming etc. to the national income is nearly 22%. On the other hand, about 60% of the total working population is engaged in this area. Hence, this large agriculture sector is controlled by the private sector.

5. Contribution to Industry: According to Industrial Policy Resolution 1956, a good number of ultra modern industries are constructed under the control of private sector. This includes several consumers' good industries like sugar industry, edible oil industry, textile industry, paper industry, spice industry and fast food or semi-finished food industries. Even in the sphere of capital goods, iron and steel heavy engineering, chemical, motors etc. private sector plays a dominant role for their development.

6. High Potentiality: Most of the small scale and cottage scale industries are using labour intensive technologies, they create huge employment opportunities. These industries are owned by private sector. About 80% of the total working forces are employed in either organized or unorganized private sector units. Private sector contributes about three-fourth of the country's national income.

3.4.3. Formal and Informal Sectors in India

The formal sector or organised sector is refers to licensed organisations, that is, those who are registered and pay GST. These include the publicly traded companies, incorporated or formally registered entities, corporations, factories, shopping malls, hotels, and large businesses. The formal sector activities that are taxed and monitored by the government and the activities involved are included in the Gross Domestic Product (GDP).

The informal sector or unorganised is neither taxed nor included in the GDP and Gross national product (GNP) of a country. Looking into the composition of the Indian economy, as mentioned above, the formal or organized sector and the informal or unorganized sector constitutes the Indian economy.

Formal sectors represent all jobs with specific working hours and regular wages and the worker's job is assured. The workers are employed by the government, state or private sector enterprises. It is a licensed organization and is liable to pay taxes. It includes large-scale operations such as banks and other corporations. Conversely, informal or unorganized sectors are those ones where the employees or the workers do not have regular working hours and wages and are exempted from taxes. It is mainly concerned with the primary production of goods and services with the primary aim of generating employment and income on a small scale.

A street vendor selling his farm products on the street to generate and earn his daily bread is an example of an informal economy. Money lenders are considered as a part of an informal economy. It is also described as the grey economy.

A major section of the Indian population is into the informal sectors. In accordance with the 2000-2010 new employment recorded data, out of the 6.4 million new employment opportunities recorded, approximately 76 percent were in the informal sector. Informal sectors are deemed with low production value. In India agriculture, dairy, horticulture and related occupation employ 52 percent of the workers. It has less remunerative, unlike the formal sectors. The latter provides incentives such as bonuses, paid leave, fixed working hours and maternity leave which are not in informal sector.

Moreover, informal sector lacks security both legally and economically. Therefore, there is a greater vulnerability of the workers who are outside the reach of the labor legislation due to a worker's absence of social protection and worker's right. The vulnerability increases with women in particular. Since the organizations, informal sectors are legalized and are monitored by governments the workers by default have economic security and social protection.

25 per cent of the informal sectors constitute urban employment in India. These comprise of domestic workers, home-based workers, street vendors, and waste pickers. The majority of the Indian population is concentrated in informal sectors. The main reason could be because most of the Indian section of society is economically backward people. They cannot afford to pay taxes. They can hardly earn the basic bread of the day. Therefore, they prefer to work which is easily accessible to them such as farming, selling on a street where they don't have to levy taxes.

In a nutshell, the formal and informal sectors constitute the Indian economy. The major difference among both sectors is imposition of legalizes tax on formal no tax on informal. Formal sector have social protection, economic security and have certain incentives of workers, while informal sector do not possess such privileges.

3.5. Model Examination Questions

Essay Type Questions :

1. Explain the importance of Industrialisation
2. Explain the trends industrial production
3. Explain about the 1956 industrial policy resolution
4. Critically examine the new industrial policy 1991
5. Discuss the relative importance of public and private sectors in economic development
6. Write a note on formal and informal sectors

Short Type Questions :

1. Role of industrialisation
2. Classification of industries in 1956 industrial policy
3. Objectives of new industrial policy 1991
4. Public sector
5. Private sector
6. Formal sector
7. Informal sector

4



NITI AAYOG

- 4.0. Objective
 - 4.1.1. Demise of planning commission.
 - 4.1.2. Genesis of NITI Aayog.
 - 4.1.3. Structure and composition of NITI Aayog.
 - 4.1.4. Functions of NITI Aayog.
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 - 4.1.6. Differences between NITI Aayog and Planning Commission.
 - 4.1.7. NITI Ayog role in strategic planning
 - 4.1.8. NITI Ayog and innovation and knowledge hub
 - 4.1.9. NITI Ayog Challenges ahead
 - 4.2.1. Cooperative federalism
 - 4.2.2. Cooperative federalism - interface between Centre and State
- 4.3 Model Examination Questions

4.1.1. Demise of Planning Commission

The Planning Commission was instituted on 15 March 1950 by a Cabinet resolution by Jawaharlal Nehru. He was impressed by the Soviet Style planned economy and wanted to provide a base for robust State led growth in independent India. On 15 August 2014, Prime Minister Narendra Modi announced that the Planning Commission would be shut down and a new NITI Aayog, National Institution for Transforming India will be replacing the institution.

This is a significant move as the Planning Commission formed the backbone of the Indian economy at the time when we were a newly independent country. Its significance diminished vastly in the 1990s with Liberalization, Privatization, and Globalization but it was still involved in the allocation of funds to the states. The demise of the Planning Commission shows the shift of the role of government from a “player” to an “enabler”. It also goes along with Modi Government’s motto of “More governance and less government” as the NITI Aayog serves as the Think Tank of the Government of India, with little discretion over the allocation of resources or implementation of a Five Year Plan.

The setting up of NITI Aayog is an important aspect of the rising Indian Economy which needs a direction. Some have called this transition a mere change in nomenclature as the building, the staff and the institutional framework of the Planning Commission has been inherited by the NITI Aayog and this serves as a major point of continuity.

The Planning Commission was established as a result of a Cabinet resolution. Members were appointed by the Prime Minister without any selection criteria. The Commission was to move towards indicative planning from the Eighth Five-Year Plan, but such a move was never realized in reality. Planning Commission’s lack of accountability, hijacking the role of other central bodies like the Finance Commission, lack of specialization, becoming a roadblock in the Path of Federalism, all in all futility in the Modern economy lead to the diminishing importance of the Planning Commission.

4.1. 2. Genesis of NITI Aayog

By mid-2014, India did show a quite strong mandate and a very stable government came at the Centre. The new government showing a renewed vigour and zeal in several areas, one such area has been its attempts at 'redefining' the federal polity of the country for the purpose of promoting growth and development. Keeping its promises in the direction, the government abolished the Planning Commission and replaced it by a new body, the NITI Aayog.

29 May 2014, Independent Evaluation Office submitted an assessment report to Prime Minister Narendra Modi with the recommendation to replace the Planning Commission with a "control commission." On 13 August 2014, the Union Cabinet scrapped the Planning Commission, to be replaced with a diluted version of the National Advisory Council (NAC) of India. On 1 January 2015, a Cabinet resolution was passed to replace the Planning Commission with the newly formed NITI Aayog (National Institution for Transforming India). Union Government of India announced the formation of NITI Aayog on 1 January 2015. The first meeting of NITI Aayog was chaired by Narendra Modi on 8 February 2015.

The NITI Aayog the Sanskrit word "NITI" means morality, behaviour, guidance, etc. But, in the present context, it means policy and the NITI stands for "National Institution for Transforming India". It is the country's premier policy-making institution that is expected to bolster the economic growth of the country. It aims to construct a strong state that will help to create a dynamic and strong nation. This helps India to emerge as a major economy in the world. The NITI Aayog's creation has two hubs called "Team India Hub" and "Knowledge and Innovation Hub".

1. Team India: It leads to the participation of Indian states with the central government.
2. The Knowledge and Innovation Hub: it builds the institution's think tank capabilities.

NITI Aayog is additionally creating itself as a State of the Art Resource Center, with the essential resources, knowledge, and skills that will empower it to act with speed, advance research and innovation, bestow crucial policy vision to the government and manage unforeseen issues. The reason for setting up the NITI Aayog is that people had expectations for growth and development in the administration through their participation. This required institutional changes in administration and active strategy shifts that could seed and foster substantial scale change.

The government aims at 'transforming the development agenda of India' with the help of the NITI Aayog and has given a slogan, 'from planning to NITI'. India has undergone a paradigm shift over the past six decades, politically, economically, socially, technologically as well as demographically. The role of the government in national

development has seen a parallel evolution. Keeping with these changing times, the government decided to set up the NITI Aayog as a means to better serve the needs and aspirations of the people of India. The government thinks the new institution to function as a catalyst to the developmental process, nurturing an overall enabling environment, through a holistic approach to development going beyond the limited sphere of the public sector and the Government of India, which will be built on the foundations of:

1. An empowered role of states as equal partners in national development; operationalising the principle of Cooperative Federalism.
2. A knowledge hub of internal as well as external resources, serving as a repository of good governance best practices, and a Think Tank offering domain knowledge as well as strategic expertise to all levels of the government.
3. A collaborative platform facilitating Implementation; by monitoring progress, plugging gaps and bringing together the various ministries at the Centre and in states, in the joint pursuit of developmental goals.

4.1.3. Structure and Composition of NITI Aayog

The National Institution for Transforming India, popularly called the (NITI) Aayog, was set up in 2015 through a resolution of the Union Cabinet in 2015. It was created as a replacement to the erstwhile Planning Commission. However, the structure and functions of the NITI Aayog were different from that of its predecessor. The reason for such difference is the conditions under which the two institutions were formed. Planning Commission was set up in 1950 when India decided to for a planned economy. It evolved into an organization which not only formulated the Five Year Plans but also was responsible for allocating funds to the states in order to fulfill the plan targets. The states came to resent such an organization which had the powers to override their sensitivities and priorities. NITI Aayog, in contrast to its predecessor, is conceived as a policy think tank of Government of India which is tasked to advise not just the central government, but also the states on economic and policy-making issues. The most important task of NITI Aayog is to provide strategic and technical advise to the government.

The NITI Aayog comprises the following:

- The Prime Minister as the Chairperson.
- A Governing Council composed of Chief Ministers of all the States and Union territories with Legislatures and lieutenant governors of Union Territories(except Delhi and Pondicherry).
- Regional Councils composed of Chief Ministers of States and Lt. Governors of Union Territories in the region to address specific issues and contingencies impacting more than one state or a region.

- Full-time organizational framework composed of a Vice-Chairperson, four full-time members, two part-time members (from leading universities, research organizations and other relevant institutions in an ex-officio capacity), four ex-officio members of the Union Council of Ministers, a Chief Executive Officer (with the rank of Secretary to the Government of India) who looks after administration and a secretariat.
- Experts and specialists in various fields.

Presently NITI Aayog consists of :

1. The Prime Minister as the Chairperson.
2. Vice Chairperson: Rajiv Kumar.
3. Ex-Officio Members: Amit Shah, Rajnath Singh, Nirmala Sitaraman and Narendra Singh Tomar Special Invitees: Nitin Gadkari, Piyush Goyal, Thawar Chand Gehlot and Rao Inderjit Singh.
4. Full-time Members: V. K. Saraswat (former DRDO Chief), Ramesh Chand (Agriculture Expert) and Dr. Vinod Paul (Public Health expert).
5. Chief Executive Officer (CEO): Amitabh Kant.
6. Governing Council: All Chief Ministers of States (and Delhi and Pondicherry), Lieutenant Governor of Andaman & Nicobar Islands, and Special Invites.

4.1.3. Functions of NITI Aayog

As a dedicated Think Tank of the Government, NITI Aayog will carry out the 'directional' role, strategically charting the future of the nation. Functions of NITI Aayog as envisioned by the institution are:

1. Cooperative and Competitive Federalism: Primary platform for operationalising Cooperative Federalism by enabling States to have active participation in the formulation of national policy, as well as achieving time-bound implementation of quantitative and qualitative targets. NITI Aayog is, replacement of the one-way flow of policy from centre-to-state. Systematic and structured interactions between the Union and State Governments, to better understand developmental issues and forge a consensus on strategies and implementation mechanisms. Cooperation would be further enhanced by the vibrancy of Competitive Federalism with the Centre competing with the States and vice versa, and the States competing with each other, in the joint pursuit of national development.

2. **Shared National Agenda:** Evolve a shared vision of national development priorities and strategies, with the active involvement of States. This will provide the framework ‘national agenda’ for the Prime Minister and Chief Ministers to implement.
3. **State’s Best Friend at the Centre:** Support States in addressing their own challenges, building on strengths and comparative advantages. This will be through coordination with Ministries, championing their ideas at the centre, providing consultancy support and building capacity.
4. **Decentralized Planning :**
 - 1) Restructure the planning process into a bottom-up model.
 - 2) Empower States, and guide them to further empower local governments.
 - 3) Develop mechanisms to formulate credible plans at the village level, which are progressively aggregated up the higher levels of government.
5. **Vision & Scenario Planning :**
 - 1) Design medium and long-term strategic frameworks across all sectors.
 - 2) Identify critical gaps and harness untapped potentialities.
 - 3) Constantly monitor for necessary mid-course recalibration and incorporate evolving trends and addressing emerging challenges.
 - 4) Fundamental transition from merely planning for where the nation’s money goes, to planning where we want the Nation to go.
6. **Domain Strategies:** Build a repository of specialized domain expertise , imbibe good governance measures nationally and internationally to assist Central and State governments.
7. **Network of Expertise:** Main-stream external ideas and expertise into government policies and programmes through a collaborative community of national and international experts, practitioners and other partners. This would entail being Government’s link to the outside world.
8. **Knowledge and Innovation hub:** Be an accumulator as well as disseminator of research and best practices on good governance, through a Resource Centre which identifies, analyses, shares and facilitates replication of the same.

9. **Harmonization:** Facilitate harmonization of actions across different layers of government through communication, coordination, collaboration and convergence amongst all stakeholders. The emphasis will be on bringing all together on an integrated and holistic approach to development.
10. **Conflict Resolution:** Provide a platform for mutual resolution of inter-sectoral, inter-departmental, inter-state as well as centre-state issues. Facilitate consensus acceptable and beneficial to all, to bring about clarity and speed in execution.
11. **Coordinating interface with the World:** Be the nodal point for strategically harnessing global expertise and resources from multilateral platforms , nations etc.
12. **Internal Consultancy:** Offer an internal consultancy function to central and state governments on policy and program design, specialised skills such as structuring and executing Public Private Partnerships.
13. **Capacity building:** Enable capacity building and technology up-gradation across government, benchmarking with latest global trends and providing managerial and technical knowhow.
14. **Monitoring and Evaluation:** Monitor the implementation of policies and programmes, and evaluate their impact through tracking of performance and evaluations. This will help to identify weaknesses and bottlenecks for necessary course correction. It will also enable data-driven policy making encouraging greater efficiency as well as effectiveness.

4.1.5 Objectives of NITI Aayog

The National Institution for Transforming India, NITI Aayog is the new economic think-tank of the government that replaced the Planning Commission on January 1, 2015. The government realized that the Planning Commission had completed more than 6 decades of existence and become outdated. Since it was based on a “one size fits all” formula, it was no longer able to address the diverse economic paradigms in the country. Thus, NITI was launched with a fresh approach with following objectives:

1. Creating an effective administration paradigm in which the Government is an enabler rather than a provider of the first and last resort.
2. Attaining progress from food security. Focusing on a mix of agricultural production and the actual returns that farmers get from their produce.

3. Ensuring that India is an active participant in global debates and deliberations.
4. Ensuring that the economically vibrant middle-class is actively engaged and utilized to its full potential.
5. Leveraging India's pool of entrepreneurial, scientific, and intellectual human capital.
6. Incorporating the geo-economic and geopolitical strength of the NRI Community.
7. Using urbanization as an opportunity to creating a secure habitat via modern technology.
8. Using technology to reduce opacity and potential for misadventures in governance. The measures were taken by the NITI Aayog to help India face complex challenges
9. Leverage India's demographic dividend and realize the potential of young men and women. This is done through imparting education, skill development, the elimination of gender bias and providing employment opportunities.
10. Eliminate poverty and offer Indians a better chance to live a life of dignity and respect.
11. Redress inequalities based on gender bias, caste, and economic disparities.
12. Integrate villages into the development process of the country.
13. Provide policy support to more than 50 million businesses – a major source of employment generation.
14. Safeguard our environmental and ecological assets.

4.1.6. Differences between NITI Aayog and planning commission

Planning Commission	NITI Aayog
1. Enjoyed the powers to allocate funds to ministries and state governments.	1. To be an advisory body, or a think-tank. The powers to allocate funds might be vested in the finance ministry.
2. The last Commission had eight full-time members	2. The number of full-time members could be fewer than Planning Commission
3. States' role was limited to the National Development Council and annual interaction during Plan meetings.	3. State governments are expected to play a more significant role than they did in the Planning Commission.
4. Secretaries or member secretaries were appointment through the usual process	4. Secretaries to be known as the CEO and to be appointed by the prime minister.
5. Planning Commission had no provision for part-time members.	5. To have a number of part-time members, depending on the need from time to time.
6. The commission reported to National Development Council that had state chief ministers and lieutenant governors.	6. Governing Council has state chief ministers and lieutenant governors.
7. Had deputy chairperson, a member secretary and full-time members	7. New posts of CEO, of secretary rank, and Vice-Chairperson. Will also have five full-time members and two part-time members. Four cabinet ministers will serve as ex-officio members.
8. Policy was formed by the commission and states were then consulted about allocation of funds.	8. Consulting states while making policy and deciding on funds allocation. Final policy would be a result of that.
9. Had power to decide allocation of government funds for various programmes at national and state levels.	9. No power to allocate funds
10. Imposed policies on states and tied allocation of funds with projects it approved.	10. NITI is a think-tank and does not have the power to impose policies.

4.1.7. NITI Aayog role in Strategic Planning

The NITI Aayog, established in 2015, is one of Indian democracy's youngest institutions. It has been entrusted with the mandate of re-imagining the development agenda by dismantling old-style central planning. As the Indian economy rapidly integrated with the global economy contradictions arose between central planning and increasing private capital flows. The NITI Aayog was mandated to promote cooperative federalism, evolve a national consensus on developmental goals, redefine the reforms agenda, act as a platform for resolution of cross-sectoral issues between Center and State Governments, capacity building and to act as a Knowledge and Innovation hub. It represented a huge mandate for a budding organization.

The NITI Aayog's predecessor, the Planning Commission was established in March 1950 by a Government of India resolution with Prime Minister as Chairperson. The initial mandate was to establish heavy industries through public investment as a means for achieving rapid industrialization. The functions assigned to the Planning Commission were to assess and allocate plan resources, formulate plans and programs for area development, determine implementation methodology, identify resource constraints and appraise & adjust implementation.

An internal evaluation in Government revealed that Planning Commission was witnessing policy weakness necessitating structural changes in central planning process. The assessment identified that the collapse of public investment in the face of rising subsidies, huge demands on public resources from the Right to Education Act, the National Rural Employment Guarantee Act and a poorly targeted Public Distribution System. Further rigid labor laws were impeding progress, and there were difficulties in releasing land for public housing and other public projects. A new Institutional framework was needed.

As the Prime Minister announced the closure of the Planning Commission from the ramparts of Red Fort on August 15, 2014, a renowned economic journal said that not many will shed tears for the demise of the Planning Commission. The planning exercise that was followed hardly had any relevance for the market economy. It did very little to plan and implement public sector investments and its role in public-private partnerships was restrictive. The proliferation of Centrally Sponsored Schemes contributed to severe distortions in public spending.

The NITI Aayog has done enormous amount of work in a short period of 3 years. It started designing strategic policies, fostering cooperative federalism, provided knowledge and innovation support and undertook evaluation/ monitoring of major investments. The NITI Aayog formulated the Make in India Strategy for Electronics Industry, a Model Land Leasing Law, laid down a National Energy Policy, prepared a Roadmap for

Revitalizing Agriculture, designed a Developmental Strategy for North East and Hilly areas and undertook an appraisal of the 12th Five Year Plan. Further the NITI Aayog recommended closure of sick Public under Takings (PSUs), strategic disinvestment of other Central Public under Takings (CPSUs) and pushed for reforms in Medical Council of India and the University Grants Commission. The two standout initiatives of the NITI Aayog were the model law on land leasing and the framework of priorities for disinvestment.

An over-arching theme of the NITI Aayog was the change in focus from central planning to cooperative federalism. The Prime Minister said that "Through the NITI Aayog, India will move away from the one size fits all approach and forge a better match between schemes and needs of States". The Governing Council of NITI Aayog met very often, 3 sub-groups of Chief Ministers were worked on centrally sponsored schemes (CSS), skill development and Swachh Bharat. Based on their recommendations, the new CSS sharing system was notified and a transparent formula based allocation of resources was reached. The Swachh Bharat cess was levied on all services. To promote skill development initiatives, the involvement of States in the Pradhan Mantri Kaushal Vikas Yojana was ensured. The Atal Innovation Mission was launched to seed innovations to teach young minds new skills.

The NITI Aayog made serious efforts for Transforming India's developmental agenda. It sought proposals from all Central Ministries for Accelerated Growth and Inclusion Strategy, Employment Generation, Energy Conservation and Efficiency, Good Governance and Swachh Bharat. In April 2017, the NITI Aayog Governing Council approved the 3 Year Action Plan agenda aimed at shifting the composition of expenditure by allocating a larger proportion of additional resources to high priority sectors, namely education, health, agriculture, rural development, defence, railways and roads. An agricultural transformation was envisaged with the objective of doubling farmer's income by 2022.

This was to be achieved through a model land leasing law, reform of agriculture produce marketing committees, a legal framework for contract farming and policies to overcome distortions caused by the MSP scheme. Further the NITI Aayog monitored the implementation of the Sustainable Developmental Goals. The NITI Aayog has undertaken path breaking work in its first 3 years and the Nation can look forward to the Institution imparting a new dynamism to India's developmental process in the coming years.

4.1.8. NITI Aayog and Innovation and Knowledge Hub

NITI Aayog has created the India Knowledge Hub (IKH), a dynamic web portal, functioning as a repository to store and disseminate best practices from across the country. The Hon'ble Prime Minister places emphasis that states should not only learn from each other but capitalize on their strengths. Reflecting the spirit of cooperative federalism, the NITI Aayog launched the India Knowledge Hub so that districts, States, Central ministries and other government institutions can exchange knowledge on real-time basis and replicate practices that have worked in other areas.

The portal serves as a dynamic sharing platform in which the key functionaries can directly upload best practices for replication in other regions. While, mostly the best practices are directly uploaded by the district collectors from any State/UT, Departments of State governments and Central Ministry can also upload the best practices in the portal. In its first phase, the portal is also being extended to certain non-government institutions which have requested access to upload best practices.

Presently, there are over 400 best practices that are catalogued in 20 thematic areas, covering Digital India, e-governance, law and order and security, financial inclusion, health, nutrition, education, Public Private Partnership (PPP) among others. The best practices are examples of the innovative practices adopted in districts. It also provides a platform for valuable feedback and is visible to the public.

4.2.1. Cooperative Federalism

Federalism is a system of government in which states or provinces share power with a national government. Cooperative federalism refers to a concept where various states cooperate with each other and with the centre to achieve the goals of growth, development of the states and the nation. They cooperate in working out details concerning which level of government takes responsibility for particular areas and creating policy in that area. The concept of cooperative federalism put forward the view that the national and state governments are partners in the exercise of governmental authority. Measures to strengthen cooperative federalism:

1. Empowering states: NITI Aayog was formed to further empower and strengthen the states. NITI Aayog needs to act to provide the strategic policy vision for the government as well as deal with contingent issues. There are several ways through which a country can achieve higher growth and promote economic activities. One of the ways is to empower states towards optimum utilization of its resources such as infrastructure, buildings, transportation and the most importantly its human resource.

2. Fostering cooperation: All states should compete with each other regarding policies and its effective implementation. The Union government can include States in how decisions are made and enforced. The Union must develop newer conventions to foster cooperation. Aspirational district initiative has potential to foster cooperation at local level, enabling the states to work with the centre.

3. Taxation: States must be given more power to tax and more grants should be given to them. One size fits all policy needs to be changed with focus to specific needs of each state.

The new challenges and issues need centre and various states to come together. Terrorism, militancy, organised crimes, problem of internally displaced persons, refugees issue, all these require that the country as a whole comes together. Cooperative federalism alone strengthens the nation from within by enabling it to withstand adversities and challenges because of its inherent resilience and malleability. Thus efforts must be made towards cooperative federalism.

4.2.2. Cooperative Federalism - Interface between Centre and State

In a vast country like ours, the spirit of co-operative federalism should guide the relations between the Centre and the States on the one hand, among different States and between the States and the Panchayati Raj Institutions on the other. The essence of co-operative federalism is that the Centre and the State Governments should be guided by the broader national concerns of using the available resources for the benefit of the people. Co-operative federalism encourages the Government at different levels to take advantage of a large national market, diverse and rich natural resources and the potential of human capabilities in all parts of the country and from all sections of the society for building a prosperous nation.

This requires a harmonious relationship and co-operative spirit between the Centre and the States and among the States themselves. While a healthy competition among the States for evolving efficient and socially desirable policies and programmes is welcome, any competition which nullifies each other's advantages in development and erodes the resource base of the States should be avoided.

The cooperative federalism is not the first time that the Centre-state relationship in India has turned testy. In the past, it necessitated setting up of two high-level commissions, one led by retired Supreme Court judge, Justice R.S. Sarkaria in 1983, and the second by former Chief Justice of India, retired Justice M.M. Punchhi in 2007, to examine this relationship and suggest changes.

In 2017, the Niti Aayog called out for competitive “cooperative federalism” stressing that this formula would redefine the relationship between the Centre and the States. Former vice chairman of Niti Aayog Arvind Panagariya put the burden on the States to reimagine brand India. Chief Secretaries of States in one of the meetings even showcased the best practices being incorporated in their respective States, a move aimed at promoting cross fertilisation of ideas. There appears to be a silver lining in the functioning of the Aayog in enabling states competing with each other to promote governance initiatives in the spirit of “co-operative, competitive federalism”. An important objective of NITI Aayog is to establish dynamic institutional mechanisms where ‘eminent individuals outside the government system’ could contribute to policy making.

The priorities for the Aayog are evident with the suggestions for rationalisation of 66 central schemes on skill development and making Clean India a continuous program leading to the formation of three CM sub-committees. In a subtle manner, NITI Aayog not only puts the burden on Chief Ministers to speed implementation of projects for the betterment of the state, but also make the state an attractive investment destination, a kind of competitive federalism.

The socio-economic parameters and development of each State in India is different and while a few have made substantial progress in terms of employment, literacy and creating a conducive environment for doing business and investments, there are a few which are lagging. There are varied economic patterns in different states. There are deficit states or the backward regions or the states under debt. Those states should not be treated on par with the well-off states. The states like West Bengal, Bihar, Orissa, and Assam have protested against the uniform approach in funding because of their special situations in which the central government has to provide special funds to these states. Without special funding these states cannot imagine their participation in competitive federalism. Though the states are provided with financial independence, it is a fallacy to assume that all the states would perform uniformly in the process of development because while some states have favourable factors like skilled labour, capital and infrastructure, innovative service industries other states lagging behind.

Efforts at cooperative and competitive federalism have commenced but need to be strengthened. NITI Aayog concentrates on the broader policy framework instead of micro resource-allocated functions. So there is a need to take some further steps.

4.3. Model Examination Questions

Essay Type Questions :

1. Explain the structure and composition of NITI Aayog
2. Explain the objectives of NITI Aayog
3. Describe the functions of NITI Aayog
4. Distinguish between Planning Commission and NITI Aayog
5. Describe the challenges ahead the NITI Aayog
6. What is cooperative federalism? Explain in detail

Short Answer Questions :

1. Planning commission
2. NITI Aayog
3. Strategic planning
4. Innovation and Knowledge hub
5. Cooperative federalism

5



SERVICE SECTOR & ECONOMIC REFORMS

- 5.0. Objective**
 - 5.1.1. Concept and Components of Service Sector**
 - 5.1.2. Trends in Service Sector.**
 - 5.1.3. The Role of Service Sector in Economic Development**
 - 5.2.1. Infrastructural Development**
 - 5.2.2. Transport in India**
 - 5.2.3. Banking in India**
 - 5.2.4. Insurance in India**
 - 5.2.5. Information Technology**
 - 5.3.1. Economic Reforms in India**
 - 5.3.2. Liberalisation**
 - 5.3.3. Privatisation**
 - 5.3.4. Globalisation**
 - 5.3.5. A critical Evaluation of LPG**
- 5.4. Model Examination Questions**

5.0. Objective

The main objective of this module is to understand the concept and components of service sector and know the role of service sector in economic development. And also know trends and performance of service sector. In this module you will understand infrastructural development like transport, banking, insurance, and information technology. In this module you will know about Economic Reforms and its impact in India.

5.1.1. Concept and Components of Service Sector

The service sector, also known as the tertiary sector, is the third tier in the three sector economy. Instead of the product production, this sector produces services maintenance and repairs, training, or consulting. Examples of service sector jobs include housekeeping, tours, nursing, and teaching. The service or tertiary sector is the third piece of a three-part economy. The first economic sector, the primary sector, covers the farming, mining, and agricultural business activities in the economy. The secondary sector covers manufacturing and business activities that facilitate the production of tangible goods from the raw materials produced by the primary sector. The service sector, though classified as the third economic sector, is responsible for the largest portion of the global economy's business activity. The Service sector can be broadly divided into two parts: 1) Economic Services 2) Social Service:

I. Economic Services: Economic Services includes the items, such as: 1) Transport, Storage and Communication 2) Trade, Hotels and Tourisms 3) Banking and Insurance Services.

1. Transport, Storage and Communication: There are various types of transport, such as rail transport, road transport, water transport, air transport. Indian railway system is first in Asia and fourth in the world after USA, Russia and Canada. Storage service is provided by both government and private. Central Warehousing Corporation, the Food Corporation of India, etc are the government units which provide storage facilities. And also, there are several cold storage facilities mainly provided by private authorities. Communication is a vital service of an economy. It includes postal and telegraph, telecommunication, information and broadcasting etc. In India postal department includes several new schemes like Speed Post, Express Post, and E-Post etc. Indian telecommunication network is one of the largest in Asia. It provides land phone, mobile phone and e-mail services.

2. Trade, Hotels and Tourisms: Trade service comprises both domestic and foreign trades. Domestic trade means trade between the different states and cities within the country. On the other hand, foreign trade means trade between different countries. It

includes both exports and imports. There are several public sector units like State Trading Corporation (STC), Minerals and Metals Trading Corporation (MMTC), Special Economic Zones (SEZ) etc giving sufficient support to increase the foreign trade in India. Nowadays, several private sector units are also taking part to enlarge international trade. Hotel industries are mainly run by private entrepreneurs. However, both government and private bodies are equally responsible to increase tourism service in India.

3. Banking and Insurance Services: Development of banking service is the major indicator of economic growth. In India, banking network is spread all over the country. For the flourishing of other service sectors, banking sector plays a very vital role. In India, apart from the Central Bank, i.e., Reserve Bank of India (RBI), all the commercial banks including both public and private sector banks are performing a true role for the country's development. Public sector banks include SBI, PNB, UBI, UCO Bank etc. and private banks include HDFC, HSBC, AXIS Bank etc. In spite of these, there are several non-banking financial institutions like NABARD, ICICI, and IDBI etc. Moreover, there are several public insurance units like LIC, GIC etc. and private insurance units like Tata AIG, Biria Sunlife etc.

II. Social Service: Social service includes items, such as, 1) Education 2) Health 3) Administration

1. Education: After Independence, education system has increased tremendously. General education facilities have increases in good number. There are sharp increases in the number of primary, middle, higher secondary schools, colleges, deemed universities and universities have also risen to a large extent. Moreover, technical and professional education institutions are also increasing rapidly. Medical colleges, engineering colleges, agriculture colleges and business schools etc. are also growing rapidly in India.

2. Health: It is an important service sector of India. The health service includes number of hospitals, dispensaries, community health services, primary health centres, number of doctors, nurses, beds in hospitals along with the number of doctors per 1000 population. Both private and public sectors are working together to improve the health services in urban and rural parts of India. After Independences medical facilities have improved in India.

3. Administration: In India administrative service has also increased at a rapid pace. After Independence, the offices of BDO (Block Development Office), DM (District Magistrate), IAS (Indian Administrative Service), IPS (Indian Police Service), IFS (Indian Forest Service) and Judicial Courts have increased to operate smooth functioning of civil services in India.

5.1.2. Trends in Service Sector

India's dynamic services sector has grown rapidly in the last decade with almost 72.4 per cent of the growth in India's GDP in 2014–15 coming from this sector. Unlike other developing economies, the Indian growth story has been led by service sector growth which is now in double digits. India's service sector has not only outperformed other sectors of the Indian economy, but has also played an important role in India's integration with world trade and capital markets. India's liberalisation of services has been a challenging process in several sub-sectors, but clearly those services where integration through trade and FDI has gone further are also the ones that have exhibited more rapid growth along with positive spillovers on the rest of the economy.

Table No 5.1. Trends and Performance of Service Sector

Sectors	Share in GVA at Current Prices	Growth Per cent (YoY) at constant Prices (2011-12)		
	2018-19 (P)	2016-17	2017-18	2018-19 (P)
Total services (Excluding construction)	54.3	8.4	8.1	7.5
Trade, hotels, transport, communication and services related to broadcasting	18.3	7.7	7.8	6.9
Financial, real estate & professional services	21.3	8.7	6.2	7.4
Public administration, defence & other services	14.7	9.2	11.9	8.6
Source: Central Statistical Office (Economic Survey 2018-19) P: Provisional Estimates, YoY (Year over year)				

Table No. 5.1 describes that, services sector accounts for 54.3 per cent of India's Gross Value Added (GVA). Its growth rate moderated to 7.5 per cent in 2018-19 from 8.1 per cent in 2017-18. The segments that saw slow down are tourism, trade, hotels, transport, communication and services related to broadcasting, public administration and defence. Financial, real estate and professional services category accelerated. An important finding is that India's services sector does not generate jobs in proportion to its share in GVA. This was due to a deceleration in the sub-sectors 'trade, hotels, transport, communication & broadcasting services' to 6.9 per cent and 'public administration and defence & others services' to 8.6 per cent in 2018-19. On the bright side, growth in the sub-sector 'financial services, real estate & professional services' picked up to 7.4 per cent in 2018-19 from 6.2 per cent in 2017-18. Despite the recent growth moderation, services sector growth continues to outperform agriculture and manufacturing sector growth, contributing more than 60 per cent to total GVA growth.

5.1.3. The Role of Service Sector in Economic Development

The role of services sector has been increasing continuously decade after decade in the economic development of our country. With the continuous expansion of services sector, both in terms of volume and diversity, the importance of services sector has been increasing at a high speed. The following are some of the importances of services sector in Indian economy:

1. Contribution of GDP: The share of total services sector in India's GDP (at constant prices), which is constituted by trade, hotels, transport, storage and communications, banking, insurance, real estate, community and personal services, but excluding construction increased from 28.5 per cent in 1950-51 to 31.8 per cent in 1970-71 and then finally to 55.17 per cent in 2019-20. Thus it has been observed that the contribution of services sector into GDP of India has been increasing at considerable proportion and thereby it has proved to be a major sector among all the three sectors of the economy.

2. Higher CAGR and Rapid Growth of Services Sector: The importance of services sector to Indian economy can also be traced from its attainment of higher compound annual growth rate (CAGR). The CAGR of the services sector attained at 10.0 per cent for the period 2004-05 to 2011-12 has been found to be higher than the 8.6 per cent of CAGR of Gross Domestic Product (GDP) of India during the same period, which clearly indicates that the services sector has outgrown both the industry and agriculture sectors, showing its supremacy among all three sectors of the economy in recent years. Such rapid growth of the service sector has resulted considerable changes in the GDP of the country.

3. Employment Generation of Services Sector: The important of services sector can also be realised from its contribution towards generation of employment in India. Although the primary sector (mainly agriculture) is the dominant employer followed by the services sector, the share of services sector has been increasing over the years and that of the primary sector has been decreasing.

4. Contribution to India's Services Trade: The services sector is also playing an important role sector in raising the volume of exports in the country. Thus India is moving towards a services-led export growth in recent years. During 2004-05 to 2008-09 as per the Balance of Payment (BoP) data, merchandise and services exports grew by 22.2 and 25.3 per cent respectively.

5. Contribution towards Human Development: Services sector has a lot of contribution towards human development in our country. Accordingly, services sector has been rendering some valuable services, viz., health services, educational facilities; IT and IT enabled services, skill development, health tourism, sports and cultural services

etc. which are largely responsible for human empowerment and improvement of quality of life of the people in general.

6. Services Sector Growth and FDI Inflows: Modest growth of services sector has made ample scope for the smooth inflow of FDI into the country. FDI also plays a major role in the dynamic growth of the services sector. On the positive side, at global level, medium term prospects for services are generally better than those manufacturing sector with international investment in the services sector expected to grow relatively faster.

7. Contribution towards Development of Infrastructure and Communication Services: Services sector has also been playing an important role in developing expanding and management of infrastructure with a special emphasis on development of transportation and communication services. In a developing country like India the importance of development of infrastructural facilities is quite high.

8. Contribution towards Development of Some Social Services: Services sector is also playing an important role in the development and expansion of some social services like sports, cultural services etc. Sports promote physical fitness and develop human personality which also played an important role in national identity, community bonding and international bonding.

5.2.1. Infrastructural Development

In Economic literature, infrastructure is popular by the name “Overhead Capital” or “Social Overhead Capital”. The famous economist A.O Hirschman stated that Social Overhead capital is the “basic services without which primary, secondary and tertiary productive activities cannot function”. The very success of social and economic transformation of an economy lies in providing inclusive and sustainable infrastructure amenities to the people and the pace of economic growth depends on how competently and judiciously an economy is able to address its infrastructure bottlenecks. Sustainable Development Goals (SDG), goal number 9 aims to “Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all”.

The prosperity of a country depends directly upon the development of agriculture and industry. Agricultural production, however, requires irrigation, power, credit, transport facilities, etc. Industrial production requires not only machinery and equipment but also skilled manpower, management, energy, banking and insurance facilities, marketing facilities, transport services which include railways, roads, and shipping,

communication facilities, etc. All these facilities and services which help in industrial and agricultural production constitute collectively the infrastructure of an economy.

The development and expansion of these facilities are an essential pre-condition for increasing agricultural and industrial production in a country. In the last 200 years or more, industrial and agricultural revolutions in England and in other countries were accompanied by a revolution in transport and communications, the extensive use of coal and later oil as source of energy, tremendous expansion in banking, insurance and other financial institutions to finance production and trade, an explosion of knowledge of science and technology, and so on. Infrastructural facilities, often referred to as economic and social overheads, consist of:

1. Irrigation, including flood control and command area development.
2. Energy: coal, electricity, oil and non-conventional sources.
3. Transport: Railways, roads, shipping and civil aviation.
4. Communications: Posts and telegraphs, telephones, telecommunications, etc.
5. Banking, finance and insurance.
6. Science and technology.
7. Social overheads: health and hygiene and education

In the words of Dr. V.K.R.V. Rao “The link between infrastructure and development is not a once for all affair. It is a continuous process; and progress in development has to be preceded, accompanied and followed by progress in infrastructure, if we are to fulfill our declared objectives of a self-accelerating process of economic development.”

5.2.2. Transport in India

If agriculture and industry are regarded as the body and the bones of the India economy, transport and communications constitute its nerves which help the circulation of men and materials. The transport system helps to broaden the market for goods and by doing so; it makes possible large-scale production through division of labour. It is also essential for the movement of raw materials, fuel, machinery etc., to the places of production.

The more extensive and continuous the production in any branch of activity, the greater will be the need for transport facilities. Transport development helps to open up remote regions and resources for production. Regions may have abundant agricultural, forest and mineral resources but they cannot be developed if they continue to be remote and inaccessible. By linking the backward regions with the relatively more advanced, transport development helps in the better and fuller utilisation of resources. Finally, expansion of transport facilities, in turn, helps industrialisation directly. The demand

for locomotives, motor vehicles, ships etc. leads to the start of industries which specialise in the production of these goods. Expansion of transport is thus of fundamental importance for a developing country like India.

Table No 5.2. Growth of the Transport System

Type of Transport	Particulars	1950-51	1970-71	2011-12	2012-13	2013-14
1. Railways	Rough length(000 km) Freight	53,600	59,800	64,600	65,400	65,800
	Traffic originating (M.Tonnes)	93	196	975.2	1014.2	1058.8
2.Roads	Road length (000 km)	400	915	4,865	4,949	N.A
	Surfaced	160	400	2,698	2,772	N.A
	No. of goods Vehicles(000)	82	343	7,064	N.A	N.A
3.Shipping	Overseas Shipping(M.Tonnes)	0.2	2.2	10.0	10.20	10.49
Ports	In M.Toones	19.0	N.A	560	560	555
4. Civil Aviation	Number of passengers Domestic (lakhs)	N.A	26	617	588	617

Source: Railway Budget 2015-16, Economic Survey 2014-15)
Ministry of Shipping Annual Report 2013-14. (N.A Not Available)

Growth of Transport System since 1951: Rail and road transport systems dominate but other forms of transport are also important within their specialised areas considering the size of the country and its geographical features. Table 5.2 shows that the transport sector has recorded a substantial growth since the introduction of economic planning in 1950-51. Railways have recorded a growth of 3 per cent per annum in freight originating tonnage, though the growth in route length was indeed low. The road network has expanded at an annual rate of 5 per cent while road transport fleet has increased by 7 per cent per annum in respect of goods vehicles.

About 70 per cent of the Indian villages have been connected by a net work of rural roads and over 40 per cent of our villages are served by all weather roads. Shipping tonnage has increased by an impressive 11 per cent while coastal shipping could register only a meager rise of 1.4 per cent. Airlines passenger traffic has risen smartly by 9 per cent per annum. The traffic handled by major ports has increased from 19 million tonnes to 555 million tonnes between 1951 and 2014, at an annual rate of nearly 5 per cent. The growth of the transport sector in general is indeed quite impressive and it reflects the enormous outlay allocated to the development of the transport system during the planning period.

5.2.3. Banking in India

The banking system plays an important role in the modern economic world. Banks collect the savings of the individuals and lend them out to business- people and manufacturers. Bank loans facilitate commerce. Manufacturers borrow from banks the money needed for the purchase of raw materials and to meet other requirements such as working capital. It is safe to keep money in banks. Interest is also earned thereby. Thus, the desire to save is stimulated and the volume of savings increases. The savings can be utilised to produce new capital assets.

Thus, the banks play an important role in the creation of new capital or capital formation in a country and thus help the growth process. Banks arrange for the sale of shares and debentures. Thus, business houses and manufacturers can get fixed capital with the aid of banks. There are banks known as industrial banks, which assist the formation of new companies and new industrial enterprises and give long-term loans to manufacturers. The banking system can create money. When business expands, more money is needed for exchange transactions. The legal tender money of a country cannot usually be expanded quickly. Bank money can be increased quickly and used when there is need of more money. In a developing economy like that of India banks play an important part as supplier of money.

The banking system facilitates internal and international trade. A large part of trade is done on credit. Banks provide references and guarantees, on behalf of their customers, on the basis of which sellers can supply goods on credit. This is particularly important in international trade when the parties reside in different countries and are very often unknown to one another. Banks act as advisers, counsellors and agents of business and industrial organisations. They help the development of trade and industry. Now-a-days in every country there is a central bank (in India RBI) which controls the activities of all other banks, endeavours to keep the price level steady, and controls the rates of foreign exchange.

Coming to expansion of bank branches in the country in the year 1969, there were only 8,260 branches of commercial banks in India by 2017 they were increased to 91,549 branches. In other words, the bank branches were increased by more than 12 times since 1969. In recent years in order to meet the credit requirements of the weaker sections, small and marginal farmers, landless labourers, artisans and small entrepreneurs, the Regional Rural Banks (1975) have been set up in different parts of the country. The foreign scheduled banks operate mostly in big cities having 285 branches in the country. And other banks in the private sector branches numbered 24,890 by the end of March 2017.

5.2.4. Insurance in India

In India, insurance has a deep-rooted history. It finds mention in the writings of Manu (Manusmrithi), Yagnavalkya (Dharmasastra) and Kautilya (Arthasastra). The writings talk in terms of pooling of resources that could be re-distributed in times of calamities such as fire, floods, epidemics and famine. This was probably a pre-cursor to modern day insurance.

1818 saw the advent of life insurance business in India with the establishment of the Oriental Life Insurance Company in Calcutta. In 1829, the Madras Equitable had begun transacting life insurance business in the Madras Presidency. 1870 saw the enactment of the British Insurance Act and in the last three decades of the nineteenth century, the Bombay Mutual (1871), Oriental (1874) and Empire of India (1897) were started in the Bombay Residency. This era, however, was dominated by foreign insurance offices which did good business in India, namely Albert Life Assurance, Royal Insurance, Liverpool and London Globe Insurance and the Indian offices were up for hard competition from the foreign companies.

In 1914, the Government of India started publishing returns of Insurance Companies in India. The Indian Life Assurance Companies Act, 1912 was the first statutory measure to regulate life business. In 1928, the Indian Insurance Companies Act was enacted to enable the Government to collect statistical information about both life and non-life business transacted in India by Indian and foreign insurers including provident insurance societies. In 1938, with a view to protecting the interest of the Insurance public, the earlier legislation was consolidated and amended by the Insurance Act, 1938 with comprehensive provisions for effective control over the activities of insurers.

The Insurance Amendment Act of 1950 abolished Principal Agencies. However, there were a large number of insurance companies and the level of competition was high. There were also allegations of unfair trade practices. The Government of India, therefore, decided to nationalize insurance business.

An Ordinance was issued on 19th January, 1956 nationalising the Life Insurance sector and Life Insurance Corporation came into existence in the same year. The LIC absorbed 154 Indian, 16 non-Indian insurers as also 75 provident societies, 245 Indian and foreign insurers in all. The LIC had monopoly till the late 90s when the Insurance sector was reopened to the private sector.

This millennium has seen insurance come a full circle in a journey extending to nearly 200 years. The process of re-opening of the sector had begun in the early 1990s and the last decade and more has seen it been opened up substantially. In 1993, the Government set up a committee under the chairmanship of RN Malhotra, former Governor

of RBI, to propose recommendations for reforms in the insurance sector. The objective was to complement the reforms initiated in the financial sector. The committee submitted its report in 1994 wherein, among other things, it recommended that the private sector be permitted to enter the insurance industry. They stated that foreign companies are allowed to enter by floating Indian companies, preferably a joint venture with Indian partners.

Following the recommendations of the Malhotra Committee report, in 1999, the Insurance Regulatory and Development Authority (IRDA) was constituted as an autonomous body to regulate and develop the insurance industry. The IRDA was incorporated as a statutory body in April, 2000. The key objectives of the IRDA include promotion of competition so as to enhance customer satisfaction through increased consumer choice and lower premiums, while ensuring the financial security of the insurance market.

In December, 2000, the subsidiaries of the General Insurance Corporation of India were restructured as independent companies and at the same time GIC was converted into a national re-insurer. Parliament passed a bill de-linking the four subsidiaries from GIC in July, 2002. Today there are 34 general insurance companies including the Export Credit Guarantee Corporation of India (ECGC) and Agriculture Insurance Corporation of India and 24 life insurance companies operating in the country.

The insurance sector is a huge one and is growing at a speedy rate of 15-20%. Together with banking services, insurance services add about 7% to the country's GDP. A well-developed and evolved insurance sector is a boon for economic development as it provides long- term funds for infrastructure development at the same time strengthening the risk taking ability of the country.

5.2.5. Information Technology

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. Information technology 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 range 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 technology is of recent origin, but it is spreading fast in India.

Information Technology Act, 2000 was approved on 9th June, 2000 by the Government of India. The Act provide legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as “electronic commerce”. It is the new service sector industry in the knowledge based world. Information technology is the technical revolution that has transformed and integrated the world as the “Global Village”, it has become indispensable in all major sectors of all economies of the world.

Contribution to GDP: Information Technology being one of the largest offshoring destinations for different IT companies across the world, the business process management market in India is of considerable importance. The information technology/business process management (IT-BPM) sector had contributed 7.7 percent share to the GDP of our country in the year 2020. In the 2009 its share is just 5.8 percent to the GDP. But in the year 2015 its share is 9.5 percent to the GDP recorded as highest share.

Employment: The IT industry encompasses a vast range of fields related to computers and digital information. As leading companies across industries push for further adoption of digital technologies, IT professionals have become some of the most in-demand members of today’s labor force. Total number of employees grew to 1.02 million cumulatively for four Indian IT majors (including TCS, Infosys, Wipro, HCL Tech) as on December 31, 2019. Indian IT industry employed 205,000 new hires; up from the 185,000 jobs added in 2019 and had 884,000 digitally skilled talents in 2019.

India is the topmost offshoring destination for IT companies across the world. Having proven its capabilities in delivering both on-shore and off-shore services to global clients, emerging technologies now offer an entire new range of opportunities for top IT firms in India.

5.3.1. Economic Reforms in India

Soon after taking over as Prime Minister in 1985, Mr. Rajiv Gandhi outlined the new trends in economic policy of the Government. The method suggested by him was: Improvement in productivity, absorption of modern technology and fuller utilisation of capacity must acquire the status of a national campaign. The basic thrust of the New Economic Policy was a greater role for the private sector.

To provide larger scope to the private sector, a number of changes in policy were introduced with regard to industrial licensing, export-import policy, technology up gradation, fiscal policy, foreign equity capital, removal of controls and restrictions, rationalising and simplifying the system of fiscal and administrative regulation. Consequently, the New Economic Policy focussed its attention on dismantling the edifice of controls so as to remove unnecessary hurdles in securing licences, in adjusting output to administered prices and in denying industrial licensing to MRTP Companies. The Government initiated a number of measures in this regard.

Although economic reforms were introduced under Rajiv Gandhi regime, they did not yield the desired result. The balance of trade deficit, instead of narrowing down, increased. There was also decline in the receipts on invisible account. Consequently, the country was faced with a serious balance of payments crisis. Thus, India was forced to approach the World Bank and the IMF to provide a huge loan of the order of about \$7 billion to bail India out of the crisis.

While agreeing to provide assistance to India, the World Bank-IMF insisted that the Government must put its economy back on rails. The Congress Government, soon after resumption of office on June 21, 1991, adopted a number of stabilisation measures that were designed to restore internal and external confidence. In his Memorandum on Economic policies submitted to IMF, Dr. Manmohan Singh, the then Finance Minister proposed: "The thrust will be to increase the efficiency and international competitiveness of industrial production, to utilize foreign investment and technology to a much greater degree than in the past, to improve the performance and rationalize the scope of the public sector, and to reform and modernize the financial sector so that it can more efficiently serve the needs of the economy."

Industrial Policy Reforms: The regulatory framework which acted as a barrier to entry and growth was sought to be basically changed by the Industrial Policy announced on July 24, 1991. The measures introduced in this area along with other economic reforms were as under:

1. De licensing: Industrial licensing was abolished for all projects except for a list of 15 industries related to security, strategic or environmental concerns and certain items of luxury consumption that had a high proportion of imported inputs.

2. Removal of MRTP Act: The Monopolies and Restrictive Trade Practices (MRTP) Act applied in a manner which eliminated the need to seek prior government approval for expansion of present undertakings and establishment of new undertakings by large companies. MRTP Act restriction was removed.

3. Privatisation: The set of activities henceforth reserved for the public sector was now much narrower than before, and there would be no ban on the remaining reserved areas being opened up to the private sector.

Foreign Investment Policy: The Industrial Policy (1991) also provided increased opportunities for foreign investment with a view to take advantage of technology transfer, marketing expertise and introduction of modern managerial techniques. It was also intended to promote a much-needed shift in the composition of external private capital inflows towards equity and away from debt-creating flows. The following measures were announced in this regard:

- 1) Automatic approval would be given for direct foreign investment up to 51 per cent foreign equity ownership in a wide range of industries. Earlier, all foreign investment was generally limited to 40 per cent.
- 2) To provide access to international markets, majority foreign equity holdings up to 51 per cent equity would be allowed for trading companies primarily engaged in export activities.
- 3) Automatic permission would be given for foreign technology agreements for royalty payments.

Trade Policy: An important element of this strategy was the transition from a regime of quantitative restriction to price-based system. From 1st April 2001, quantitative restrictions on all items have been removed.

Public Sector Policy: To provide a solution to the problems of the public sector, Government decided to adopt a new approach, the key elements of which were: (i) the existing portfolio of public investment would be reviewed with a greater sense of realism to avoid areas where social considerations were not paramount or where the private sector would be more efficient; (ii) enterprises in areas where continued public sector involvement was judged appropriate would be provided a much greater degree of managerial autonomy; (iii) budgetary support to public enterprises would be progressively reduced; (iv) to provide further market discipline for public enterprises, competition from the private sector would be encouraged and part of the equity in selected enterprises would be disinvested; and (v) chronically sick public enterprises would not be allowed to incur heavy losses.

5.3.2. Liberalisation

The term liberalisation denotes removing restrictions from certain private individual activity, typically pertaining to economic system. Commonly, liberalisation is used in the context of a government relaxing its previously imposed restrictions on economic or social policies. Economic liberalisation refers to a situation where inessential restrictions and controls are removed from a country's economy to ensure that businesses and enterprises can maximise their contribution. It is, however, important to note that liberalisation does not mean an uncontrolled economy.

The Indian economy was liberalised in the year 1991. In India, the concept of economic liberalisation was introduced to attain several objectives. Economic liberalisation in India was bolstered by its balance of payments crisis in 1985. This crisis rendered the country incapable of paying for its essential imports and servicing its debt payments. India was pushed to the brink of bankruptcy therein. As a response to it, the then finance minister of India, Dr. Manmohan Singh, introduced economic liberalisation in India. The Following are some of the features of liberalisation that was initiated as a part of economic reforms of 1991:

1. Abolition of the previously existing License Raj in the country. License or Permit Raj is a complicated system of regulations, licenses and restrictions that were imposed to run and set up businesses between 1947 and 1990.
2. Reduction of interest rates and tariffs
3. Curbing monopoly of the public sector from various areas of our economy.
4. Approval of foreign direct investment in various sectors

The primary objectives of initiating liberalisation in India can be summed up as follows

1. To solve India's impending balance of payment crisis
2. To boost the private sector's participation in the development of India's economy.
3. To increase the volume of foreign direct investment in India's businesses.
4. To introduce competition between India's domestic businesses.
5. To maximise India's economic potential by encouraging multinational and private companies to expand.
6. To usher in globalisation for the Indian economy.
7. To regulate export and import and promote foreign trade.

5.3.3. Privatisation

The term “Privatisation” connotes a wide range of ideas. It would therefore be appropriate to understand the meaning of the term. In a narrow sense, privatization implies the induction of private ownership in publicly owned enterprises, but in a broader sense, it connotes besides private ownership, the induction of private management and control in the public sector enterprises.

The transfer of ownership, property or business from the government to the private sector is termed privatization. The government ceases to be the owner of the entity or business. The process in which a publicly-traded company is taken over by a few people is also called privatization. The stock of the company is no longer traded in the stock market and the general public is barred from holding stake in such a company. The company gives up the name ‘limited’ and starts using ‘private limited’ in its last name.

Privatization is considered to bring more efficiency and objectivity to the company, something that a government company is not concerned about. India went for privatization in the historic reforms budget of 1991, also known as ‘New Economic Policy or LPG policy’.

The Central Public Sector Undertakings (CPSUs) have played a vital role in the development of India’s economy. It is clear from the fact that in 1951, there were hardly 5 CPSUs with an investment of Rs. 29 crore and their number has increased to 348 with an investment of Rs.16.4 trillion by the end of 2018-19. The CPSUs were established with an objective of achieving higher economic growth, self-sufficiency in production of goods and services, long term equilibrium of Balance of Payments and low and stable prices. They have been playing a strategic role in the economy, providing essential goods and services and holding dominant market positions in key sectors.

However, later on some of these CPSUs became white elephants, started incurring losses and became a fiscal burden for the country. As per the public enterprise survey 2018-19, there were 70 CPSUs that incurred losses of Rs.0.32 trillion. Their poor performance forced the government to change its stance and move towards disinvestment. In 1991, the window of industries that was reserved for the CPSUs was opened for private players. The policy of disinvestment of government equity in CPSUs started in 1991-92 through the new industrial policy of 1991.

At present, the country is facing economic disruptions due to the global pandemic. The pandemic has shrunk revenue and increased expenditure of the country. As the time required, the government is focusing on capital expenditure, especially on infrastructure, through privatization as a key strategy for the recovery of the economy.

5.3.4. Globalisation

The term globalisation refers to the integration of the economy of the nation with the world economy. It is a multifaceted aspect. It is a result of the collection of multiple strategies that are directed at transforming the world towards a greater interdependence and integration.

It includes the creation of networks and pursuits transforming social, economical, and geographical barriers. Globalisation tries to build links in such a way that the events in India can be determined by the events happening distances away. To put it in other words, globalisation is the method of interaction and union among people, corporations, and governments universally.

India is one of the countries that succeeded significantly after the initiation and implementation of globalisation. The growth of foreign investment in the field of corporate, retail, and the scientific sector is enormous in the country. It also had a tremendous impact on the social, monetary, cultural, and political areas. In recent years, globalisation has increased due to improvements in transportation and information technology. With the improved global synergies, comes the growth of global trade, doctrines, and culture.

Indian society is changing drastically after urbanisation and globalisation. The economic policies have had a direct influence in forming the basic framework of the economy. Economic policies established and administered by the government also performed an essential role in planning levels of savings, employment, income, and investments in the society.

Advantages of Globalisation in India

1. Increase in employment: With the opportunity of special economic zones (SEZ), there is an increase in the number of new jobs available. Including the export processing zones (EPZ) centre in India is very useful in employing thousands of people. Another additional factor in India is cheap labour. This feature motivates the big companies in the west to outsource employees from other regions and cause more employment.

2. Increase in compensation: After globalisation, the level of compensation has increased as compared to the domestic companies due to the skill and knowledge a foreign company offers.

3. High standard of living: With the outbreak of globalisation, the Indian economy and the standard of living of an individual have increased. This change is notified with the purchasing behaviour of a person, especially with those who are associated with foreign companies. Hence, many cities are undergoing a better standard of living along with business development.

5.3.5. A Critical Evaluation of LPG

Economic Reforms in India were introduced in 1991 by the Congress government led by Mr. P. V. Narsimha Rao. There is near unanimity among major political parties on the implementation of economic reforms. It may be pointed out that a consensus has been achieved in the country to introduce and implement economic reforms so as to accelerate the process of development. The reforms process has completed 30 years and this cannot be considered as too short a period to assess the impact of economic reforms. It would, therefore, be proper to undertake an appraisal of the achievements and shortcomings of economic reforms to understand as to whether the country is moving in the right direction, or alternatively, there is a need to reform the reform process undertaken during the nineties. Before undertaking an appraisal of the economic reforms, it would be desirable to state the goals of the process of economic development. The reforms process while accelerating economic development should lead us to the following ends:

1. A higher rate of growth.
 2. An enlargement of employment potential leading to full employment.
 3. Reduction of population living below the poverty line.
 4. Promotion of equity leading to a better deal for the poor and less well-off sections of our society.
 5. Reduction of regional disparities between the rich and the poor states of India. It would be of interest to examine economic reforms in terms of goals of the society listed above.
1. **GDP Growth and Poverty Reduction:** There is no doubt that economic reforms have been able to promote a relatively higher growth. After the teething problems of the first two years viz., 1991-92 and 1992-93, the growth rate during 1993-94 to 1997-98 has averaged to more than 7 per cent per annum. If we compare the annual average growth rate during the pre-reform period (1980-81 to 1990-91) which was of the order of 5.2 per cent per annum, then the post reform decade (1990-91 to 2000-01) also shows a little higher average annual growth rate of 5.8 per cent of real GDP. However, there is a distinct improvement in growth rate of GDP during the 5-year period (2000-01 to 2003-04) to an average of 6.0 per cent and further to 7.9 per cent in next 8-years from 2004-05 to 2012-13.
 2. **Impact on Labour:** A review of Industrial relations in the pre-reform period (1981-90) reveals that as against 402.1 million man days lost during the decade (1981-90), i.e. in the prereform period, the number of man days lost declined to 230.2 million during (1991-2000) - the post-reform period. Looking at the aggregate level it may be stated that the loss of man days in the aggregate declined and this can be treated as the index of improvement of industrial relations in the post-reform period.

3. **Neglect of Agriculture -The Major Sin of Economic Reforms:** A major criticism of the process of economic reforms is the neglect of agriculture. Data reveals that foodgrains production increased from 129.6 million tonnes in 1980-81 to 176.4 million tonnes in 1990-91 resulting in annual compound rate of 3.1 per cent. But during the 18-year period of economic reforms, foodgrains production increased from 176.4 million tonnes in 1990- 91 to 234 million tonnes in 2008-09, indicating an annual average growth rate of 1.6 per cent, which was lower than the growth rate of population.
4. **Economic Reforms and Industrial Growth:** Economic Reforms were mainly intended to remove the bottlenecks, which acted as obstacles in industrial production. To pursue this goal, Industrial licensing was abolished in all but 18 Industries. Later the government delicensed several others. At present, there are only two industries reserved for the public sector. Put another way, it can be stated that the reform process dismantled the system of Industrial licensing which was considered to be a main roadblock in the progress of industrial development.
5. **India's Foreign Trade and Balance of Payments:** Although policies of liberalisation in foreign trade were initiated in 1985-86 but their impact though felt during the period 1986-87 to 1990-91 was slow and after 1991 the new economic reforms went in for a more rapid globalisation of the Indian economy by reducing and/or abolishing quantitative restrictions and also reducing tariff barriers which hindered trade.
7. **Foreign Investment:** Foreign investment flows in India during the last 15 years (1991-92 to 2006- 07), a total of US \$136.5 billion. Out of which \$72.09 billion (52.8 per cent of total) was in the form of direct investment and \$64.44 billion (47.2 per cent) was in the form of portfolio investment.
8. **Reduction of Regional Disparities:** One of the major objectives of development is to reduce regional disparities. The reform process initiated in 1991 has been emphasising the use of the market forces, which naturally attract investment to regions more developed in infrastructure. It does not pay any attention to the question of regional imbalance. It would be, therefore, desirable to understand the impact of economic reforms on various states. An analysis of the growth of the Net State domestic Product (at 1993-94 prices) for the post-reform period reveals that NSDP in forward states indicated an annual average growth rate of 5.6 per cent during 1990- 91 and 2002-03, but as against them in the backward states, growth rate of NSDP was merely 1.7 per cent. This only underlines the stark reality that the reform process helped the forward states much more than the backward states and could be held responsible for widening regional disparities.

- 9. Social Infrastructure and Human Development:** Data on selected indicators of Human Development viz., life expectancy, literacy rate, infant mortality rate (IMR), death rate and birth rate etc. Wide disparities are observed among different states.

It has to be acknowledged that the reform process will not be able to achieve its socio-economic objective, because the private sector is merely concerned with profit motive. Whereas the liberalisation process has reduced the role of the public sector investment, it has failed to fill the vacuum created by the withdrawal of public sector investment in infrastructure, more especially in the backward states.

5.4. Model Examination Questions

Essay Type Questions :

1. Define service sector and explain its components
2. Explain the role and importance of service sector in economic development
3. Describe the infrastructural development in India
4. Critically evaluate the economic reforms in India
5. Write a note on LPG policies in India

Short Answer Questions :

1. Transport sector
2. Banking sector
3. Insurance sector
4. Information technology
5. Liberalization
6. Privatization
7. Globalization

MVN VIGNANA KENDRAM

Nalgonda Economics Forum Regd. No. 297/13

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2016, 2017 మరియు 2018 మొదటి ర్యాంకులతో రాష్ట్ర చరిత్రలో అద్భుతమైన

హ్యాండ్రీక్ ఫలితాల ప్రభంజనం



1st - RANK
K. SRAVAN KUMAR
OU CET - 2016



1st - RANK
B. BHAVANI
KU CET - 2016



1st - RANK
G. KRISHNA
OU CET - 2017



2nd - RANK
K. CHANDRASHEKAR REDDY
KU CET - 2017



1st - RANK
BUGGA NARENDAR
OU CET - 2018



1st - RANK
B. GURU PRASAD
KU CET - 2018

OU CET - 2018 టాప్ 20/14 ర్యాంకులతో ర్యాంకుల ప్రభంజనం



2nd - RANK
B. GURU PRASAD
OU CET - 2018



4th - RANK
J. NAVEEN
OU CET - 2018



5th - RANK
CH. SANGAMESHWAR
OU CET - 2018



6th - RANK
V. BIXAM
OU CET - 2018



7th - RANK
K. RAGHAVENDAR
OU CET - 2018



8th - RANK
SK. JAVEED PASHA
OU CET - 2018



9th - RANK
K. KIRAN KUMAR
OU CET - 2018



10th - RANK
P. SHEKAR
OU CET - 2018



13th - RANK
R. RAJESH
OU CET - 2018



14th - Rank
B. SHIVA RAJU
OU CET - 2018



15th - Rank
S. MADHU
OU CET - 2018



17th - Rank
N. HARISH
OU CET - 2018



18th - Rank
B. RAJASHEKAR
OU CET - 2018

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CPGET-2020 మొదటి మూడు ర్యాంకులతో పాటు

(Common P.G. Entrance Test - 2020)

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K. SAI CHANDRA
1st - RANK



B. BHARGAVI
2nd - RANK



KURUPATI KOTESH
3rd - RANK



DEDEKULA THASLEEM
7th - RANK



JAMPALA RAJESHWARI
8th - RANK



GADALA VINEELA
9th - RANK



PALLAPU SRIKANTH
10th - RANK



PRAVEEN KUMAR
14th - RANK



DEEKSHA
17th - RANK



A. MOUNIKA
19th - RANK



MAHIPAL
20 - Rank



B. JHANSI
27 - Rank



G. SRIKANTH
29 - Rank



PRUTHVIRAJ
30 - Rank



ANIL
33 - Rank



R. VIJAY
34 - Rank



G. MANISHA
35 - Rank



M. SANDHYA
39 - Rank



SK. SONY
45 - Rank



CH. SATHISH
50 - Rank



M. MANEESHA
52 - Rank



RENUKA
65 - Rank



MAHESHWARI
80 - Rank



B. DIVYA
95 - Rank



PAPPULA MANASA
96 - Rank



NARESH
105 - Rank

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