

# Indian Economic Development

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**Class XII**



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# Syllabus

## Central Board of Secondary Education, Delhi Economics Class-XII

Paper One	3 Hours	Theory: 80 Marks	Project: 20 Marks
Units		Periods	Marks
<b>Part-A: Introductory Macroeconomics</b>			
1. National Income and Related Aggregates			
2. Money and Banking	15	06	
3. Determination of Income and Employment	27	12	
4. Government Budget and the Economy	15	06	
5. Balance of Payments	15	06	
	<b>100</b>	<b>40</b>	
<b>Part-B: Indian Economic Development</b>			
6. Development Experience (1947-90) and Economic Reforms since 1991	28	12	
7. Current Challenges facing Indian Economy	60	22	
8. Development Experience of India—A Comparison with Neighbours	12	06	
	<b>100</b>	<b>40</b>	
<b>Part-C: Project Work</b>			
		<b>20</b>	<b>20</b>

### PART-A: INTRODUCTORY MACROECONOMICS

#### Unit-1: National Income and Related Aggregates (28 Periods)

What is Macroeconomics?

Basic concepts in macroeconomics: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation.

Circular flow of income (two sector model); Methods of calculating National Income—Value Added or Product method, Expenditure method, Income method.

#### Aggregates related to National Income:

Gross National Product (GNP), Net National Product (NNP), Gross and Net



Domestic Product (GDP and NDP)—at market price, at factor cost; Real and Nominal GDP.

GDP and Welfare.

#### **Unit-2: Money and Banking** (15 Periods)

Money—meaning and supply of money—Currency held by the public and net demand deposits held by commercial banks.

Money creation by the commercial banking system.

Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Government Bank, Banker's Bank, Control of Credit through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.

#### **Unit-3: Determination of Income and Employment** (27 Periods)

Aggregate demand and its components.

Propensity to consume and propensity to save (average and marginal).

Short-run equilibrium output; investment multiplier and its mechanism.

Meaning of full employment and involuntary unemployment.

Problems of excess demand and deficient demand; measures to correct them—changes in government spending, taxes and money supply.

#### **Unit-4: Government Budget and the Economy** (15 Periods)

Government budget—meaning, objectives and components.

Classification of receipts—revenue receipts and capital receipts; classification of expenditure—revenue expenditure and capital expenditure.

Measures of government deficit—revenue deficit, fiscal deficit, primary deficit—their meaning.



#### **Unit-5: Balance of Payments** (15 Periods)

Balance of payments account—meaning and components; balance of payments deficit—meaning.

Foreign exchange rate—meaning of fixed and flexible rates and managed floating.

Determination of exchange rate in a free market.

## PART-B: INDIAN ECONOMIC DEVELOPMENT

### Unit-6: Development Experience (1947-90) and Economic Reforms since 1991 (28 Periods)

A brief introduction of the state of Indian economy on the eve of independence.

Common goals of Five Year Plans.

Main features, problems and policies of agriculture (institutional aspects and new agricultural strategy, etc.), industry (industrial licensing, etc.) and foreign trade.

#### Economic Reforms since 1991:

Features and appraisals of liberalisation, globalisation and privatisation (LPG policy); Concepts of demonetization and GST.

### Unit-7: Current Challenges facing Indian Economy (60 Periods)

**Poverty**—absolute and relative; Main programmes for poverty alleviation: A critical assessment.

**Rural Development:** Key issues—credit and marketing—role of cooperatives; agricultural diversification; alternative farming—organic farming.

**Human Capital Formation:** How people become resource; Role of human capital in economic development; Growth of Education Sector in India.

**Employment:** Formal and informal growth; problems and policies.

**Infrastructure:** Meaning and Types: Case Studies: Energy and Health: Problems and Policies—A critical assessment.

**Sustainable Economic Development:** Meaning, Effects of Economic Development on Resources and Environment, including global warming.

### Unit-8: Development Experience of India— A Comparison with Neighbours (12 Periods)

India and Pakistan

India and China

**Issues:** growth, population, sectoral development and other Human Development Indicators.

# Design of Question Paper

Central Board of Secondary Education, Delhi

**Economics**

**Class XII**

**Duration: 3 Hours**

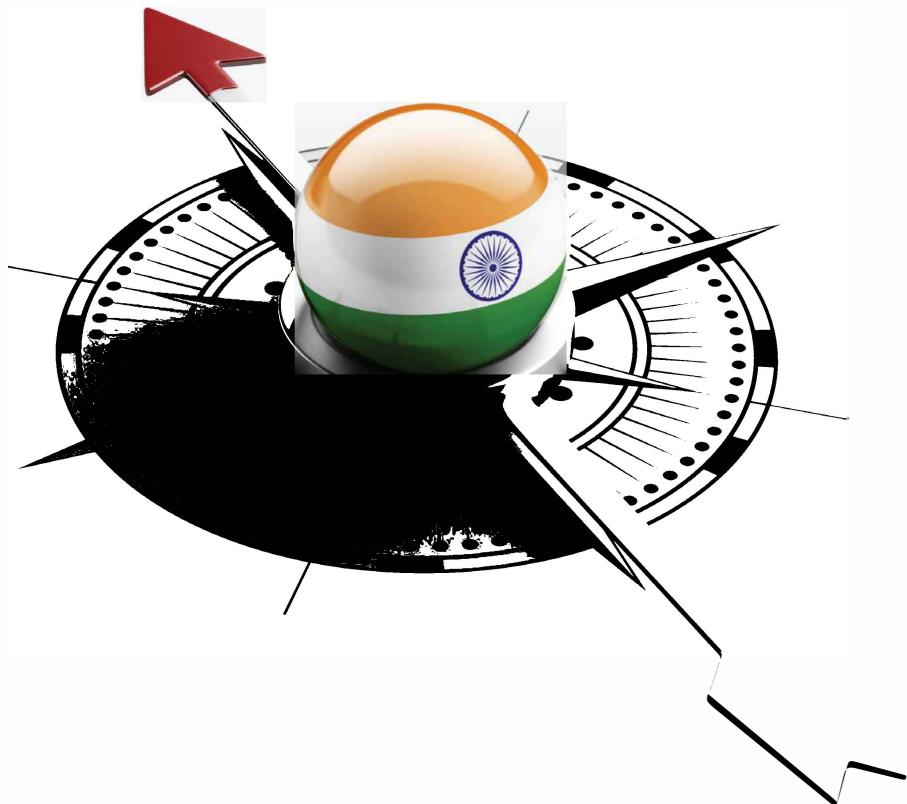
**Theory: 80 Marks**

**Project: 20 Marks**

S. No.	Typology of Questions	Objective Type/MCQ 1 Mark	Short Answer I 3 Marks	Short Answer II 4 Marks	Long Answer 6 Marks	Marks
1.	<b>Remembering:</b> Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	5	1	2	1	22
2.	<b>Understanding:</b> Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.	5	1	2	1	22
3.	<b>Applying:</b> Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	5	1	1	1	18
4.	<b>Analysing and Evaluating:</b> Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations. <b>Creating:</b> Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.	5	1	1	1	18
<b>Total</b>		$20 \times 1 = 20$	$4 \times 3 = 12$	$6 \times 4 = 24$	$4 \times 6 = 24$	<b>80 (34)</b>

**Note:** There will be **Internal Choices** in questions of 1 mark, 3 marks, 4 marks and 6 marks in both sections (A & B). In all, total 8 internal choices.





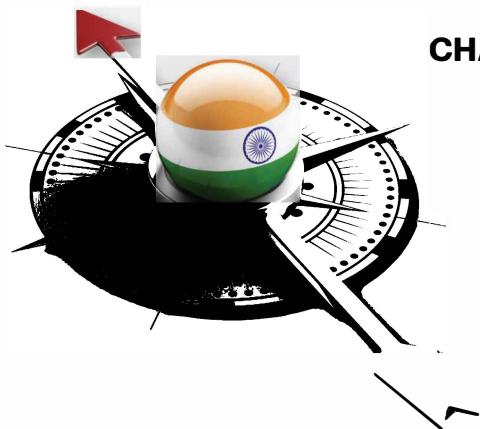
# INDIAN ECONOMIC DEVELOPMENT





## CHAPTER: 1

# INDIAN ECONOMY ON THE EVE OF INDEPENDENCE



TO  
DO

- Colonial Exploitation of the Indian Economy Under the British Rule
- Features of Indian Economy on the Eve of Independence
- Agricultural Sector on the Eve of Independence
- Industrial Sector on the Eve of Independence
- Foreign Trade Under the British Rule
- Demographic Profile During the British Rule
- Occupational Structure on the Eve of Independence
- Infrastructure on the Eve of Independence

## I. COLONIAL EXPLOITATION OF THE INDIAN ECONOMY UNDER THE BRITISH RULE

Indian economy under the British rule was subjected to colonial exploitation. It implied a targeted exploitation of all sectors of the economy by the British Government. This is how it happened:

- (1) **Colonial Exploitation of Agricultural Sector:** Agriculture was exploited through *zamindari* system of land revenue.



### Zamindari System of Land Revenue

A system of land revenue that worked through middlemen called *zamindars*; an intermediary between the colonial government and the peasants.

Following observations highlight how this system led to exploitation of the Indian agriculture:

- ◆ *Zamindars* were declared as owners of the soil. They were to pay a fixed sum to the government by way of land revenue, and were free to extract as much as they wished (or as much as they could) from the tillers of the soil (farmers).
- ◆ The tillers of the soil (the actual cultivators) got bare minimum for survival. They were left with no surplus for investment in agriculture.
- ◆ The *zamindars*, on the other hand, spent their revenue income on the luxuries of life. Little or no investment was made for the development of agriculture.

(2) **Colonial Exploitation of Industrial Sector:** Prior to the British rule, industrial sector in India was well known for its handicrafts.

Indian handicrafts (work produced by hand labour) enjoyed a world-wide reputation for their variety and quality. But these were destroyed by the British government in two ways:

- ◆ Foreign demand for the Indian handicrafts was destroyed by way of heavy duty on their exports.
- ◆ Domestic demand for the Indian handicrafts was destroyed by way of duty-free import of the British goods in the Indian markets.

(3) **Colonial Exploitation of International Trade:** India's international trade was exploited through discriminatory tariff (a tax on imports) policy. It implied:

- ◆ Duty-free export of Indian raw material to fulfil the industrial needs in Britain.
- ◆ Duty-free import of British goods to expand demand for the British goods in the Indian markets.

It was owing to discriminatory tariff policy that India became importer of finished goods from Britain, and exporter of raw material to Britain.

Briefly, owing to its colonial exploitation, the Indian economy became both stagnant as well as backward.

## 2. FEATURES OF INDIAN ECONOMY ON THE EVE OF INDEPENDENCE

On the eve of independence, Indian economy had the following characteristics:

- (1) **Stagnant Economy:** On the eve of independence, Indian economy was completely a stagnant economy. *A stagnant economy is the one which shows little or no growth in income.*

Between 1860-1925, growth rate of per capita income was as low as 0.5 per cent per annum and between 1925 and 1950 it was 0.1 per cent per annum.

On account of this stagnation, bulk of Indian population lived in poverty. Standard of living of the people remained miserably low. Epidemics and Famines were a recurring phenomenon.

- (2) **Backward Economy:** Indian economy was a backward economy on the eve of independence. Backward economy is the one in which per capita income is very low.

In 1947-48, per capita income in India was just ₹ 230.

The bulk of the population was very poor, without sufficient food, clothing and shelter. Unemployment was rampant.

- (3) **Agricultural Backwardness:** It is highlighted by the following facts:

- ◆ Nearly 72 per cent of the country's working population was engaged in agriculture. But, its contribution to GDP was only 50 per cent.
- ◆ Productivity was extremely low. Thus, per hectare output of wheat was only 660 kilograms, and of rice just 665 kilograms.
- ◆ Foodgrain production was barely enough for subsistence. In 1947-48, it was recorded to be just 527 lakh tonnes.

- (4) **Industrial Backwardness:** Here, following facts are of underlined significance:

- ◆ There was a virtual lack of the basic and heavy industries in the country.
- ◆ Production of machines was almost negligible.
- ◆ Small-scale and cottage industries were almost ruined.
- ◆ For the bulk of its capital-goods requirement, the Indian industry was dependent upon imports from Britain.

- (5) **Rampant Poverty:** Bulk of the population was very poor. People were not getting two square meals a day. They lacked shelter and clothing. This was largely owing to widespread unemployment (caused by the destruction of handicraft industries).
- (6) **Poor Infrastructure:** Infrastructural development (including means of communication and transport, generation of power/energy) was extremely low. In 1948, power generation capacity was merely 2,100 MW, length of railway lines was 53,596 km, pucca roads had a coverage of 155 thousand km only.
- (7) **Heavy Dependence on imports:** The country had to depend on imports for machinery and other equipments of production. Armed forces of the country also depended heavily on foreign imports for most of the defence equipments. Besides, several consumer goods like sewing machines, medicines, kerosene oil, bicycles, etc. used to be imported from abroad.
- (8) **Limited Urbanisation:** At the time of independence, bulk of the population of India lived in villages. In 1948, only 14 per cent of population lived in urban areas while 86 per cent lived in rural areas. Rural population lacked opportunities outside agriculture. This compounded their poverty.
- (9) **Semi-Feudal Economy:** On the eve of independence, Indian economy was neither wholly feudal nor a capitalist economy. It was a mixed economy or a semi-feudal economy. Such an economy had the mixture of feudalistic and capitalist modes of production. Feudalistic mode of production leads to low productivity. Low productivity leads to backwardness.
- (10) **Colonial Economy:** Indian economy was a colony of British government. It implied exploitation of the Indian economy for the benefit of the British economy. Following observations highlight how Indian economy suffered at the hands of the British rulers:
- ◆ British government curbed domestic industry by imposing heavy taxes. This forced the Indians to buy the British goods.
  - ◆ Indian economy was used as a source of raw material for the British industries. Exports of raw material were almost duty-free. Thus, natural resources in India were drained for the growth of the British industry.
  - ◆ Atrocities were committed on the Indian artisans so as to force them to close their cottage industries. This led to destruction of the Indian handicrafts.

### 3. AGRICULTURAL SECTOR ON THE EVE OF INDEPENDENCE

On the eve of independence, Indian agricultural sector revealed the following characteristics:

- (1) **Low Production and Productivity:** Production refers to total output, while productivity refers to output per hectare of land. Both (production as well as productivity) were found to be extremely low on the eve of independence. If arose on account of lack of means as well as incentive on part of the cultivator (the peasants).

Table 1 shows production and productivity levels in 1947 for wheat and rice, compared with their levels in 2018-19.

**Table 1. Production and Productivity of Wheat and Rice–  
A Comparison between the Levels in 1947 and 2018-19**

Crop	Productivity (kg per hectare)		Production (in lakh tonnes)	
	1947	2018-19	1947	2018-19
1. Wheat	660	3,408	64	991
2. Rice	665	2,665	220	1,156

[Source: (I) D. Bhattacharya: Economic History of India, Economic Survey 2018-19]

Table 1 shows that productivity of wheat was nearly 5.2 times lower in 1947 compared with its level in 2018-19. Productivity of rice was nearly 4 times lower in 1947 compared with its level in 2018-19.

Likewise, level of output of wheat was nearly 15.5 times lower, and that of rice was nearly 5.3 times lower in 1947 compared with their levels in 2018-19.

- (2) **High Degree of Uncertainty:** Agriculture showed a high degree of uncertainty (in terms of farm output). Because, it was excessively dependent upon rainfall. Good rainfall implied good output, while poor rainfall implied poor output. No effort was ever made under the British rule to develop permanent means of irrigation (including wells and canals).

- (3) **Dominance of Subsistence Farming:** Farming was taken mostly as a means of subsistence. *Subsistence farming is a form of farming in which the crops are produced to provide for the basic needs of the family.* There is little surplus left for sale in the market. Implying a lack of commercial outlook. Accordingly, backwardness prevailed and poverty dominated.

**Notable Economists who Estimated India's National and Per Capita Income**

- Notable Economists who estimated India's national and per capita income were: Dadabhai Naoroji, William Digby, Findlay Shirras, V.K.R.V. Rao and R.C. Desai.
- Most of them find that during the first-half of the twentieth century, growth rate of national income and per capita income were less than 2 per cent and 0.5 per cent respectively.

**Owners of the Soil vs.  
Tillers of the Soil**

Owners of the soil were the *zamindars* and tillers of the soil were *peasants* and labourers who worked on the farms of *zamindars*.

**(4) Gulf between Owners of the Soil and Tillers of the Soil:** Agriculture, during the British Raj was characterised by a gulf between 'owners of the soil' on the one hand and 'tillers of the soil' on the other. While the owners shared the output, they seldom (hardly) shared the cost of production. They were merely interested in maximising their rental income (in terms of share of output). The tillers of the soil were merely given enough for subsistence.

#### **Indebtedness of the Tillers of the Soil and Conspicuous Consumption of the Owners of the Soil**

- During the British rule, while tillers of the soil confronted absolute poverty and accepted indebtedness as their way of life, the owners of the soil indulged in conspicuous consumption.
- The tillers of the soil viewed agriculture merely as a source of subsistence. The owners of the soil viewed it as a hereditary source of income without investment.

**(5) Small and Fragmented Holdings:** Landholdings were both small as well as fragmented. [Fragmented holdings mean a piece here and a piece there]. Accordingly, most landholdings were uneconomic: yielding low output at high cost.

**(6) Land Revenue System under the British Raj:** The British government in India introduced a unique system of land revenue. It set up a triangular relationship among the government, the owner of the soil and the tiller of the soil. This was popularly known as *zamindari* system of Land Revenue. The distinct features of this system were as these:

- (i) The *zamindars* were recognised as permanent owners of the soil.
- (ii) The *zamindars* were to pay a fixed sum to the government as land revenue.
- (iii) The *zamindars* were free to extract as much from the tillers of the soil as they could.

The implications of the land revenue system were alarming for the farmers and the farming. Most importantly:

- ◆ It led to unlimited exploitation of the tillers of the soil by the *zamindars*.
- ◆ Rates of land revenue were frequently raised by the *zamindars* which led to frequent eviction of the tillers of the soil.
- ◆ Tillers were reduced to the status of landless labourers.

#### **Partition of the Country and its Impact**

- The partition of the country had a negative impact on Indian agriculture.
- India got 82 per cent of population and 65 per cent of food grain area.
- Rich food producing areas of West Punjab and Sindh went to Pakistan.
- This aggravated the food crisis in the country.

- ◆ As landless labourers, the tillers merely got subsistence wage (in kind).

Backwardness of tillers (as landless labourers) meant that they had no means and little interest in improving agriculture. The *zamindars*, on the other hand, led a lavish lifestyle and spent all their revenue income on luxuries of life. Improvement of agriculture was totally neglected.

(7) **Forced Commercialisation of Agriculture:** Commercialisation of agriculture refers to a shift from cultivation for self-consumption to cultivation for the market. Following are some notable points in this context:

Mention need to be made of cash crops such as cotton, jute, sugarcane which had a high demand in the market were increasingly cultivated.

- ◆ Farmers were forced to shift to commercial crops (indigo, in particular) from the conventional subsistence crops (like rice and wheat). **Reason:** Indigo was required by the textile industry in Britain for dyeing/bleaching of the textile.
- ◆ The farmers were either lured or forced to accept advance payments for the cultivation of indigo. It exposed the subsistence farmers to uncertainties of the market.
- ◆ While earlier they would grow grain for their family consumption, now they needed cash to buy it from the market. But they would seldom have cash owing to their mounting indebtedness. **Consequence:** Perpetual indebtedness of the farmers and perpetual stagnation of farming.

Briefly, on the eve of independence, Indian agriculture was both backward as well as stagnant (non-vibrant). **Backward of agriculture is explained in terms of the following factors:**

- Low production and low productivity,
- High degree of uncertainty, owing to huge dependence on rainfall.
- Dominance of subsistence farming, and
- Small and fragmented holdings.

**Stagnation of agriculture is explained in terms of the following factors:**

- Gulf between the owners of the soil and the tillers of the soil,
- Land Revenue System under the British Raj, and
- Forced commercialisation of agriculture.

#### Famines in India During the British Rule

- Famines refers to a severe shortage of food (as through crop failure) resulting in violent hunger and starvation.
- Throughout the period of British rule, most Indians always lived on the verge of starvation.
- From 1760 till 1943, India was hit by terrible famines on a regular basis.
- The most significant amongst those was the great famine of Bengal of 1769-70, which claimed a large toll of lives.
- More than 85 million people died owing to repeated famines.
- In contrast, there have been no famine related deaths since independence.



### Pre-British Period Agriculture

- Backward, stagnant and non-vibrant agriculture during the British Raj sharply contrasted with the pre-British period agriculture.
- Prior to the British Raj in India, rural India was described as a system of self-contained village communities. These village communities included farmers and the functionaries.
- The farmers were engaged in crop farming or cattle farming while the functionaries would render essential services like that of blacksmiths, goldsmiths, washermen and shoe-makers.
- There were no intermediaries (like zamindars) between the state and the farmers; the farmers would pay land revenue directly to the king.
- Prosperity and stability were the key characteristics of life in rural India. Thus, the French traveller, Bernier, described Bengal in 17th century as "richer than Egypt" producing amply for self-consumption and exporting in abundance.



Prosperous Agriculture even without Mechanisation (Pre-British Period )

## 4. INDUSTRIAL SECTOR ON THE EVE OF INDEPENDENCE

Systematic de-industrialisation is the term that describes the status of industrial sector during the British rule. It implied two things:

- (i) Decay of world famous traditional handicraft industry owing to discriminatory policies of the British government, and
- (ii) Bleak growth of modern industry owing to lack of investment opportunities.

### Decay of Handicrafts

Prior to the British rule, handicraft in India enjoyed the worldwide reputation of excellence and quality. But, the British Raj contributed to their decay. It was owing to discriminatory economic and political policies pursued by the British government. Following points may be noted in this regard:



Indian Handicrafts of Worldwide Reputation prior to British Rule

- (1) Discriminatory Tariff Policy of the State:** The British rule in India coincided with industrial revolution in Britain.

The British found India as the best source of raw material as well as the best market for their industrial products. Accordingly, a discriminatory tariff policy was pursued. It allowed:

- (i) tariff-free export of raw material from India, and
- (ii) tariff-free import of British industrial products into India.

But, at the same time, heavy duty was placed on the export of Indian handicraft products which reduced their competitiveness in the international market.

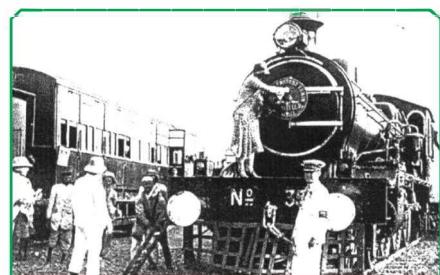
As a consequence, while the British products started gaining the Indian markets, the Indian handicraft products started losing their domestic as well as foreign market. Decay of handicrafts was the end-result.

- (2) Disappearance of Princely Courts:** Prior to the British rule, nawabs, rajas, princes and emperors ruled different parts of the country. They used to patronise the handicrafts because of which the Indian handicraft industry had acquired international reputation. The beginning of British rule implied the end of princely courts. Consequently, the handicrafts started decaying.

- (3) Competition from Machine-made Products:** Machine-made products from Britain were low cost products and gave a stiff competition to the handicraft products in India. Also, machine-made products out-excelled Indian handicraft products in precision and quality. Competition forced the Indian craftsmen to shut-down their enterprises.

- (4) New Patterns of Demand:** Owing to the impact of British culture, a new class emerged in India which was keen to adopt the western lifestyle. This changed the pattern of demand against the Indian products and in favour of the British products. In the process, the Indian industry started losing domestic market, and ultimately perished.

- (5) Introduction of Railways in India:** With the introduction of railways, size of the market for the low-cost British products tended to expand while it started shrinking for the high-cost Indian products. This hastened/quickened the process of decay of the Indian handicrafts.



First Train run from Bombay (Mumbai) to Thane (1853)

**Two-fold motive behind the Systematic De-industrialisation during the British Rule in India**

- (i) To exploit India's wealth of raw material and primary products (like cotton and jute). It was required to fulfil the emerging needs of industrial inputs in the wake of industrial revolution in Britain.
- (ii) To exploit India as a potential market for the industrial products of Britain.

The twin motive resulted in twin consequence:

- (a) destruction of handicrafts in India.
- (b) impetus to the process of industrialisation in Britain.

Briefly, the British government converted the Indian economy into a colonial market for the British industrial goods. Implying, exploitation of the Indian market as: (i) a source of raw material (for the British industry) and (ii) a destination of demand for the British products. In the process, the handicraft industry in India was finally eliminated.

### **Bleak (Notional) Growth of Modern Industry**

Under the 'British Raj', modern industry saw only a bleak growth. It was only in second half of the 19th century that the modern industry showed its emergence.

Three observations need to be noted in this regard:

- (i) Some industries were established by the private entrepreneurs. These included: iron and steel (Tata Iron & Steel Company was founded in 1907), sugar, cement and paper industries. These were established in the wake of worldwide scarcity of industrial good because of World Wars I and II.
- (ii) The state participation in the process of modern industrialisation was limited. It was confined to such strategic areas (like railways and means of communication) which helped expansion of the Indian market for the British products.
- (iii) There was no capital goods industry worth the name. Capital goods industry produces goods like machines and industrial plants which are used for further industrialisation. In the absence of this industry, industrialisation in India remained lopsided.

Briefly, industrial sector on the eve of independence revealed four core characteristics, pointing to its backwardness and limited growth:

- (i) Handicraft industry was systematically destroyed by the British government. It was largely owing to the discriminatory tariff policy of the British government.
- (ii) Modern industry showed a bleak expansion. It was by and large restricted to the expansion of railways. It helped expansion of the Indian market for the British products.
- (iii) Capital goods industry (which is the core element of industrial growth) was almost non-existent.
- (iv) While the traditional Indian industry (handicrafts) were decaying, modern industry remained in an infant stage. This again pointed to the backwardness of the Indian economy with little or no evidence of dynamic change.

## 5. FOREIGN TRADE UNDER THE BRITISH RULE

India had acquired eminence in the area of foreign trade, since ancient times. The Romans used to call India, “the sink of world’s bullion”. But the British rule in India brought an end to it. India was a well-known exporter of finished goods (such as fine cotton, silk, textiles, iron goods, wooden goods, ivory work and precious stones). But the British converted India into a net exporter of raw material and importer of finished goods. It was all due to discriminatory policy of trade and tariff pursued by the British government.

State of India’s foreign trade at the time of independence can be described in terms of the following observations:

**(1) Net Exporter of Primary Products and Importer of Finished Goods:**

**Owing to colonial exploitation of the Indian economy, India became net exporter of raw materials and primary products (like raw silk, cotton, wool, jute, indigo, sugar, etc.).**

On the other hand, it became net importer of finished goods produced by the British industry. Our imports included cotton, silk and woollen clothes, besides several types of capital goods produced in England.

Composition of exports and imports reflected utter backwardness of the Indian economy.

**(2) Monopoly Control of India’s Foreign Trade:**

During the British rule, exports and imports of the country came under monopoly control of the British government. In this context, two observations are of critical significance:

- ◆ More than 50 per cent of India’s foreign trade was directed towards Great Britain.
- ◆ While exports of primary products (raw material) from India supplied inputs to the British industry, imports of finished goods from Britain provided a huge market to the British industry.

- Colonial policy of the British government resulted in a monopoly control of India’s foreign trade.
- Exports and imports were largely restricted to be between India and Britain.
- India’s exports provided raw material to the British industry, while India’s imports provided a huge market for the British industry.

These are typical characteristics of a backward economy.

### Suez Canal and Access to Indian Markets

- Opening of Suez Canal in 1869 significantly reduced the cost of transportation of goods between Britain and India.
- Because, this canal served as a direct route for the ships operating between India and Britain avoiding the African continent.
- A significant reduction in transport cost promoted monopoly control of India’s foreign trade by the British government.

### Drain of India's Wealth

- Huge administrative expenses were incurred by the British government to manage their colonial rule in India.
- Also, huge expenses were incurred by the British Government to fight wars in pursuit of their policy of imperialism.
- All these expenses were borne by the Indian Exchequer.
- This implied a drain of India's wealth.

(3) **Surplus Trade but only to Benefit the British:** Surprisingly, during the British regime, our exports exceeded our imports. It implied a surplus of balance of trade. But, note these points carefully:

- ◆ This surplus was owing largely to the export of primary goods (not the industrial goods) which is a sign of economic backwardness.
- ◆ The trade surplus was not used for growth and development of the country. Instead, it was used to meet:
  - (i) administrative expenses of the British government in India, and
  - (ii) expenses of wars fought by the British government.
- ◆ Administrative and war expenses led to a huge drain of wealth from India. It compounded the backwardness of the Indian economy.

- Surplus generated as balance of trade was only spent to meet administrative and war expenses by the British government in India.
- These expenses led to a huge drain of wealth as it was not used for investment
- Consequently, poverty and backwardness were elevated.

## 6. DEMOGRAPHIC PROFILE DURING THE BRITISH RULE

Demographic conditions during the British rule exhibited all features of a stagnant and backward economy. Here, we focus on the following parameters:

- (1) **Birth Rate and Death Rate:** Both birth rate (BR) and death rate (DR) were very high—nearly 48 and 40 per thousand respectively. High BR and High DR suggest a state of massive poverty in the country.
- (2) **Infant Mortality Rate:** Infant mortality rate (death rate of children below the age of one year per 1000 live births) was very high. It was about 218 per thousand, while at present, it is 32 per thousand. High infant mortality is a sign of poor healthcare associated with extreme poverty.
- (3) **Life Expectancy:** Life expectancy (average life of a person) was as low as 32 years, while presently it is 69.4 years. Low life expectancy reflects lack of healthcare facilities, lack of awareness as well as lack of means to avail them.

- High Mortality Rate and Low Life Expectancy are important social indicators of backwardness and poverty of the masses.
- During the British rule, frequent famines and recurring epidemics were the prime causes behind a high mortality rate.
- While famines occurred largely due to droughts, epidemics occurred due to the neglect of public health services.

**(4) Literacy Rate:** Literacy rate (referring to those who can read and write) was nearly 16 per cent, reflecting social backwardness as a reflection of economic backwardness. Female literacy rate was still worse—only 7 per cent. This indicated gender-bias in the society.

## Demographic Transition

Following are some notable points relating to demographic transition in India:

- (i) In the history of demographic transition, 1921 is regarded as the '[Year of Great Divide](#)'.
- (ii) Prior to 1921, population growth in India was never consistent. Size of population kept fluctuating, increasing in one census and decreasing in the other.
- (iii) After 1921, population in India recorded a consistent rise.
- (iv) Thus, the census 1901 showed a decline of 0.04 crore in total population (from 23.87 crore in 1891 to 23.83 crore in 1901).
- (v) The census 1911 showed a rise of 1.38 crore (from 23.83 crore in 1901 to 25.21 crore in 1911).
- (vi) Again, the census of 1921 showed a decline of 0.07 crore (from 25.21 crore in 1911 to 25.14 crore in 1921).
- (vii) From the year 1921 onwards, total population in India never declined; it showed a consistent rise: the census 1931 recorded a rise of 2.76 crore; the census 1941 recorded a rise of 3.96 crore; the census 1951 showed a rise of 4.24 crore, and so on.
- (viii) A consistently rising population (on the eve of independence) led to excessive burden of maintenance investment. It is an expenditure which a country has to incur on the maintenance of the existing population.
- (ix) When the maintenance investment is high, growth-oriented investment remains low.

### Population Census

- Population census in India is a detailed estimation of population size, along with a complete demographic profile of the country.
- It was first conducted under the British rule in 1881. Since then it is conducted after every ten years.



A Consistent Rise in Population post 1921

- (x) High maintenance and low growth-oriented investment on the eve of independence is another feature of the Indian economy pointing towards its backwardness and stagnation.

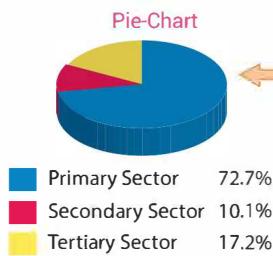
*High maintenance investment (expenditure on the maintenance of existing population) and low investment for growth and development kept India in a state of perpetual backwardness.*

- (xi) However, the underlying fact is that till 1951, the rise in India's population was never alarming; it ranged between mild to modest.
- (xii) It was only from 1951 onwards that the rise in population became explosive in nature, and the country started facing a serious challenge in terms of population explosion.

## 7. OCCUPATIONAL STRUCTURE ON THE EVE OF INDEPENDENCE

Occupational structure refers to distribution of working population across primary, secondary and tertiary sectors of the economy.

Table 2 shows occupational structure of Indian economy at the time of independence. The data relates to the 1951, because reliable statistics for the year 1947 are not available.



**Table 2. Occupational Distribution of India at the Time of Independence**

Occupation	1951 (in %)
<b>1. Primary Sector</b>	<b>72.7</b>
(i) Agriculture	50.0
(ii) Agricultural Labour	19.7
(iii) Forestry, Fisheries, Animal Husbandry, Plantation	2.4
(iv) Mining	0.6
<b>2. Secondary Sector</b>	<b>10.1</b>
(v) Small and Large Scale Industries	9.0
(vi) Building Construction	1.1
<b>3. Tertiary Sector</b>	<b>17.2</b>
(vii) Trade and Commerce	5.2
(viii) Transport, Storage and Communication	1.4
(ix) Other Services	10.6
	100.00

[Source: Census of India 2011]

Table 2 offers the following observations:

(1) **Agriculture—The Principal Source of Occupation:** On the eve of independence, about 72.7 per cent of working population was engaged in agriculture.

Percentage of population dependent on agriculture is much less in advanced countries of the world. For instance, in England and America 2 per cent, in Japan 12 per cent and in Germany 4 per cent of the population depend on agriculture.

This establishes backwardness of the Indian economy at the time of independence.

(2) **Industry—An insignificant Source of Occupation:** On the eve of independence, barely 9.0 per cent of the working population in India was engaged in manufacturing industries, mining, etc.

As against it, 32 per cent in the USA, 42 per cent in England and 39 per cent in Japan are engaged in these activities.

It further proves how backward the Indian economy was at the time of independence.

(3) **Unbalanced Growth:** The table shows unbalanced growth of the Indian economy.

Growth is said to be balanced when all sectors of the economy are equally developed. However, in case of India, secondary and tertiary sectors were in their infant stage of growth.

Hence, the conclusion that Indian economy at the time of independence was lopsided and therefore, backward.

- ❑ Assessed in terms of occupational distribution of the working population in India at the time of Independence, we get a disappointing picture of the Indian economy.
- ❑ Since bulk of the working population was engaged in agricultural sector (along with the fact that agriculture was merely a means of subsistence), Indian economy was in a state of extreme backwardness.
- ❑ The masses led their life in extreme poverty.

## 8. INFRASTRUCTURE ON THE EVE OF INDEPENDENCE

Infrastructure refers to the elements of (i) economic change (like means of transport, communication, banking, power/energy), and the elements of (ii) social change (like growth of educational, health and housing facilities), which serve as a foundation for growth and development of a country.

### Agriculture as a Means of Subsistence

- Greater dependence on agriculture (as suggested by occupational structure on the eve of independence) implied lesser availability of land per head of the farming population.
- Accordingly, agriculture was taken largely as a means of subsistence, and less as an occupation for profit.

The state of India's infrastructure on the eve of independence can be described in terms of the following observations:

- (i) Railways were developed to transport finished goods from Britain to the interiors of the colonial India (with a view to widening the size of the market). It aimed at widening the size of the market for the British products in India.
- (ii) Ports were developed to handle export of raw material to Britain and import of finished goods from Britain.
- (iii) Post and telegraphs were developed to enhance administrative efficiency.
- (iv) Roads were developed to facilitate transportation of raw material from different parts of the country to the ports.

Briefly, some modest infrastructural change in the economy during the British Raj is not denied. But, the motive behind this change was not the growth and development of the Indian economy; rather it was the growth and development of the British economy through colonial exploitation of the Indian economy. Consequently, Indian economy remained to be backward.

### IMPACT OF RAILWAYS IN INDIA

#### Positive Impact

- (i) Railways facilitated expansion of the domestic market. Accordingly, exports and imports of the country showed a significant rise.
- (ii) Railways facilitated commercialisation of agriculture, as goods could then be moved to distant places. This implied a modest change in the outlook of the farmers. They started viewing farming as a business, rather than merely as a source of subsistence.
- (iii) Railways enabled people to break the barriers of distance and undertake journeys to far off places. This promoted cultural affinity among the countrymen.
- (iv) Faster movement of food grain across different parts of the country (owing to Railways) helped control the spread of famines. Food supplies could reach the people before they were driven to starvation.



Railways in the British Rule

#### Negative Impact

- (i) Railways contributed to colonial exploitation of the Indian economy. Because, primary goods (raw material) could then be easily transported from the fields and farms to the ports for the purpose of exports to the British economy.
- (ii) Finished goods coming as imports to the Indian economy could be easily transported to the interiors of the country for purpose of sale.
- (iii) Thus, the spread of railways led to the spread of the domestic market for the British products.

## Was there any Positive Impact of the British Rule in India?

Certainly not, if the impact of the British rule is studied with reference to ‘motive’ of the British government in India. The motive was clear and focused: it was colonial exploitation of the Indian economy. However, the means to achieve the end yielded some positive side-effects. These are as under:

- (1) **Commercial Outlook of the Farmers:** Forced commercialisation of agriculture under the British rule exposed the subsistence farmers to uncertainties of the market. True, but it also led to a gradual change in outlook of the farmers. The farmers started considering market price of the produce as an important determinant of their production decisions.
- (2) **New Opportunities of Employment:** Spread of railways and roadways opened up new opportunities of economic and social growth.
- (3) **Control of Famines:** Rapid means of transport facilitated rapid movement of food grain to the famine-affected areas. Accordingly, famines were controlled.
- (4) **Monetary System of Exchange:** There was a transition from barter system of exchange to monetary system of exchange. Growth of monetary system of exchange facilitated division of labour, specialisation, and large-scale production.
- (5) **Efficient System of Administration:** The British government in India left a legacy of an efficient system of administration. This served as a ready-reference for our politicians and planners.

## Power Points & Revision Window

- **Colonial Exploitation of the Indian Economy under the British Rule:** Colonial exploitation of the Indian economy was achieved through: (i) Colonial exploitation of agricultural sector, (ii) Colonial exploitation of industrial sector, (iii) Colonial exploitation of international trade.
- **Features of Indian Economy on the Eve of Independence:** (i) Stagnant economy, (ii) Backward economy, (iii) Agricultural backwardness, (iv) Industrial backwardness, (v) Rampant poverty, (vi) Poor infrastructure, (vii) Heavy dependence on imports, (viii) Limited urbanisation, (ix) Semi-feudal economy, (x) Colonial economy.
- **State of Agriculture under the British Rule:** Indian agriculture under the British rule showed these characteristics:
  - Low production and productivity.
  - High degree of uncertainty: good harvest when it rains good and bad harvest when it rains bad.
  - Dominance of subsistence farming: tillers of the soil took to agriculture merely as a source of subsistence, never as a source of profit.
  - Widening gulf between owners of the soil (*zamindars*) and tillers of the soil.
  - Wastage of land revenue income on conspicuous consumption. Implying ‘low or no’ investment for the growth of agriculture. Net consequence: backwardness of farmers as well as farming.
- **State of Industry under the British Rule:** Indian industry (as dominated by handicrafts) which at one time enjoyed global reputation, suffered a systematic destruction during the British rule. It was largely owing to discriminatory policy of the British government. While cheaper industrial goods were allowed tariff-free access to the Indian markets, handicraft products from India were subjected to heavy export-duty. Handicrafts in India lost both domestic as well as international market. Growth of the modern industry was tardy. It lacked state-initiative. Capital goods industry was almost non-existent. Process of industrialisation remained lop-sided.
- **State of Foreign Trade under the British Rule:** Foreign trade of India took a hit in two ways:
  - Composition of trade showed a shift from the export of finished goods to the export of raw material and from the import of bullion (gold and silver) to the import of finished industrial products, largely from Britain, and
  - It was monopolised by the British government, ending multinational exports from India.
- **Demographic Profile under the British Rule:** India’s demographic profile showed high birth rate, high death rate, high infant mortality rate, low expectancy of life and low rate of literacy. These characteristics point to economic and social backwardness of the country.
- **Occupational Structure under the British Rule:** More than 70 per cent of working population was engaged in agriculture. Industry offered employment merely to 9 per cent of the working population. This is yet another pointer to economic and social backwardness of a country.
- **Infrastructure on the Eve of Independence:** Infrastructure—economic as well as social—continued to be highly deficient. There was a modest change, but only to facilitate colonial exploitation of the Indian economy.
- **Some Positive Side-effects of the British Rule in India:** With a view to enlarging size of the market for British goods in India, the British government needed to provide some infrastructural facilities in India. These included: (i) Transport facilities, largely in terms of railways, (ii) Development of ports, (iii) Provision of post and telegraph services. Besides, the British government left a legacy of a strong and efficient administrative set-up.



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

## Choose the correct option:

1. The Indian economy on the eve of the independence was:  
(a) developed (b) underdeveloped  
(c) stagnant (d) both (b) and (c)
  2. Landholdings at the time of independence were:  
(a) fragmented (b) large  
(c) small (d) both (a) and (c)
  3. Farming which focuses on basic needs of the family is called:  
(a) stagnant farming (b) subsistence farming  
(c) commercial farming (d) none of these
  4. Decay of handicrafts was caused by:  
(a) British tariff policy  
(b) competition from machine-made products  
(c) change in the patterns of demand  
(d) all of these
  5. Suez Canal was opened in:  
(a) 1867 (b) 1868  
(c) 1869 (d) 1870
  6. On the eve of independence, India was net exporter of:  
(a) primary products (b) industrial products  
(c) capital goods (d) all of these
  7. High infant mortality is a sign of:  
(a) extreme poverty (b) poor healthcare  
(c) both (a) and (b) (d) none of these
  8. Gender-bias in the society on eve of independence was indicated by:  
(a) mortality rate (b) literacy rate  
(c) death rate (d) life expectancy
  9. During colonial period, India's demographic profile showed:  
(a) high birth rate (b) high death rate  
(c) high infant mortality (d) all of these
  10. On the eve of independence, bulk of the population was engaged in:  
(a) agriculture sector (b) trade and commerce  
(c) mining sector (d) industrial sector

## Answers

1. (d)      2. (d)      3. (b)      4. (d)      5. (c)      6. (a)      7. (c)      8. (b)      9. (d)      10. (a)  
11. (a)      12. (b)      13. (c)      14. (d)      15. (d)

### B. Fill in the Blanks

### **Choose appropriate word and fill in the blank:**

- On the eve of independence, Indian economy was a  
(feudal economy/semi-feudal economy)
  - Zamindari system of land revenue worked through the system of middlemen called  
(jagirdars/zamindars)
  - An economy made to serve the interests of its colonial rulers is called a  
(colonial economy/feudal economy)
  - is a form of farming in which crops are produced to provide for the basic needs of the family.  
(Commercial farming/Subsistence farming)
  - infrastructure includes educational, health and housing facilities.  
(Economic/Social)
  - During the colonial rule, India was a  
of finished products from/to Britain.  
(net exporter/net importer)
  - The year is regarded as the 'Year of Great Divide' in the history of demographic transition of India.  
(1921/1931)
  - Occupational structure refers to the distribution of across primary, secondary and tertiary sectors of the economy.  
(population/working population)
  - as a production activity, belongs to primary sector of the economy.  
(Animal husbandry/Storage)

10. At the time of independence, secondary and  
stage of growth. sectors were in their infant  
(primary/tertiary)

### Answers

- |                        |                     |                     |
|------------------------|---------------------|---------------------|
| 1. semi-feudal economy | 2. zamindars        | 3. colonial economy |
| 4. Subsistence farming | 5. Social           | 6. net importer     |
| 8. working population  | 9. Animal husbandry | 10. tertiary        |
7. 1921

### C. True or False

**State whether the following statements are True or False:**

- Landholdings on the eve of independence were fragmented. (True/False)
- It was owing to the discriminatory tariff policy of the colonial government that handicraft industry in India got destroyed. (True/False)
- Per capita income refers to the income per head of the total work force of the country. (True/False)
- Railways were developed by the colonial government to promote the market for British goods in India. (True/False)
- From the year 1921, total population in India never declined. (True/False)
- Infant mortality rate refers to the death rate of children below the age of 2 year per 1000 live births. (True/False)
- Muslin is a type of cotton textile which had its origin in Bengal. (True/False)
- Commercialisation of agriculture refers to a shift from cultivation for self-consumption to cultivation for sale in the market. (True/False)
- On the eve of independence, only heavy and basic industries were developed in the Indian economy. (True/False)
- During British period, India was treated as a colony supplying raw material to the British industries. (True/False)

### Answers

1. True    2. True    3. False    4. True    5. True    6. False    7. True    8. True    9. False    10. True

### D. Matching/Chronological

**I. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:**

Column I	Column II
(a) Zamindari system of land revenue	(i) One in which per capita income is very low
(b) Stagnant economy	(ii) The distribution of working population across different sectors of the economy
(c) Backward economy	(iii) It worked through the system of middlemen
(d) Occupational structure	(iv) One which shows little or no growth in national income

### Answers

- (a)—(iii), (b)—(iv), (c)—(i), (d)—(ii)

**II. Choose the correct alternative showing chronological order of the following events:**

- (i) The Year of Great Divide
- (ii) Great famines of Bengal which claimed a large toll of lives
- (iii) First Train run from Bombay (Mumbai) to Thane
- (iv) Opening of Suez canal

**Alternatives:**

- |                            |                            |
|----------------------------|----------------------------|
| (a) (iv), (ii), (i), (iii) | (b) (i), (iv), (iii), (ii) |
| (c) (ii), (iii), (iv), (i) | (d) (iii), (i), (iv), (ii) |

**Answer**

(c)—(ii), (iii), (iv), (i)

**E. 'Very Short Answer' Objective Type Questions**

**1. What is a stagnant economy?**

Ans. A stagnant economy is an economy in which there is little or no scope of GDP growth.

**2. Define land-productivity.**

Ans. Land-productivity refers to output per hectare of land.

**3. What is meant by subsistence agriculture?**

Ans. Subsistence agriculture is a form of farming in which only subsistence crops are grown to provide for the basic needs of the family.

**4. What do you mean by commercialisation of agriculture?**

Ans. Commercialisation of agriculture refers to a shift from cultivation for self-consumption to cultivation for the market.

**5. Define occupational structure.**

Ans. Occupational structure refers to distribution of working population across primary, secondary and tertiary sectors of the economy.

**6. What is infant mortality rate?**

Ans. Infant mortality rate is an estimate of the number of infant deaths for every 1,000 live births (infants refer to children below the age of one year).

**7. What is life expectancy?**

Ans. Life expectancy is defined as the average number of years that a person can expect to live.

**8. Define literacy rate.**

Ans. It refers to the percentage of people in a certain sample of population who can read and write.

**9. What do you mean by Population Census?**

Ans. Population census is a detailed estimation of population size, along with a complete demographic profile of the country.

**10. State two main indicators of backwardness and poverty of the masses.**

Ans. Two main indicators of backwardness and poverty are:

- (i) High mortality rate, and
- (ii) Low life expectancy.

## **2. Reason-based Questions (Comprehension of the Subject-matter)**

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**Read the following statements carefully. Write True or False with a reason.**

1. Low level of productivity was the principal characteristic of Indian agriculture on the eve of independence.

Ans. True. **Reason:** Use of primitive technology and small-size holdings.

2. **Zamindari system of land revenue gave incentives to tillers of soil to increase their productivity.**

Ans. False. Under zamindari system, the tillers lacked ownership rights. As a result, they had no interest in improving the agriculture.

3. **Railways during the British rule in India promoted colonial exploitation of the Indian economy.**

Ans. True. Railways promoted colonial exploitation of the Indian economy in two ways, as under:

(i) Railways facilitated the movement of raw material from their source of supply to the ports for further transportation to England.

(ii) Railways led to expansion of the market for the British products in India.

4. **The year 1921 was the year of Great Divide with regard to the growth of population in India.**

Ans. True. The year 1921 was the year of Great Divide. Because, prior to 1921, population growth in India was not consistent. It was only after 1921 that the population recorded a consistent rise.

5. **Zamindari system brought stability to cultivation during the British rule in India.**

Ans. False. The zamindari system during the British rule did not bring stability. Instead, it brought instability to Indian cultivation. Because, this system led to frequent ejection of the tillers of the soil. They lost their permanent rights of cultivation, and accordingly, lost permanent interest in cultivation.

6. **The tillers of the soil could not leave agriculture even when they were always exploited.**

Ans. True. The tillers of the soil could not leave agriculture despite their continuous exploitation. This was because of the lack of vocational avenues outside agriculture.

7. **Under the British Raj, discriminatory tariff policy was pursued with a view to protecting the Indian industry.**

Ans. False. British pursued discriminatory tariff policy which allowed tariff-free export of raw material from India and tariff-free import of British industrial products in India. This enabled the British industrial products to capture the Indian markets.

8. **Surplus generated in trade was used to meet administrative expenses by the British government in India.**

Ans. True. Surplus generated in trade was used by British government to meet administrative expenses in India which led to a huge drain of wealth.

9. **Partition of the country had a negative impact on Indian agriculture.**

Ans. True. India got 82 per cent of population and 65 per cent of food grain area. Fertile areas of West Punjab and Sindh went to Pakistan which led to food crisis in the country.

## **3. HOTS & Applications**

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1. **How Railways moderated the impact of famines during the colonial period?**

Ans. Railways facilitated the movement of food grains from the surplus zones or from the government warehouses (Godowns) to the areas afflicted with famines. Accordingly, the impact of famines was moderated.

2. How would you support the view that the destruction of handicraft in India coincided with the industrial revolution in Great Britain?
- Ans. The destruction of the Indian handicrafts was systematically planned by the British government to coincide with the industrial revolution in Great Britain. The success of industrial revolution depended on (i) growth of Indian market for the British products, and (ii) export of raw material from India to Britain. Achievement of both these objectives (largely through discriminatory trade policy) led to the destruction of Indian handicrafts.
3. The policy of colonial exploitation of the Indian economy during the British Raj had some positive side-effects for the Indian economy. Do you agree?
- Ans. It is true, that the policy of colonial exploitation during the British Raj had some positive side-effects for the Indian economy. Start of Railways, development of ports, improvement of the means of communication and a good system of administration were some critical elements of the policy of colonial exploitation. But all these implied a growth-oriented change in the Indian economy.
4. How did discriminatory trade policy contribute to the success of industrial revolution in Great Britain?
- Ans. Discriminatory trade policy contributed to the success of industrial revolution in Great Britain in two ways:
- (i) Low duty on the import of British industrial goods into India led to the growth of domestic demand for these goods, and
  - (ii) Low duty on the export of raw material from India ensured availability of low-cost inputs for the British industry.

#### 4. Analysis & Evaluation

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1. Legally, Zamindari System of Land Revenue has been abolished in independent India. Yet Indian agriculture continues to be in a state of backwardness. What in your opinion is the principal reason for this situation?
- Ans. Despite abolition of zamindari system, poverty continues to be pervasive in Indian agriculture owing to two reasons:
- (i) The bulk of the Indian farmers are small and marginal holders. Small and marginal holdings are not conducive to the adoption of innovative techniques of farming, and
  - (ii) The delivery mechanism related to financial help by the state is grossly inefficient and ineffective.
2. MNCs (Multinational Corporations) are dominating the Indian industrial sector and are offering stiff competition to the small scale industry. How do you compare this situation with the one under the British rule when the Indian handicrafts were exposed to stiff competition from the machine-made products of Britain?
- Ans. Competition promotes the adoption of innovative technology and is therefore, expected to open new vistas of growth for the small scale enterprises. But the adoption of new technology needs a level playing field. Do the small enterprises in India have it? 'No' is the answer. Small enterprises in India do not get enough funds at a low rate of interest as the MNCs can manage. Accordingly, they often fail to upgrade their technology to make it competitive. Also, they fail to spend as much on advertisement and publicity as the MNCs can do to capture the market. Thus, survival of small enterprises in the face of stiff competition from the MNCs seems to be doubtful. This

situation is definitely comparable with the one when the Indian handicrafts were exposed to the stiff competition from machine-made products of Britain during the British rule in India. However, the difference is that whereas during the British rule, destruction of small enterprises could be taken as a consequence of the colonial exploitation by the foreign government in India, no such situation exists in India now. It is all a matter of competition in the wake of NEP (new economic policy) promoting liberalisation, privatisation and globalisation of the industrial sector.

## 5. NCERT Questions (With Hints to Answers)

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1. What was the focus of the economic policies pursued by the colonial government in India? What were the impacts of these policies?

[Hint: The focus of the economic policies pursued by the British government was to exploit the Indian economy as much as they could do to foster the growth process of the British economy. The colonial policies changed the nature and structure of the Indian economy. It was rendered as a supplier of raw materials and net importer of finished industrial products from Britain.]

2. Name some notable economists who estimated India's per capita income during the colonial period.

[Hint: Dadabhai Naoroji, William Digby, Findlay Shirras, V.K.R.V. Rao and R.C. Desai.]

3. What were the main causes of India's agricultural stagnation during the colonial period?

[Hint: Following were the principal causes of India's agricultural stagnation during the colonial period:

- (i) Tillers of the soil were not the owners of the soil.
- (ii) Land Revenue System under the British Raj focused on exploitation of the farmer.
- (iii) Forced commercialisation of agriculture which led to uncertainty of farm income.]

4. Name some modern industries which were in operation in our country at the time of independence.

[Hint: (i) Cotton Textile Industries,  
(ii) Jute Textile Industries,  
(iii) Iron and Steel Industries,  
(iv) Sugar Industries,  
(v) Cement Industries,  
(vi) Paper Industries, etc.]

5. What was the two-fold motive behind the systematic deindustrialisation effected by the British in pre-independent India?

[Hint: (i) To exploit India's wealth of raw material and primary products like cotton and jute.  
(ii) To exploit India as a potential market for the industrial products of Britain.]

6. The traditional handicrafts industries were ruined under the British rule. Do you agree with this view? Give reasons in support of your answer.

[Hint: Yes, the traditional handicraft industries were ruined under the British rule. The reasons are as follow:

- (i) Discriminatory tariff policy of the state.
- (ii) Disappearance of princely courts.

- (iii) Competition from machine-made products.
- (iv) New patterns of demand (favouring machine-made goods).
- (v) Introduction of railways in India which led to the spread of Indian market for the British industrial goods.]

**7. What objectives did the British intend to achieve through their policies of infrastructure development in India?**

[Hint: The British intends to achieve the following objectives through their policies of infrastructure development in India:

- (i) Expansion of the Indian market for the British products through the expansion of railways.
- (ii) To handle export of raw material to Britain and import of finished goods from Britain through the development of ports.
- (iii) To enhance administrative efficiency through the development of post and telegraphs.
- (iv) To facilitate transportation of raw material from different parts of the country to the ports through the development of roads.]

**8. Critically appraise some of the shortfalls of the industrial policy pursued by the British colonial administration.**

[Hint: Industrial policy pursued by the British colonial administration was to foster the process of industrial growth in Britain. In India, capital goods industry was developed only to the extent that it aided the development of industry in Britain. The contribution of the industrial sector was insignificant. The public sector recorded a very dismal growth.]

**9. What do you understand by the drain of Indian wealth during the colonial period?**

[Hint: Huge administrative expenses were incurred by the British government to manage their colonial rule in India. Also, huge expenses were incurred by the British government to fight wars in pursuit of their policy of imperialism. All these expenses were borne by the Indian Exchequer. This implied a drain of India's wealth.]

**10. Which is regarded as the defining year to mark the demographic transition from its first to the second decisive stage?**

[Hint: The year 1921 is regarded as the defining year to mark the demographic transition from its first to the second decisive stage. 1921 is also known as the year of great divide.]

**11. Give a quantitative appraisal of India's demographic profile during the colonial period.**

[Hint: India's demographic profile showed the following features:

- (i) High birth rate and death rate.
- (ii) High infant mortality rate.
- (iii) Low life expectancy.
- (iv) Low female literacy rate indicating high degree of gender-bias in the society.]

**12. Highlight the salient features of India's pre-independence occupational structure.**

[Hint: The agricultural sector accounted for the largest share of workforce (70-75%). The manufacturing and the services sectors accounted for only 10% and 15-20% share, respectively.]

**13. Underscore some of India's most crucial economic challenges at the time of independence.**

[Hint: (i) Agricultural sector of the economy was backward, stagnant and non-vibrant. It was a crucial economic challenge.

- (ii) There was an urgent need of modernisation, diversification, capacity building and increased public investment in industrial sector.
- (iii) Infrastructure facilities, including the famed railway network needed up-gradation and expansion.
- (iv) Prevalence of rampant poverty and unemployment required welfare-orientation of the economic policies.]

14. When was India's first official census operation undertaken?

[Hint: 1881.]

15. Were there any positive contributions made by the British in India? Discuss.

[Hint: Following points highlight positive contributions made by the British in India:

- (i) Commercial outlook of the farmers started replacing subsistence-based production decisions of the farmers.
- (ii) Opportunities of employment were generated through infrastructural growth.
- (iii) Famines were effectively controlled through the development of rapid means of transport.
- (iv) There was a significant shift from barter system of exchange to monetary system of exchange.
- (v) Efficient system of administration emerged as a sine-qua-non of growth.]

## 6. Miscellaneous Questions and Reference to the Text for Answers

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1. What was the state of agriculture sector of the Indian economy on the eve of independence?  
[Page 7-9]
2. What was the state of industrial sector of the Indian economy on the eve of independence?  
[Page 10-12]
3. Comment on the state of exports and imports of the Indian economy on the eve of independence.  
[Page 13]
4. Comment on the economic conditions of the tillers of the soil at the time of independence.  
[Page 7-9]
5. Briefly describe the occupational structure of Indian economy on the eve of independence.  
[Page 16, 17]
6. Write a few words on infrastructure in the Indian economy at the time of independence.  
[Page 17, 18]
7. State three main features of Indian economy at the time of independence.  
[Page 5, 6]

- **Reversal of Growth Process under the British Raj**

Prior to the Colonial Rule in India, Indian economy was a vibrant economy. Doubtless, the agricultural sector was the main source of livelihood. But there was an all round prosperity across all sectors of the economy. Agriculture was subsistence based, but the cultivators enjoyed the ownership rights and were to pay a reasonable amount of land revenue directly to the king. There were no middlemen, and therefore, no exploitation.

Industry was dominated by handicrafts, but it enjoyed worldwide reputation of producing quality products like '[Dacca Musline](#)'.

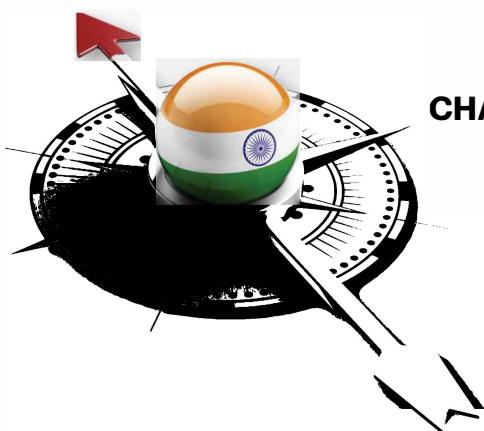
Exports consisted largely of finished products. Imports were largely of bullion (gold and silver).

Colonial policies of the British government almost reversed the composition, or structure of output, as well as the composition of exports and imports. Also, the pace of growth was severely hit.

No systematic official attempts were ever made of estimating per capita income (indicating per-head availability of goods and services in the economy).

However, some individuals made some modest attempts to measure per capita income during the British period. These included V.K.R.V. Rao, Dadabhai Naoroji, Findlay Shirras, William Digby and R.C. Desai. Rao's study was most comprehensive and systematic. He found that during the 1st half of the 20th century, while national income showed a modest growth of about 2 per cent, per capita income showed a dismal growth of about 0.5 per cent.





## CHAPTER: 2

# FIVE YEAR PLANS IN INDIA: GOALS AND ACHIEVEMENTS

TO  
DO

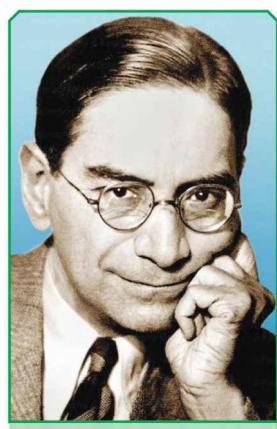
- *What is Economic Planning?*
- *Need for Planning in India*
- *Directive Planning and Comprehensive Planning*
- *Types of Economies:  
Capitalist, Socialist and Mixed Economies*
- *Long Period and Short Period Goals of Planning in India*
- *Features of Economic Policy Pursued Under Planning till 1991*
- *Success (Achievement) of Planning*
- *Failures of Planning in India*

## I. WHAT IS ECONOMIC PLANNING?

Economic planning refers to a system under which a central authority (like Planning Commission in India after independence) sets a set of targets and specifies a set of programmes and policies to achieve those targets within the specified period of time. The principal focus is on the rational management of the scarce resources. The resources are to be so rationally (optimally) utilised that the social welfare is maximised along with GDP growth.

*“Economic planning means utilisation of country’s resources in different development activities in accordance with national priorities.”*—Planning Commission

In India, the idea of economic planning became a reality with the setting up of Planning Commission in 1950, under the chairmanship of **Prof. Mahalanobis**. [It is important to note that the Planning Commission has now been abolished. In January 2015, it has been replaced by ‘NITI Aayog’. The role of NITI Aayog is to make such policies that accelerate the pace of GDP growth.]



Prof. P.C. Mahalanobis  
(1893-1972)

In the Indian Constitution, reference to economic and social planning exists in the concurrent list of the Seventh Schedule.

### Economic and Social Spheres of Comprehensive Planning

- In India, planning covers economic as well as social spheres/areas of activity.
- Agriculture, industry, transportation and trade are the examples of economic spheres (or areas) of planning.
- Education, health and housing are the principal examples of social spheres (or areas) of planning.
- Planning that covers both the social and economic spheres of growth is called 'Comprehensive Planning'.

#### What is 'Free Play of Market Forces'?

- It refers to a situation when the government of a country does not interfere with the market forces of supply and demand.
- Producers are free to allocate resources to the production of different goods and services with a view to maximising their profit.
- They will simply produce those goods which fetch them high price and high profits, no matter whether the poor get even the minimum of food, shelter and clothing.
- 'Maximisation of profit' dominates the process of decision-making; social welfare is given only a notional priority.
- It is a model of a capitalist economy, briefly, called capitalism. Planning in such an economy is only a directive planning, if at all it exists.

## 2. NEED FOR PLANNING IN INDIA

India inherited from the British a backward and stagnant economy. It was backward as the level of output and productivity were low. And, it was stagnant as the GDP growth was tardy (extremely low). Such an economy could not be left to the market forces of supply and demand to trace its path of growth and development. It needed a big push of investment, supported by the government. Hence, the recourse to economic planning.

## 3. DIRECTIVE PLANNING AND COMPREHENSIVE PLANNING

**Directive planning** refers to a system in which planning is introduced just to direct the forces of supply and demand, so that the system does not go wayward from the state of equilibrium.

- In such a planning there is no direct participation of the state in the process of growth.
- It is more like directing the private sector with regard to a set of dos and don'ts, so that the national interest does not suffer while individual gains are allowed to be maximised.
- Directive planning is pursued in capitalist economies.

**Comprehensive planning**, on the other hand, refers to a system in which government herself participates in the process of growth and development.

- Comprehensive planning is pursued in socialist economies as well as mixed economies.
- In case of mixed economies (like India), both private and public sectors co-exist as agents of growth.

- While individual gains are allowed to be maximised as under capitalism, social gains (or collective gains) are fostered through direct participation of the state as under socialism.

#### 4. TYPES OF ECONOMIES: CAPITALIST, SOCIALIST AND MIXED ECONOMIES

Let us understand the concepts of capitalist, socialist and mixed economies. This will help us in having a comprehensive view of the goals and objectives of planning, discussed in next sections of the chapter.

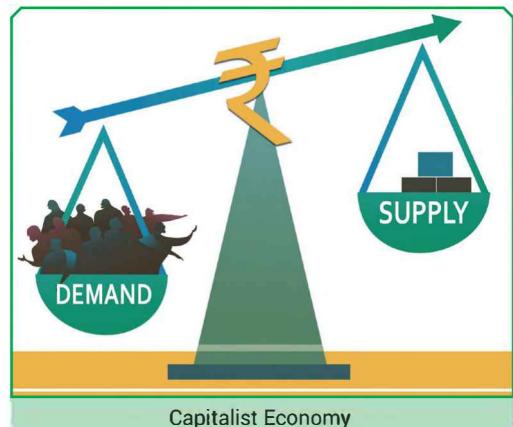
##### Capitalist Economy

A capitalist economy is defined as the one in which means of production are owned by the individuals, and the individuals are free to take their economic decisions, as guided by the principle of profit maximisation.

##### Features

The salient features of a capitalist economy are as under:

- There is a private ownership of the means of production.
- Means of production are used in a manner such that the profits are maximised.
- The role of the government is largely confined to the maintenance of law & order and defence of the country.



##### Merit

The principal merit of this system is that it promotes self-interest. Profits are maximised, and GDP growth is accelerated.

##### Demerit

The principal demerit of this system is that it ignores 'collective interest' of the society. Only those goods are produced which yield high profits. Accordingly, production is directed to satisfy needs of the rich. The poor people suffer deprivation. There is growth without social justice.

##### Social Justice

Social justice is achieved when the process of economic growth leads to equitable distribution of income and wealth.



## Socialist Economy

A socialist economy is the one in which there is a social (collective/public) ownership of the means of production, and economic decisions are taken by some central authority of the government with a view to maximise social welfare.

### Features

The salient features of a socialist economy are as these:

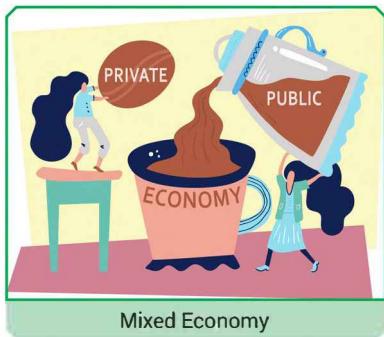
- (i) Means of production are collectively owned by the society as a whole. Or, there is a public ownership of the means of production.
- (ii) Means of production are used in a manner such that social welfare is maximised.
- (iii) There is a direct participation of the government in the process of production. The role of the government is not merely confined to law & order and defence.

### Merit

Socialist economy achieves 'equality' in the distribution of income. Growth process becomes inclusive, and is based on the principle of social justice.

### Demerit

The principle demerit is that GDP growth remains a slow process. This is because, production is not directed by the principle of 'profit maximisation'. Instead, it is directed by the principle of 'Equity and Justice'. It is owing to this demerit that the erstwhile socialist economies like Soviet Union and China had to switch over to market economy from the controlled economy.



## Mixed Economy

A mixed economy is the one in which there is private as well as public ownership of the means of production. Production decisions are governed largely by the principle of profit maximisation, but not without checks and balances of social justice.

## **Features**

The salient features of a mixed economy are as under:

- (i) Means of production are owned by the private entrepreneurs as well as the government.
- (ii) In the private sector, production decisions are governed by the principle of profit maximisation, while in the public sector, social welfare rules the roost.
- (iii) Both private and public sectors play a significant role in the process of production.

## **Merit**

The principle merit of a mixed economy is that it combines the merits of capitalist as well as a socialist economy. On the one hand, GDP growth is encouraged because private entrepreneurs are free to focus on 'profit maximisation'. On the other hand, 'social justice' or equality is promoted because the government sector places high priority on the maximisation of social welfare.

## **Demerit**

The principle demerit is that the government sector is often inflicted with corruption, leading to low level of efficiency/productivity. It is owing to this demerit, that the mixed economies (like India) are gradually opting for privatisation of the public enterprises.

It may be noted that most economies of the world are now mixed economies where production decisions are governed largely by the market forces of demand and supply, but are regulated by way of direct or indirect intervention by the government.

## **5. LONG PERIOD AND SHORT PERIOD GOALS OF PLANNING IN INDIA**

- **Long Period Goals** are common to all the Five Year Plans and are therefore generally studied as **Common Goals of Five Year Plans** or **Objectives of Planning**.
- **Short Period Goals** are **plan-specific** and are generally studied as **Objectives of Plans**.

Depending on the ground realities, each plan is designed as a distinct plan with a distinct set of objectives.

It must, however, be made amply clear that objectives of plans (referring to specific short period objectives of each plan) and objectives of planning

(referring to long period objectives of planning) are not to contradict but complement each other.

Truly speaking, short period objectives refer to ‘plan-to-plan strategy’ with a view to achieving the long period objectives of planning, or the Common Goals of Five Year Plans.

### Why should Plans have Goals?

Without goals, there is no planning. In fact, planning is defined as a strategy that defines how to allocate the country's scarce resources to different uses with a view to achieving a given set of goals. These goals often relate to growth and social justice.

## Long Period Goals/Objectives

Planning in India focuses on five long period goals/objectives, as under:

**(1) GDP Growth:** Increase in GDP (gross domestic product) implies increase in the level of output in the economy.

It implies an increase in the flow of goods and services in the economy.

When the increase in the flow of goods and services is consistent over a long period of time, it is called ‘economic growth’. Thus, GDP growth leads to economic growth.

Increase in GDP leads to economic growth. It implies a consistent increase in GDP or a consistent increase in the level of output, or a consistent increase in the flow of goods and services in the economy over a long period of time.

### Two Ways of Increasing the GDP are:

- (i) Discovery of more and more resources in the country that increases resource-base of the country.
- (ii) Innovative technology, that enhances productivity or output per unit of input.

Increase in GDP depends on two factors:

- (i) Increase in resource-base of the country, and
- (ii) Increase in productivity (output per unit of input) through innovative technology.

Planning in India is to ensure that natural resources are fully explored and production technology is continuously improved. So that, GDP growth achieves a momentum.



Harvester



Thresher

Innovative Technology raises Efficiency/Productivity

**(2) Full Employment:** Full employment refers to a situation when all the people who are able to work and willing to work at the market wage rate are getting work.

In other words, those who are able to work and are willing to work must get work. This is a [social objective of planning](#).

The objective of full employment focuses on ‘inclusive growth’. It implies that:

- (i) more and more people should participate in the process of growth, and
- (ii) benefits of growth must be shared across wider sections of the society.

It amounts to achieving ‘growth with social justice’.

#### **Full Employment does not mean a situation of Zero Unemployment**

- *Full employment by no means should be considered as a situation of zero unemployment.*
- *In an economy, there is always some natural rate of unemployment, which is the minimum rate of unemployment caused by structural changes in the system of production.*
- *Structural changes, by and large, are related to the introduction of new technology in the production system. Because of these changes, people tend to remain unemployed for some time till they adapt themselves to these changes.*
- *Natural rate of unemployment (also, called structural unemployment) is consistent with a situation of full employment.*

**(3) Equitable Distribution or Equity:** Economic growth would become a meaningless exercise if the benefits of growth accrue to only a handful of people in the society. Note the following observations carefully:

- ◆ Growth serves virtually no purpose in a society where rich tend to become richer and the poor continue to struggle even for the essential of life.
- ◆ Benefits of growth must spread across all sections of the society, so that the distribution of income becomes equitable.
- ◆ Equitable distribution of income implies social equality and this is one of the principal objectives or goals of planning in India.

### **Equal Distribution and Equitable Distribution**

**Equal distribution** would mean every individual in the society gets the same share in the country's national income. It would imply a situation when a doctor gets the same salary as a clerk in the hospital. No society would ever seek a situation like this.

**Equitable distribution**, on the other hand, refers to a situation when differences in income are allowed but only within certain limits.

- ❑ These differences are socially unwarranted and are to be proportionate to the differences in qualifications and skills of different individuals in the society.
- ❑ When a doctor gets ₹ 50,000 to perform a surgery (lasting for 1 hour) while, on the other hand, a factory worker gets ₹ 50,000 for the entire year (working 8 hours a day), the difference in income is too large to be socially justified. Such differences (which are socially unwarranted) must be corrected.
- ❑ 'Equity' (in terms of equitable distribution of income) implies that economic growth is related to social justice.
- ❑ It is only when economic growth is related to social justice that 'growth' is converted into 'development'. Planning in India focuses on 'growth with social justice'.

**(4) Modernisation:** It refers to updation and adoption of modern technology in the process of growth.

As noted earlier, output can be increased either by increasing the pool of resources or by using innovative technology.

Modern age is the age of science and innovations. Science has offered us new ways of doing things, such that productivity in farms and factories has shown an exponential rise over time.

Green Revolution in Indian agriculture is a well known example of how technology can bring about revolutionary changes in output.

Recently, IT revolution has redefined the concept of domestic production through BPO (Business Process Outsourcing).

However, [modernisation in the context of goals of plans in India, has a social angle as well](#). Here, it refers to modernisation of social outlook.

Conventional wisdom (wisdom without a valid reason) must give way to modern outlook. It includes issues like empowerment of women so that (like men) they also participate in the process of production and contribute to the process of economic and social prosperity.

**(5) Self-sufficiency:** It refers to the state of being able to provide essential goods (particularly foodgrains) without the help of others.

This goal was accorded a high priority during the first seven plans.

The basic idea was not to expose Indian economy to political pressures from rest of the world simply because we are dependant upon them for the supply of essential goods. Indeed, it happened in 1965, when USA threatened to stop exports of foodgrains to India if it did not stop the then war with Pakistan.

India wanted to be self-sufficient in foodgrain production to avoid the uncertainties of supplies from rest of the world.

*It was necessary for a developing country like India to achieve self-sufficiency in foodgrain production. Otherwise, these countries had to yield to food-exporting countries (like USA) and support their political agenda. **Example:** India was pestered to end war with Pakistan (1965) for favour of food grain supplies from USA.*

## Short Period Goals/Objectives

Short period goals/objectives vary from plan to plan depending on current needs of the economy. Broadly, plan to plan objectives were specified as under:

- (i) When the First Plan was initiated, the country was battling severe shortage of foodgrains. Accordingly, the First Plan focused on higher agricultural production as the principal objective.
- (ii) Enthusiastic achievement of the First Plan prompted the planners to shift the focus from agriculture to industry. Accordingly, increase in industrial production was taken as the principal objective during the Second Plan.
- (iii) Third Plan emphasised the need for self-sufficiency in foodgrain production while the Fourth Plan focused on price stability and fuller utilisation of manpower.
- (iv) Alleviation of poverty was the principal objective of Fifth and Sixth Plans while the Seventh Plan again stressed the need for greater employment opportunities.
- (v) The Eighth Plan reinforced the objective of full employment, besides universalisation of education.
- (vi) Growth, price stability and environmental sustainability were the principal objectives of the Ninth Plan.
- (vii) Tenth Plan stressed the need for better quality of life.
- (viii) Poverty reduction, job creation and protection of environment were the focus areas of the Eleventh Plan.

(ix) Twelfth Plan stressed the need for sustainable as well as inclusive growth.

Check the following flow chart for plan-wise objectives stretching from the First to the Twelfth Plan in India.

Plan & Period	Focus of the Plan or the Principal Objectives
1st Plan: April 1, 1951 — March 31, 1956	(i) Increase in agricultural production. (ii) Equitable distribution of production, income and wealth.
2nd Plan: April 1, 1956 — March 31, 1961	(i) Increase in industrial production. (ii) Development of heavy industry.
3rd Plan: April 1, 1961 — March 31, 1966	(i) Self-sufficiency in food grain production. (ii) Generation of employment opportunities. (iii) Reduction in inequality.
<b>Three Annual Plans/April 1, 1966 – March 31, 1969</b>	
4th Plan: April 1, 1969 — March 31, 1974	(i) Accelerating the process of growth. (ii) Price stability.
5th Plan: April 1, 1974 — March 31, 1979	Raising the living standards with a focus on weaker sections of the society.
<b>Annual Plan/April 1, 1979 – March 31, 1980</b>	
6th Plan: April 1, 1980 — March 31, 1985	(i) Removal of poverty. (ii) Reduction of inequality. (iii) Development of infrastructure.
7th Plan: April 1, 1985 — March 31, 1990.	(i) Generation of employment opportunities. (ii) Increase in agricultural productivity.
<b>Two Annual Plans/April 1, 1990 – March 31, 1992</b>	
8th Plan: April 1, 1992 — March 31, 1997	(i) Fuller utilisation of manpower by the turn of the century. (ii) Universalisation of elementary education. (iii) Strengthening of infrastructure.
9th Plan: April 1, 1997 — March 31, 2002	(i) Agricultural and rural development. (ii) Growth with price stability. (iii) Checking the growth of population.
10th Plan: April 1, 2002 — March 31, 2007	(i) Improving the quality of life through better health and educational facilities and improved levels of consumption. (ii) Reduction in inequality through inclusive growth.
11th Plan: April 1, 2007 — March 31, 2012	(i) Multiple targets covering not only growth but also poverty reduction. (ii) Improving quality of education and public health services. (iii) Strategy of second green revolution. (iv) Generating high quality of job. (v) Protection of environment.
12th Plan: April 1, 2012 — March 31, 2017	Faster, sustainable and more inclusive growth.

We find that the short period objectives of plans are in sync with the long period objectives of planning, discussed earlier. Depending upon our needs and means, our planners have been redefining the relative significance of different objectives from plan to plan. On the whole, the focus has been on achieving better quality of life across all sections of the society, now popularly known as 'Inclusive Growth'.

## 6. FEATURES OF ECONOMIC POLICY PURSUED UNDER PLANNING TILL 1991

Planning in India has witnessed a marked shift in the economic policy of the government in the year 1991. Accordingly, features of economic policy are often studied separately for the pre-1991 period and post-1991 period. The present section describes the features of economic policy between the period 1951-1991, as under:

- (1) **Heavy Reliance on Public Sector:** Economic policy prior to 1991 indicated heavy reliance on public sector.

Thus, in Industrial Policy Resolution 1956, as many as 17 industries were reserved for public sector as against 12 industries earmarked for private sector.

It was realised that the objective of socialistic pattern of society could be achieved only through a comprehensive development of public sector enterprises.

- (2) **Regulated Development of Private Sector:** According to Industrial (Development and Regulation) Act, 1948 new industry in the private sector could not be established without a licence and registration.

Similarly, Monopolies and Restrictive Trade Practices Act, 1969 placed several restrictions on the expansion of existing industries in the private sector.

Regulated development of private sector was to ensure that there was no concentration of economic power in the private hands.

- (3) **Protection of Small-scale Industry and Regulation of Large-scale Industry:**

Large-scale industry was regulated through several acts, particularly MRTP [Monopolistic and Restrictive Trade Practices Act].

Small-scale industry, on the other hand, was offered protection from competition:



certain areas of production were exclusively reserved for the small-scale industries, particularly labour-intensive industries such as readymade garments, chemicals, leather products, etc.

Besides, financial institutions were developed to cater to the needs of small-scale industries.

Several boards (like Handloom Board and Silk Board) were established to promote the products of small-scale industries in the global market.

**(4) Development of Heavy Industry of Strategic Significance:**

Industries like of electricity generation, engineering goods, and iron & steel industry were identified as of strategic significance. These industries were to be developed on priority basis.

**Universal Intermediaries**

Industries of strategic significance (like of iron & steel, electricity generation and engineering goods) were recognised as 'universal intermediaries'. This was because:

- These industries supplied essential ingredients for almost all heavy industries in the economy.
- No industry could run without power (energy), plant & machinery (engineering goods) and iron & steel.

**(5) Focus on Saving and Investment:** Saving and investment were identified as the key determinants of economic growth. High interest rates were offered to promote saving, while investment was induced through subsidies and capital grants.

**(6) Protection from Foreign Competition:** Domestic industry was protected from foreign competition. High import duties and quantitative restrictions were levied on imports.

**(7) Focus on Import Substitution:** It implied domestic production of goods which were imported from abroad. The basic idea was to save foreign exchange, and become self-sufficient.

**(8) Restriction on Foreign Capital:** Foreign direct investment was controlled and regulated through Foreign Exchange Regulation Act (FERA). Loans from abroad were accorded higher priority than FDI. This was to minimise economic control of the domestic market by the foreign investors.

**(9) Centralised Planning:** Programmes of growth and development at the state level were aligned to centralised planning. That is, the objectives of growth as specified at the state level did not contradict with the overall strategy of growth as specified in the Five Year Plans.

## 7. SUCCESS (ACHIEVEMENT) OF PLANNING

Success of planning is assessed in terms of the different parameters of growth, as under:

- (1) **Increase in National Income:** Increase in national income indicates economic growth. In this context, following observations need to be noted:

- ◆ During the period prior to planning, national income of India increased at the rate of just 0.5 per cent per annum. Indian economy was, therefore, a stagnant economy.
- ◆ Increase in national income during the First Plan was 4.6 per cent per annum, against the target of 2.1 per cent per annum.
- ◆ Between the Second and Tenth Plan, the target was to raise national income by 5 per cent per annum. But this target was achieved only between Fifth and Tenth Plan.
- ◆ Increase in national income during the Eleventh Plan was 7.5 per cent against the target of 9 per cent.
- ◆ Increase in national income during the Twelfth Plan was 6.8 per cent against the target of 8 per cent. In 2018-19, increase in national income is estimated to be 6.9 per cent.

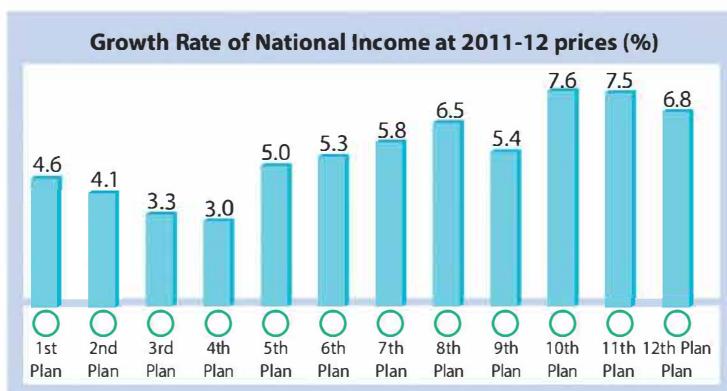
Thus, during most plans, we failed to achieve the targeted rate of growth. Yet, a deadlock was broken: a deadlock of economic stagnation that had gripped the Indian economy prior to independence.

- (2) **Increase in Per Capita Income:** Over time, per capita income has recorded a significant rise. Here, following observations need to be noted:

- ◆ During the period prior to planning, rate of increase in per capita income had only been notional.

### New Base Year for GDP Estimation

Base year for estimating GDP has now been changed to 2011-12 from 2004-05. This has pushed the GDP growth for the year 2013-14 to 6.9 per cent, from the earlier estimation of 4.7 per cent (when 2004-05 was taken as the base year).



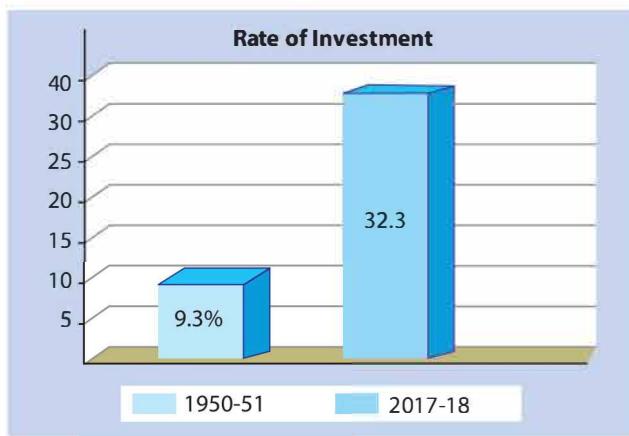
[Source: Economic Survey 2017-18]



- ◆ During the period of planning, initially the pace of growth was slow: just 2.7 per cent during the First Plan. But, it picked up subsequently.
- ◆ Eleventh Plan recorded a growth rate of 6 per cent per annum.
- ◆ Twelfth Plan estimated a growth rate of 5.5 per cent per annum. In 2017-18 and 2018-19, rate of increase in per capita income was 5.7 per cent and 5.6 per cent per annum respectively.

Increase in per capita income is a significant achievement as it implies greater availability of goods and services per head of population of the country. But, the reader must bear in mind that this is an average rise. This does not show any promise of a rise in the quality of life of each and every individual in the economy. This does not account for the distribution of income.

- (3) **Rise in Savings and Investment:** During the Five Year Plans, there has been considerable increase in the rate of saving and investment. Note the following observations:



- ◆ In 1950-51, rate of saving was 9.5 per cent of national income.
- ◆ It increased to 31.3 per cent by the end of the Eleventh Plan (2011-12) and was estimated to be 30.5 per cent in 2017-18.
- ◆ Likewise, the rate of investment (gross capital formation) has risen from 9.3 per cent of GDP in 1950-51 to 32.3 per cent in 2017-18.

We all know, that saving and investment are the principal drivers of economic growth.

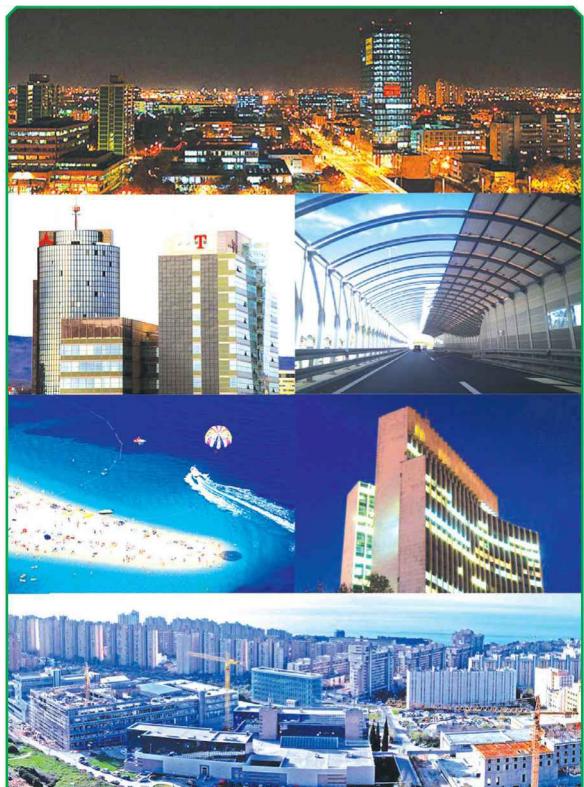
- (4) **Institutional and Technical Change in Agriculture:** Five Year Plans have contributed to the development of agriculture in two ways: (i) through land reforms, and (ii) through improvement in technology.

- (i) Land reforms, included:

- abolition of intermediaries between the state and tiller of the soil,
- moderation and regularisation of rents,
- ceiling on land holdings & redistribution of land, and
- optimising holding size through consolidation of holdings.

Because of these changes, there has been a significant improvement in the environment for farming.

- (ii) Improvement in technology (particularly HYV seeds) led to revolutionary rise in agricultural output and productivity. Self-sufficiency in foodgrain was the hallmark of this change.
- (5) **Growth and Diversification of Industry:** Five Year Plans gave a big push to the basic and capital goods industries (iron and steel, machinery, chemical fertilisers, etc.). Following points bring out this fact:
- ◆ During the planning period, growth rate of industrial production has been around 7 per cent per annum.
  - ◆ In the Eleventh Plan, industrial production growth rate was 7.2 per cent. It increased to 6.9 per cent in 2018-19.
  - ◆ Consumer goods industries have substantially grown to achieve the level of self-sufficiency.
  - ◆ Indian economy is now ranked as the tenth largest industrial economy in the world.
- (6) **Economic Infrastructure:** Means of transport & communication, irrigation facilities & power generation capacity, banking & insurance facilities are the key elements of economic infrastructure. During planning, economic infrastructure has recorded a significant growth. Here are a few examples:
- ◆ Indian Railways has become one of the world's largest railway networks.
  - ◆ Installed power generation capacity which was 2,300 MW in 1950-51 increased to 3,56,818 MW as on 31st March 2019.
  - ◆ A revolutionary growth of IT sector has earned India the distinction of a global player in the international market.
- (7) **Social Infrastructure:** Health and educational facilities are the key parameters of social infrastructure. These



Economic Infrastructure

have recorded a significant rise over time. It is owing to expansion of health facilities that:

- ◆ Death rate has come down to 6.3 per thousand in 2017 from 27 per thousand in 1951.
- ◆ Average life-expectancy has risen from 32 years in 1951 to 69.4 years in 2018.

As regards educational facilities, the number of school-going students has increased three-fold and that of collegiates five-fold since 1951.

(8) **Employment:** Serious efforts have been made during plans to increase employment opportunities.

In different Five Year Plans, government has launched several employment generation schemes. It is significant to note that:

- ◆ During the Eleventh Plan, unemployment rate came down from 8.3 per cent in 2004-05 to 5.6 per cent in 2011-12. It increased to 6.9 per cent in 2018-19 (Projected Figures).
- ◆ In the Twelfth Five Year Plan, government has fixed the target of creating 50 million employment opportunities.

(9) **International Trade:** During plans, the volume and value of India's foreign trade have increased substantially. Following facts prove this point:

- ◆ In 1948-49, the value of foreign trade was ₹ 792 crore. It increased to ₹ 59,02,036 crore in 2018-19.
- ◆ Composition of exports and imports has significantly changed. Prior to planning, we were largely exporting primary products (mainly inputs for industrial output) and importing finished goods, now the pattern is gradually reversing.
- ◆ The change in composition is significantly marked in the area of exports.
- ◆ We are now exporting engineering goods. This is a sign of India emerging as an industrial nation.

In short, Indian economy has recorded a significant growth, along with a significant structural change during the period of planning. The change is happening across all sectors of the economy. Also, growth is being reflected in higher and higher standard of living of the people. However, there are certain dark spots, pointing to the failure of planning in India. This is what we discuss in the following section.

## 8. FAILURES OF PLANNING IN INDIA

Following observations explain the failures of planning in India:

- (1) **Abject Poverty:** Alleviation of poverty was the central theme of planning. But this is where we stand: In India, 21.9 per cent of population still lives below the poverty line. These are those people who are not getting even the essentials of life (food, shelter and clothing). Amazingly, nearly 50 per cent of those who are absolutely poor in the world are living in India.



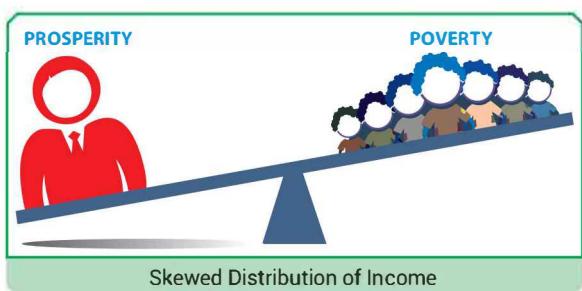
Abject Poverty

- (2) **High Rate of Inflation:** By and large, we have failed to tackle inflationary spiral in the country. Because of high rate of inflation during Five Year Plans, real income of the people has tended to erode. Also, economic divide between haves and have-nots has tended to rise. First Plan is the only exception when price level slided down, in all other plans the prices recorded a steep rise.

- (3) **Unemployment Crises:** While more and more opportunities of employment have been generated, challenge of unemployment has not subsided. At the end of First Plan, 53 lakh persons were unemployed. This number rose to over 4 crore at the end of Eleventh Plan. In March 2016, number of registered unemployed increased to 4.35 crore. This is emerging to be a serious cause of social unrest, threatening the process of growth.

- (4) **Inadequate Infrastructure:** Development of infrastructure (including power, roads, dams, bridges, schools, colleges and hospitals) continues to be inadequate despite 67 years of planning. Consequently, actual growth has failed to match the targets of growth. Particularly, shortage of power has been a serious constraint in the overall process of growth and development.

- (5) **Skewed Distribution:** Economic and social equality was considered as the principal goal of planning. Ironically, this has been the principal failure of planning in India. Widening economic and social inequality has compelled the government to offer reservations in jobs to the economically and socially weaker sections of the society.



Skewed Distribution of Income

Briefly, as observed by an expert team of UNO, the implementation and enforcement have been the principal shortcomings of planning in India. Plans are formulated after a good deal of deliberations but the targets are not achieved due to inefficient administration, dishonesty, vested interests, red-tapism, etc.

It was owing to overall failure of the strategy of planning that in 1991 the government took a U-turn from the policy of controls and regulations to the policy of market-driven growth process. NEP (New Economic Policy) redefined the whole framework of policies and programmes for growth and development. Chapter 6 focuses on economic reforms under NEP.

## Power Points & Revision Window

- **Economic Planning:** Economic planning refers to a system under which a central authority sets a set of targets and specifies a set of programmes and policies to achieve those targets within the specified period of time.
- **Directive Planning** is a system in which planning is introduced just to direct the forces of supply and demand, so that the system does not go wayward from the state of equilibrium.
- **Comprehensive Planning** refers to a system in which government herself participates in the process of growth and development. It is pursued in socialist economies as well as mixed economies.
- **Types of Economies:**
  - **Capitalist Economy** is the one in which there is a private ownership of the means of production. Maximisation of profit is the principal objective.
  - **Socialist Economy** is the one in which there is a social (collective/public) ownership of the means of production. Maximisation of social welfare is the principal objective.
  - **Mixed Economy** is the one in which means of production are owned by the private entrepreneurs as well as the government.
- **Long Period Goals of Planning:** (i) GDP growth, (ii) Full employment, (iii) Equitable distribution or equity, (iv) Modernisation, (v) Self-sufficiency.
- **Short Period Goals of Planning:** These vary from plan to plan. In the First Plan, principal objective was to give momentum to the stagnating agricultural production, with a view to combating the acute shortage of foodgrains. In contrast, the Twelfth Plan stressed the need for sustainable and inclusive growth.
- **Features of Economic Policy Pursued Under Planning till 1991:** (i) Heavy reliance on public sector, (ii) Regulated development of private sector, (iii) Protection of small-scale industry and regulation of large-scale industry, (iv) Development of heavy industry of strategic significance, (v) Thrust on saving and investment, (vi) Protection from foreign competition, (vii) Focus on import substitution, (viii) Restriction on foreign capital, (ix) Centralised planning.
- **Achievements of Planning:** (i) Increase in national income, (ii) Increase in per capita income, (iii) Rise in savings and investment, (iv) Institutional and technical change in agriculture, (v) Growth and diversification of industry, (vi) Economic infrastructure, (vii) Social infrastructure, (viii) Employment, (ix) International trade
- **Failures of Planning:** (i) Abject poverty, (ii) High rate of inflation, (iii) Unemployment crises, (iv) Inadequate economic and social infrastructure, (v) Skewed distribution of income and wealth.



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

## Choose the correct option:

## Answers

1. (a)      2. (a)      3. (c)      4. (a)      5. (d)      6. (d)      7. (b)      8. (b)      9. (b)      10. (a)  
11. (d)      12. (a)      13. (b)      14. (d)      15. (c)

### B. Fill in the Blanks

**Choose appropriate word and fill in the blank:**

1. An economy in which means of production are used in a manner such that profits are maximised is called (capitalist economy/socialist economy)
  2. is pursued under mixed economy. (Directive planning/Comprehensive planning)
  3. Objectives of are plan-specific. (plans/planning)
  4. In the Industrial Policy Resolution 1956, industries were reserved for public sector. (12/17)
  5. distribution occurs when the distribution of income is in accordance with the abilities and efficiency of the people. (Equal/Equitable)
  6. A economy is the one in which there is private as well as public ownership of the means of production. (capitalist/mixed)
  7. is achieved when there is increase in real GDP over a period of time. (Development/Growth)

8. There were two annual plans after \_\_\_\_\_ five year plan. (6th/7th)
9. Economic planning \_\_\_\_\_ rule out the free play of market forces. (does not/does)
10. Prior to 1991 was that more importance was given to sector. (Public/Private)

#### Answers

- |                       |                           |          |             |              |
|-----------------------|---------------------------|----------|-------------|--------------|
| 1. capitalist economy | 2. Comprehensive planning | 3. plans | 4. 17       | 5. Equitable |
| 6. mixed              | 7. Growth                 | 8. 7th   | 9. does not | 10. Public   |

#### C. True or False

**State whether the following statements are True or False:**

- Economic planning focuses on utilisation of country's resources in a manner such that the GDP growth is maximised along with maximisation of social welfare. (True/False)
- Protection of environment was the focus area of Twelfth Five Year Plan. (True/False)
- Economic growth combined with social justice was the principle goal of planning in India. (True/False)
- The period of Eight Five Year Plan was 1987-1992. (True/False)
- An economy in which means of production are used in such a manner that social welfare is maximised is called a capitalist economy. (True/False)
- Full employment does not mean a situation of zero unemployment in the economy. (True/False)
- Economic development implies economic growth. (True/False)
- Directive planning refers to a system in which government herself participates in the process of growth and development. (True/False)
- Third Five Year Plan was launched in 1961. (True/False)
- Housing is the principal element of economic spheres of planning. (True/False)

#### Answers

1. True    2. False    3. True    4. False    5. False    6. True    7. True    8. False    9. True    10. False

#### D. Matching/Chronological

**I. From the set of statements given in Column I and Column II, choose the correct pair of statements:**

Column I	Column II
(a) Fourth Five Year Plan	(i) Self-sufficiency in foodgrain production
(b) MRTP Act	(ii) Protection of large-scale industry
(c) Objective of planning	(iii) Equitable distribution
(d) Full employment	(iv) A situation of zero unemployment

#### Answer

- (c) Objective of planning — (iii) Equitable distribution

## **II. Choose the correct alternative showing chronological order of the following events:**

- (i) Monopolies and Restrictive Trade Practices (MRTP) Act
- (ii) Green Revolution in India
- (iii) Introduction of economic reforms in India
- (iv) Industrial (Development and Regulation) Act

**Choose the correct alternative:**

- |                             |                            |
|-----------------------------|----------------------------|
| (a) (ii), (iv), (iii), (ii) | (b) (iv), (ii), (i), (iii) |
| (c) (i), (iv), (ii), (iii)  | (d) (iii), (i), (ii), (iv) |

### **Answer**

(b)—(iv), (ii), (i), (iii)

## **E. 'Very Short Answer' Objective Type Questions**

### **1. What is economic planning?**

**Ans.** Economic planning refers to a system under which a central planning authority sets a set of targets, and specifies a set of programmes and policies to achieve those targets within the specified period of time.

### **2. What is meant by directive planning?**

**Ans.** Directive planning refers to a system in which planning is introduced just to direct the forces of supply and demand, so that the system does not go wayward from the state of equilibrium. It is pursued in capitalist economies.

### **3. What is meant by comprehensive planning?**

**Ans.** Comprehensive planning refers to a system in which government herself participates in the process of growth and development. It is pursued in socialist economies as well as mixed economies.

### **4. Define capitalist economy.**

**Ans.** Capitalist economy is an economy in which means of production are owned by the individuals and they are free to take their economic decisions. Maximisation of profit is the principal objective.

### **5. Define socialist economy.**

**Ans.** Socialist economy is an economy in which means of production are collectively owned by the society as a whole and economic decisions are taken by some central authority of the government. Maximisation of social welfare is the principal objective.

### **6. Define mixed economy.**

**Ans.** Mixed economy is an economy in which there is private as well as public ownership of the means of production. However, there are government controls as well as regulations with a view to maximising social welfare.

### **7. What is meant by economic growth?**

**Ans.** Economic growth implies a consistent increase in GDP over a long period of time.

### **8. What is full employment?**

**Ans.** Full employment refers to a situation when all those who are able to work and are willing to work (at the existing wage rate) are getting work.

**9. What is modernisation?**

Ans. Modernisation refers to updation and adoption of modern technology in the process of growth.

**10. What is meant by self-sufficiency?**

Ans. Self-sufficiency means dependence on domestically produced goods, particularly foodgrains.

## **2. Reason-based Questions (Comprehension of the Subject-matter)**

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**Read the following statements carefully. Write True or False with a reason.**

**1. Unemployment has risen despite the fact that opportunities of employment have risen during the five year plans.**

Ans. True. Unemployment has risen despite a rise in the opportunities of employment during the five year plans. This is because the rate at which the work force has risen has been more than the rate at which the additional work force was absorbed in jobs. The rise in work force is primarily related to a substantial rise in population of the country, particularly after 1951.

**2. Poverty has reduced, but the gulf between the rich and the poor has widened.**

Ans. It is true that poverty has reduced, but the gulf between the rich and the poor has widened. Reduction in poverty is explained primarily in terms of the fall in percentage of population below poverty line. It is the reduction in absolute poverty. On the other hand, the widening gulf between the rich and the poor is explained in terms of the distribution of income and wealth. The bulk of the industrial wealth is being controlled by a handful of big industrialists like TATA , Ambani and Adani. Likewise, the bulk of farming land in rural areas is owned by a small segment of big farmers.

**3. Despite a significant rise in public investment (during five year plans), the GDP growth has continued to be rather slow.**

Ans. True. GDP growth has remained slow despite a significant rise in public investment during the five year plans in India. The primary reason is that the bulk of public investment has gone into such areas of production where capital-output ratio is very high. So that, output per unit of input has remained low.

**4. Despite the fact that GDP has grown consistently during the five year plans, the challenge of inflation almost never subsided.**

Ans. True. Inflation remained a challenge during the five year plans (except the first plan), despite the fact that GDP had consistently risen. This is primarily because of population explosion. Since 1951, rate of population growth in India has been extremely alarming. This has led to an exponential rise in the demand for farm products. Despite a significant rise in farm supplies the mismatch between demand and supply (leading to excess demand) has never ceased to exist. Accordingly, the never-ending problem of inflation.

## **3. HOTS & Applications**

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**1. What led to the failure of five year plans in India? Give two specific reasons.**

Ans. (i) It was basically bloated inefficiency of the public sector enterprises which led to the failure of five year plans in India. Most public sector enterprises ran into losses, because of leakage, pilferage and the lack of accountability.

(ii) Red-tapism in Indian bureaucracy along with the lack of political will has been the 'other' important reason of the failure of five year plans.

**2. What is casualisation of work force? Explain its emergence.**

Ans. Casualisation of work force is a term referring to work force with casual employment, rather than regular employment. It is with the growth of corporate business culture that casual employment has started replacing regular employment. Till 1991 when most jobs were created by the public sector enterprises, employment was offered on regular basis. This was in view of the fact that job-security was considered as an essential ingredient of loyalty and faithfulness towards the business enterprises. Unfortunately, however, security of job led to the lack of accountability and therefore, inefficiency. It was because of gross inefficiencies in public sector enterprises that the corporate sector started offering casual employment rather than regular employment.

**3. Reliance on public sector enterprises in five year plans was a tactical mistake. Do you agree with this view?**

Ans. When five year plans were adopted as a model of growth and development, reliance on public sector enterprises was indispensable. On the eve of independence, the Indian economy was so much in a state of backwardness and stagnation that it needed a big push of investment to break this deadlock. Private investment was not forthcoming owing to low returns. Accordingly, there was no option but to rely on public investment and public enterprises. Therefore, to conclude that reliance on public sector was a tactical mistake would be an exaggeration.

#### **4. Analysis & Evaluation**

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**1. What flaws do you find in your education system that contributes to the problem of unemployment in the country?**

Ans. Education system in India lacks vocationalisation. It is degree-oriented without imparting skill to the degree holders to look for avenues of self-employment. It causes excess supply of labour seeking white collar jobs. Thus, it contributes to unemployment in the country.

**2. Do you find the concept of market forces in contradiction with the concept of comprehensive planning in India? Write your opinion with a logical reasoning.**

Ans. Comprehensive planning in India (launched to kick-start the process of growth after independence) focused on direct participation of the state in the process of growth and development. It stressed the need for a leading role of the public sector enterprises, allowing private enterprises to play only a secondary role. To the extent private sector was not allowed to enter certain areas of production activity, free play of the market forces was certainly inhibited. It was also inhibited to the extent that controls and quotas were widely practiced as a strategy of planning in India. Yet, comprehensive planning in India should not be misinterpreted as a model of growth that did not allow the free play of the market forces. The fact of the matter is that it was a model of growth that regulated the free play of the market forces in a manner such that the scarce resources of the country were most optimally utilised, promoting growth with social justice.

#### **5. NCERT Questions (With Hints to Answers)**

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**1. Define a plan.**

[Hint: Plan (or planning) is defined as a strategy allocating country's scarce resources to different uses in a manner such that a given set of goals are achieved with in the specified period of time.]

**2. Why did India opt for planning?**

[Hint: A big push of investment (supported by the government) was needed in the Indian economy to break the vicious circle of economic backwardness. Indian economy, at the time of independence, was not only backward but stagnant as well. It was backward as the level of

output and productivity were low. And, it was stagnant as the GDP growth was extremely low. Such an economy could not be left to the market forces of supply and demand. Hence, the recourse to economic planning.]

**3. Why should plans have goals?**

[Hint: Without goals, there is no planning. In fact, planning is defined as a strategy that defines how to allocate the country's scarce resources to different uses with a view to achieving a given set of goals. These goals often relate to growth and social justice.]

**4. Explain 'growth with equity' as a planning objective.**

[Hint: Economic growth (in terms of GDP growth) would become a meaningless exercise if the benefits of it accrue to only a handful of people in the society. Benefits of growth must spread across larger sections of the society, so that the distribution of income becomes equitable. 'Equity' (in terms of equitable distribution of income) implies social justice, and economic growth must be combined with social justice. That is why, planning in India, focuses not merely on economic growth, but on 'growth with social justice'.]

**5. Does modernisation as a planning objective create contradiction in the light of employment generation? Explain.**

[Hint: No, modernisation as a planning objective does not create contradiction in the light of employment generation. In fact both (modernisation and employment generation) as goals of planning are complementary, not contradictory to each other. Note the following observations in this regard:

- (i) Modernisation (in terms of adoption of new technology) implies increase in productivity. Implying lesser requirement of labour per unit of output.
- (ii) With increase in productivity, level of production activity and the level of income tend to rise. Rising income implies a rising demand for goods and services.
- (iii) In order to fulfill the rising demand, the producers plan for higher levels of output. Implying a rise in demand for inputs including labour.

Thus, as growth progresses (based on increase in productivity), opportunities of employment tend to rise. Accordingly, a positive correlation between modernisation and employment generation.]

**6. Why was it necessary for a developing country like India to follow self-reliance as a planning objective?**

[Hint: Self-reliance means reliance on the domestically available resources for the growth and development of the economy.

More specifically it means non-reliance on foreign investment and/or foreign aid. It was considered essential to minimise our dependence on foreign aid/investment as it often leads to political interference by the donor countries.

Aid is often tied to the projects and policies as dictated by the donor countries. Example: Aid from US would generally mean that we buy our defence equipment only from US even when we get a better deal from other countries. Hence, the focus on self-reliance.]

## **6. Miscellaneous Questions and Reference to the Text for Answers**

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1. Distinguish between equal and equitable distribution of income. Which one is more important and why? [Page 38]
2. Explain the different types of economies. [Page 33–35]

3. Explain 'full employment' as one of the long period objectives of planning. [Page 37]
4. State four features of economic policy as pursued in India till 1991. [Page 41, 42]
5. To what extent have the plans succeeded in accelerating the pace of growth of the Indian economy? [Page 43–46]
6. Explain the objective of 'self-sufficiency' as adopted in Indian planning. [Page 38, 39]



- **'Growth' and 'Development' though related are different Concepts**

Growth refers to a situation of sustained rise in GDP over a long period of time. It leads to a rise in average standard of living of the people.

Development refers to growth with equity as well as structural change in the economy.

Equity implies equitable distribution of income, so that the benefits of growth are shared by all sections of the society. Structural change implies a shift in the sectoral share in GDP. Share of secondary and tertiary sectors should gradually rise and that of primary sector should gradually fall. It implies a situation when secondary and tertiary sectors emerge as the key contributors to the GDP growth. It does not mean that primary sector (or the agricultural sector) is neglected. It only means that the epicentre of GDP growth shifts from the primary sector to the secondary and tertiary sectors.

- **Paradox of Saving and Investment**

Although during the planning period there has been appreciable increase in saving and investment, yet the growth rate of economy has been very slow. Several factors account for this paradox:

- (i) Capital-output ratio is very high in India. It is around 4 : 1 and has been rising over time. Because of this high ratio, increase in investment is followed by relatively less increase in production.
- (ii) Considerable part of investment is in the form of buffer-stocks of foodgrains and not in the form of fixed capital formation. No wonder, despite the increase in the rate of investment there is no corresponding increase in production.
- (iii) Large portion of investment is made in traditional sector with backward technology, leading to low productivity.

- **Modernisation and Employment Generation should not be confused as Contradictory Goals of Planning**

Modernisation and employment generation as goals of planning are complementary, not contradictory to each other. Note the following observations in this regard:

Modernisation (in terms of adoption of new technology) implies increase in productivity. Implying lesser requirement of labour per unit of output. But it does not imply a fall in the level of employment in the economy. Because, with increase in productivity, level of production activity and the level of income tend to rise. Rising income implies a rising demand for goods and services. When demand for goods and services rises, the producers plan for higher levels of output. Implying a rise in demand for inputs including labour. Thus, as growth progresses (based

on increase in productivity), opportunities of employment tend to rise. Implying a positive correlation between modernisation and employment generation. However, there could be some structural shifts in the economy. One sector releasing labour force for the other. Historically, agricultural sector is found to be releasing labour force for the industrial and tertiary sectors of the economy. Accordingly, the epicentre of growth process tends to shift from primary to secondary and tertiary sectors of the economy.

#### ● **The Concept of Interventionist State**

'Interventionist State' refers to the system in which the state intervenes to regulate and control the forces of the market (the forces of supply and demand and the consequent relative price structure) in a manner such that the production of essentials of life and their delivery to the relatively poorer sections of the society is not hurt. In case the state does not intervene, the producers will tend to allocate resources only to the production of those goods and services which are demanded by richer sections of the society with a view to maximising their profits. Accordingly, growth may occur, but not the development. Development occurs only when the benefits of growth reach the poorer sections of the society and when the gulf between the rich and the poor is reduced.

#### ● **Yet there are Starvation Deaths**

Green Revolution in Indian economy has brought about a tremendous breakthrough in foodgrain production. India no longer needs to import foodgrains. Domestic production is estimated to be enough for domestic consumption. There has been an explosive rise in the country's population. But, rise in foodgrain production has outpaced it. Yet there are **starvation deaths** in the country. How do we explain this phenomenon? This is explained in terms of two factors:

- (i) Gross inequalities in the distribution of income. So much so that the country's 21.9 per cent population is below poverty line, not having enough means to buy even the essentials of life.
- (ii) Ineffective PDS (Public Distribution System). No logic of the world can explain why food is not reaching the poor even when the state is incurring huge cost on the storage of millions of tonnes of foodgrains for PDS.

#### ● **Our Record Relating to Distribution has been Grossly Dismal**

- (i) **Distribution of Income:** Politicians can make a tall claim that over time, the distribution of income has improved or it has become more equitable. This claim is founded on two statistical facts: (a) over time the percentage of taxpayers in total population has increased, and (b) over time, the percentage of population below the poverty line has reduced. But there is another statistical fact of equal significance. It is that the total number of those below poverty line and the number of non-tax payers has tended to increase over time. Thus, the number of poor people in India is surging over time which is a poor reflection on our achievements with regard to distribution of income.
- (ii) **Distribution of Consumption Expenditure:** Of the total private consumption expenditure, the share of bottom 40 per cent in the rural areas has tended to rise in the rural areas, but the share of bottom 80 per cent in the urban areas has tended to decline. Thus, while rural inequality of consumption expenditure

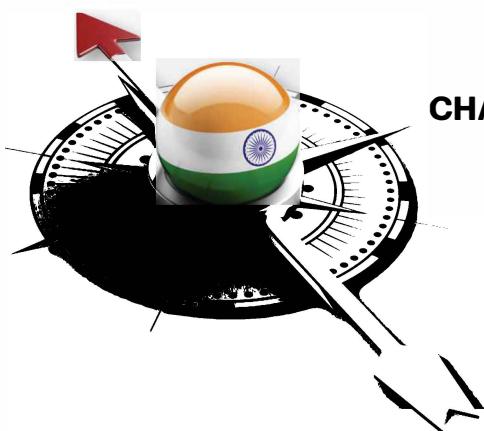
has improved, urban inequality of consumption expenditure has worsened over time. Yet another disturbing fact is that over time the rural-urban gulf in the consumption expenditure has widened.

- (iii) **Distribution of Landholdings:** Two factors are expected to have improved the distribution of landholdings: (a) abolition of the intermediaries like the *Zamindars* who used to thrive on extortions from the farmers, and (b) imposition of ceiling on the holding-size and redistribution of the surplus land to the small and marginal farmers. But simultaneously we must not lose sight of the fact that over time the size of holding has tended to shrink which has impeded the process of technological improvements in agriculture.

- (iv) **Distribution of Industrial Wealth:** Distribution of industrial wealth has tended to be grossly unequal as is evident from the following observation:

There are about 20-25 big industrial houses in the country (like Tata, Birla, Reliance, Wipro, Infosys and Godrej) who are controlling the bulk of industrial wealth in the country. In 2003-04, it was found that the top most six industrial houses controlled nearly 60 per cent of the assets of the top 20 industrial houses.





## CHAPTER: 3

# FEATURES, PROBLEMS AND POLICIES OF AGRICULTURE

TO  
DO

- *Importance of Agriculture in the Indian Economy*
- *Features of Indian Agriculture*
- *Problems of Indian Agriculture*
- *Agrarian Reforms*
- *Achievement of Agrarian Reforms: Green Revolution*

## I. IMPORTANCE OF AGRICULTURE IN THE INDIAN ECONOMY

Agriculture is of critical importance in the Indian economy. This fact is highlighted through the following observations:

- (1) **Contribution to GDP:** Agriculture makes a significant contribution to GDP in India.

During the period of planning, contribution of agricultural sector to GDP had been ranging between 51 to 17.4 per cent for different years.

It has tended to decline over time, from as high as 51 per cent in 1950-51 to 14.4 per cent in 2018-19. However, the decline (in percentage contribution of agriculture to GDP) does not indicate the decline in importance of agriculture in the economy. It often occurs owing to relatively faster growth of secondary and tertiary sectors of the economy.

- (2) **Supply of Wage Goods:** Wage goods are the necessities of life such as wheat, rice, pulses, maize, *bajra*, oil seeds, etc. Agriculture provides wage goods to about 121 crore of people in India.





Agriculture—A Major Source of Employment

(3) **Source of Employment:** In India, agriculture is a significant source of employment. Over fifty per cent of working population in India is engaged in agricultural sector. Implying that agriculture is the principal source of subsistence for the people in India.

(4) **Supply of Raw Material:** Agriculture supplies industrial raw material like cotton for the textile industry, seeds for the oil industry, and sugarcane for the sugar mills.

As a supplier of raw material, agricultural sector is of primary significance for the growth of the industrial sector in the economy.

(5) **Source of Demand for the Industrial Goods:** Agricultural sector is an important source of demand for the industrial goods, particularly the capital goods.

Tractors and harvester-machines are demanded exclusively by the agricultural sector. Thus, agricultural prosperity leads to industrial prosperity.

(6) **Contribution to International Trade:** Agriculture makes a significant contribution to India's international trade. Thus, in 2018-19, share of agricultural sector in total exports of the country stood at 11.76 per cent.

India exports tea, jute, cashewnuts, tobacco, coffee and spices.

Exports are a source of foreign exchange, which India needs for the import of defence goods as well as crude oil.



India—The Major Exporter of Spices in the World

(7) **Contribution to Domestic Trade:** Agriculture also plays a significant role in the country's domestic trade. This is borne out by the fact that huge expenditure in India is incurred on the purchase of farm products needed by more than a billion people in the country.

(8) **Support to the Transport Industry:** Agriculture in India offers a crucial support to the transport industry.

Both railways and roadways are the bulk carriers of farm products in India. Implying that, agriculture is a significant source of demand for the transport industry.

(9) **Wealth of the Nation:** A significant component of the country's wealth belongs to agricultural sector. In terms of fixed assets, land occupies the highest rank in India. Besides, capital worth crores of rupees stays invested in major and minor irrigation projects.

Briefly, agriculture in India is of central significance both in terms of production of farm products and in terms of demand for the non-farm products. Any slowdown in the agricultural sector leads to a slowdown in the industrial sector (by way of low demand emerging from the agricultural sector). Consequently, GDP growth rate is severely impacted.

## 2. FEATURES OF INDIAN AGRICULTURE

Following are the principal features of Indian agriculture:

(1) **Low Productivity:** Productivity means output per hectare of land. It is extremely low in India compared to advanced nations in the world. [Table 1](#) illustrates this fact.

**Table 1. Productivity of Principal Crops—  
A Comparative Look (April 2014)**

Crop	Country	Productivity (Tonnes of Output per hectare of Land)
Rice	India	3.6
	China	6.8
	Vietnam	5.8
	World Average	4.5
Wheat	India	3.1
	China	6.5
	UK	9.0
	World Average	3.3
Maize	India	2.6
	China	5.8
	USA	10.7
	World Average	5.6

[Source: Agricultural Census Statistics 2016]

Low productivity is a sign of backwardness. Since agricultural sector generates demand for the industrial sector, backwardness of the agriculture implies slow growth of the industry.

- (2) **Disguised Unemployment:** Disguised unemployment is a situation of hidden unemployment. It occurs when the number of persons engaged on a piece of land is much higher than what is actually needed. So, apparently all are employed. But, in reality, many are unemployed. Even when some are withdrawn, total output will not fall.

Disguised unemployment is a distinct characteristic of the Indian agriculture. This reflects backwardness and poverty.



Dependence on Rainfall

#### Categories of Farmers in India

- **Marginal Farmers:** Holding size upto 1 hectare (2.5 acres).
- **Small Farmers:** Holding size more than 1 hectare but less than 2 hectares.
- **Semi-medium and Medium Farmers:** Holding size more than 2 hectares but less than 10 hectares.
- **Large Farmers:** Holding size of 10 hectares and above.

- (4) **Subsistence Farming:** Farming in India is subsistence-oriented.

It means the primary objective of the farmer is to secure subsistence for his family; it is not to earn profits.

It implies that farming in India is not much commercial in nature. Subsistence agriculture fails to generate surplus for investment. It leads to stagnation in agriculture.

- (5) **Lack of Modern Inputs:** Modern inputs like chemical fertilizers, insecticides and pesticides are not judiciously used. It is because the bulk of farming population in India is extremely poor. Lack of modern inputs leads to low productivity and therefore, backwardness.

- (6) **Small Holdings:** Small holdings (or small size of a farmer's land under cultivation) is a characteristic feature of the Indian agriculture. Small holdings are a hinderance in the process of growth in two ways:

- (i) mechanisation of farming (use of machines) becomes difficult, and
- (ii) marginal farming continues to view farming as a source of subsistence rather than an enterprise for profit.

(7) **Landlord-tenant Conflict:** Huge areas are cultivated by the tenants who are not owners of the soil. But, the bulk of the revenue is appropriated by the owners (the landlords). Tenants often get the bare minimum.

Little or no surplus is left with the tenants for reinvestment. Accordingly, agriculture tends to stagnate.

(8) **Primitive Technology:** Because, bulk of the farms in India are small in size and bulk of the farming population is poor, the use of primitive technology becomes inevitable. There are plenty of instances where bulls plough the fields rather than the tractors.

We find heavy reliance of cultivators on cattle-power and manpower rather than on the modern equipment like tractors and harvestor-machines. Consequently, productivity remains low.



Primitive Technology—  
Bulls, not Tractors plough the fields

These features of the Indian agriculture lead to an important conclusion: that Indian agriculture is extremely backward, despite the fact that it is of significant importance in the Indian economy. Because a significant sector of the economy is extremely backward, the economy as a whole continues to battle backwardness.

### 3. PROBLEMS OF INDIAN AGRICULTURE

Indian agriculture faces a host of problems. It is owing to these problems that it continues to remain backward as well as stagnant. Some of the principal problems are as under:

(1) **Lack of Permanent Means of Irrigation:** Crop farming in India is heavily dependent on rainfall. Permanent means of irrigation are extremely deficient.

Dependence on rainwater makes Indian agriculture extremely vulnerable: good rainfall brings good harvest, while droughts cause a substantial loss of output.

Stability in agricultural output requires that permanent means of irrigation are developed across all parts of the country.

- (2) **Deficiency of Finance:** Deficiency of finance is another major problem facing Indian agriculture.

For bulk of their financial needs, the small farmers depend upon non-institutional sources, including '*mahajans*', moneylenders and the landlords. They charge very high rate of interest.

Institutional finance (referring to finance by the banking and other financial institutions) is extremely scarce in relation to needs of the farmers.

Lack of finance hinders growth of Indian agriculture.

High cost of borrowing leads to vicious circle of poverty of the farmers.

- (3) **Conventional Outlook:** Conventional outlook towards farming is yet another problem of Indian agriculture.

Despite innovative farm-technology and farm-management practices, Indian farmer continues to rely on conventional wisdom. He continues to consider farming more as a means of subsistence and less as a business venture.

Accordingly, he continues to focus on crops which offer him food security rather than those which yield high profits (but are risk-prone).

The typical Indian farmer is reluctant to grow as an entrepreneur; he avoids undertaking risks for profits.

- (4) **Small and Scattered Holdings:** Holdings in India are not only small, but scattered as well. Small holdings do not allow the use of modern technology. Scattered holdings increase the cost of management. This contributes to backwardness of farming and poverty of the farmers.

- (5) **Exploitative Agrarian Relations:** Agrarian relations refer to the business relations between the landlords and the tenants.

Most landlords are 'absentee landlords'. They seldom do farming themselves. Relying on rental income, they tend to exploit their tenants (who are actual tillers of the soil) by way of high rents and related charges.

Having paid exorbitant rents to the absentee landlords, the tillers of the soil are left with little surplus for further investment.

Accordingly, land continues to be used as a source of subsistence (or as a means of livelihood) rather than a source of business profits.

(6) **Lack of Organised Marketing System:** Agricultural marketing system is highly unorganised.

A vast majority of the small farmers continue to sell their output in the local markets at reduced rates. To a large extent this is their compulsion.

They are obliged to sell their produce to the *mahajans* and moneylenders (in the local markets) in return for the loans they raise from these middlemen.

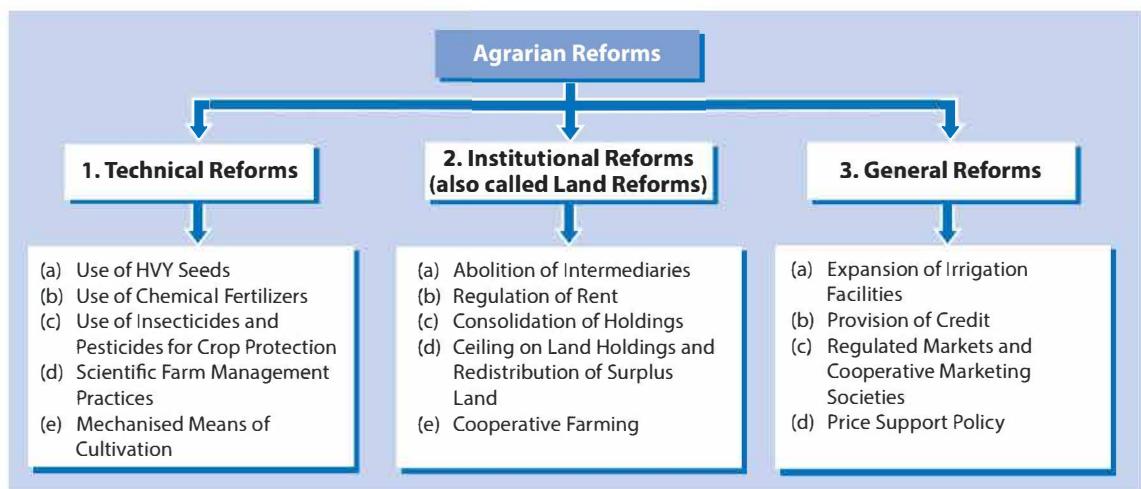
Briefly, agriculture in India faces a number of problems ranging from production to the marketing of the crops. At the level of production, modern inputs are not judiciously used, because of which productivity remains low. At the level of marketing, the bulk of small holders fail to get a remunerative price for their crops, because of the lack of organised marketing system.

#### 4. AGRARIAN REFORMS

OR

#### REFORMS IN INDIAN AGRICULTURE

With a view to tackling the problems of Indian agriculture, the government has taken a series of reform measures since independence. These reform measures are popularly known as agrarian reforms. These are broadly classified as in the following flow chart:



In what follows we attempt a brief description of the various reforms.

## Technical Reforms (New Agricultural Strategy)

Following steps have been taken by the government to upgrade the level of technology in Indian agriculture:

- (1) **Use of HYV (High Yielding Variety) Seeds:** Since 1965, High Yielding Variety seeds have replaced the conventional varieties.



High Yielding Variety Seeds and High Crop Productivity

HYV seeds (especially relating to wheat, *bajra*, rice, maize, jowar, and cotton) have led to a substantial rise in crop productivity. This breakthrough is popularly known as Green Revolution.

National Seeds Corporation has been set up to promote the growth and distribution of HYV seeds. In 2016-17, nearly 6,20,743 quintals of certified seeds were distributed among farmers in different parts of the country.

- (2) **Use of Chemical Fertilizers:** Chemical fertilisers are being increasingly used to enhance productivity. Use of chemical fertilisers has considerably increased over time. In 2017-18, nearly 265.9 lakh tonnes of chemical fertilizers were used.



Pesticides for Crop Protection

- (3) **Use of Insecticides and Pesticides for Crop Protection:** Steps have been initiated to protect crops against diseases and insects by using insecticides and pesticides.

Fourteen Central Plant Protection Centres have been set-up in this respect.

For plant protection, Integrated Pest Management Programme was adopted along with the adoption of HYV technology.

- (4) **Scientific Farm Management Practices:** Stress has been laid on scientific cultivation, as against conventional farming.

Scientific methods of farming relate to (i) selection of crops and their quality, (ii) preparation of soil, (iii) rotation of crops, (iv) selection of seed, and (v) use of fertilisers besides others.

In this connection, Intensive Agricultural Area Programme has been introduced. Also, Integrated Rural Development Programme has been launched to speed up the process of growth in agriculture.

As many as 23 Agriculture Universities are engaged in promoting research on scientific cultivation.

- (5) **Mechanised Means of Cultivation:** Several measures have been taken to spread the use of mechanised means of cultivation.

To enable the small farmers to buy agricultural machines, cheap credit facilities are provided by Cooperative Societies, Small and Marginal Farmers Agencies, Regional Rural Banks and Commercial Banks.

In almost all states, Agro-industries Corporations have been set-up for this purpose.

## Institutional Reforms or Land Reforms

Action-plan of the government with regard to land reforms includes the following steps:

- (1) **Abolition of Intermediaries:** Intermediaries (between the state and the actual tiller of the soil), popularly known as *zamindars* have been abolished. Ownership rights have been conferred upon those who actually cultivate (or till) the soil. This has been done with a view to stopping exploitation of the cultivators by the *zamindars*.

- (2) **Regulation of Rent:** To put an end to excessive and illegal extortions from the cultivators, rents have been fixed. Generally, these are not to exceed 1/3rd of the value of crop.

- (3) **Consolidation of Holdings:** With a view to reducing fragmentation, steps have been initiated for the consolidation of holdings.

Consolidation is a practice to allot land to the farmer at one place as a replacement for his scattered holdings here and there. It saves the cost of cultivation.

By 2004, more than 1,633 lakh hectares of land was brought under consolidated holdings.

- (4) **Ceiling on Land Holdings:** With a view to promoting equality in the distribution of land, ceiling has been imposed on the holding-size.

Ceiling on holdings is the maximum size of cultivable land holding that an individual or a family can own.

The surplus land (over and above the ceiling limit) has been resumed by the government and redistributed among small holders or landless labourers.

**(5) Cooperative Farming:** Cooperative farming is encouraged to enhance bargaining power of the small holders. Together they can buy inputs at a lower price and sell their produce at a higher price.

### Two Basic Objectives of Land Reforms

The government pursued land reforms to achieve two basic objectives:

- (i) To end exploitation of the actual tillers of the soil, so that they are able to generate surplus for investment. Productivity in agriculture is expected to rise only when the farmers are able to generate surplus for investment.
- (ii) To promote equality in the rural economy.

## General Reforms

General reforms include the following steps:

**(1) Expansion of Irrigation Facilities:** With a view to raising productivity in agriculture, irrigation facilities have been expanded.

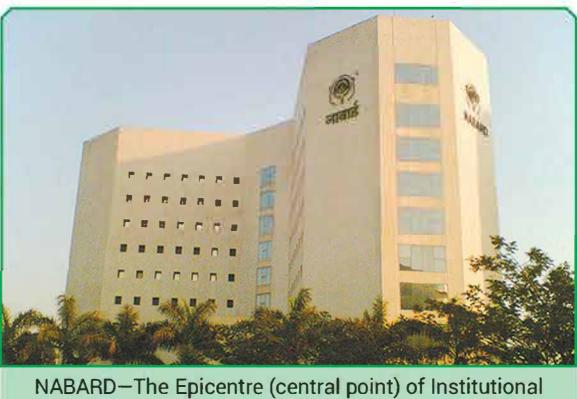
Several major and minor irrigation projects have been launched across different parts of the country.

In 1951, barely 17 per cent of land was under permanent means of irrigation.

Now, irrigation is covering about 45 per cent of land under cultivation.

**(2) Provision of Credit:** Cooperative Credit Societies have been set-up to provide credit to the farmers at low rate of interest. Also, Rural Development Banks have been established to cater to credit needs of the farmers.

At present, there are 94,647 Primary Agricultural Credit Societies and 768 Primary Cooperative Agriculture and Rural Development Banks in the country.



NABARD—The Epicentre (central point) of Institutional Credit to Agriculture Sector

Commercial Banks have also been catering to credit needs of the farmers. These banks provide about 72 per cent of total institutional credit.

Regional Rural Banks have been established to further enhance credit facilities to the farmers.

In 1982, National Bank for Agriculture and Rural Development (NABARD) was established to institutionalise credit facilities to the farmers at the national level.

In 2017-18, flow of institutional credit to the farmers was estimated to be of ₹11,79,425 crore.

**(3) Regulated Markets and Cooperative Marketing Societies:**

Regulated markets have been established across all parts of the country. This is with a view to offering remunerative price to the farmers and protect them against exploitation by the middlemen.

These markets are governed by the market committees appointed by the government.

These committees ensure timely payment to the farmers, and also ensure that only specified weights and measures are used to weigh and value the farmers' produce.

**Cooperative marketing societies** have been established to enhance bargaining power of the farmers in the markets.

These societies ensure that the farmers' produce is graded and sold only when remunerative price is available.

The cooperative societies ensure that there is no glut of supplies in the market, so that the crop price does not crash.

Provision for storage of the crops is made by the societies on behalf of the member farmers.

**(4) Price Support Policy:** Under this policy, government assures a minimum support price (MSP) to the farmer for his produce so as to protect him against uncertainties of the market. The government is committed to buy the surplus produce of the farmer at the minimum support price as and when the market price is lower than that.



## 5. ACHIEVEMENTS OF AGRARIAN REFORMS: GREEN REVOLUTION

Thanks to agrarian reforms, there has been a substantial improvement in Indian agriculture. From a backward and stagnant sector of the economy, agriculture has emerged to be a developing sector of the economy. The achievement has been so substantial that it came to be known as '**Green Revolution**'.

The term ‘Green’ refers to ‘crops’ and ‘Revolution’ refers to ‘spurt’. Together, these terms imply a spurt in crop production. It started happening in India in the year 1967-68. In the year 1967-68 itself, foodgrain production increased by nearly 25 per cent. India became self-sufficient in the production of foodgrains.



Green Revolution: A Revolutionary Rise in Productivity

Green Revolution in India is marked by two distinct phases:

### Phase 1: Mid-60s—Mid-70s

During this phase, scope of Green Revolution was restricted largely to wheat and rice growing regions of the country. These included the states of Punjab, Andhra Pradesh and Tamil Nadu.

### Phase 2: Mid-70s—Mid-80s

During this phase, the impact of Green Revolution became widespread, covering most areas of the country and larger number of crops.

Across both these phases, Green Revolution is characterised by the following features:

- (1) **Spurt in Crop Productivity:** There has been a substantial jump in crop productivity.

To illustrate: Productivity of wheat was estimated at 3,408 kg per hectare in 2018-19 compared to 660 kg per hectare in 1951; of rice, it was 2,665 kg per hectare in 2018-19 compared to 665 kg per hectare in 1951; and of maize, it was 1,114 kg per hectare in 2018-19 compared to 704 kg per hectare in 1951.

Spurt in productivity has led to a structural shift in Indian agriculture. This has marked the end of long period stagnation in Indian agriculture.

- (2) **Substantial Rise in Acreage (Area under Cultivation):** HYV technology has significantly reduced the time lag between sowing and harvesting of crops.

Use of chemical fertilizers has eliminated the need for fallowing. Accordingly, double cropping has become possible. This has led to a substantial rise in gross area under cultivation.

In 1950-51, gross area under cultivation was 13 crore hectare which now has shot up to 19 crore hectare.

#### Fallowing

- It is a practice of leaving land as uncultivated for some time. So that, it regains its fertility.
- Fallowing was a common practice among the Indian farmers prior to the launch of HYV technology.

- (3) **Shift from Subsistence Farming to Commercial Farming:** A substantial rise in output (owing to increase in productivity and increase in acreage) has started generating marketable surplus. This has prompted the farmers to gradually shift from subsistence farming to commercial farming. This is a sign of growth and development.

#### Marketable Surplus

- It refers to surplus of farmer's output over and above his 'on-farm consumption'. Thus:  
$$\text{Marketable Surplus of Wheat} = \text{Output of wheat} - \text{On farm consumption of wheat (or expected consumption of wheat by the farmer's family during the year).}$$
This surplus is available to the farmer for sale in the market. Hence, called marketable surplus.
- By selling the marketable surplus he gets cash. He can use this cash to buy producer goods for further production and also to buy consumer goods for his current consumption. Marketable surplus is a sign of commercialisation of agriculture.

- (4) **Change in Farmers' Outlook:** Commercialisation of agriculture has caused a change in outlook of the farmers. Farming is no longer viewed as a source of subsistence; it is considered as a commercial venture as well.

- (5) **Self-sufficiency in Foodgrain Production:** Increase in crop production (caused by increase in acreage and increase in productivity) has been so substantial that India has started maintaining buffer-stocks of foodgrains.

These stocks are used during periods of lean (low) farm-supplies.

A revolutionary rise in output has helped India achieve ‘growth with self-sufficiency’.

Briefly, owing to technical, institutional and general reforms, India has achieved a substantial rise in crop production through increase in productivity as well as increase in acreage. The rise in the level of production and productivity has been so substantial (compared with the levels on the eve of independence) that it is popularly known as Green Revolution.

## Gains of Green Revolution: Significant but not Sufficient

Or

## Limitations of Green Revolution

Owing to Green Revolution, there was a significant rise in crop productivity. But, it was only in relation to our own record in the past. Compared to developed nations, the risen productivity was highly insignificant. Thus:

- in case of wheat, per hectare productivity in India was 3.4 tonnes, as against 6.5 tonnes in China and 9 tonnes in UK (in 2018).
- in case of rice, per hectare productivity in India was 2.4 tonnes, as against 6.8 tonnes in China (in 2018).

Following observations highlight the limitations (failures) of Green Revolution in India:

- (1) **Limited Crops:** Revolutionary rise in output (due to green revolution) is confined mainly to the production of foodgrains (wheat and rice). There has been no similar rise in the production of pulses and commercial crops like jute, cotton, tea, etc.
- (2) **Un-even Spread:** Spread of Green Revolution has not been uniform across all regions. In states like Punjab, Haryana, Maharashtra and Tamil Nadu, it made a remarkable impact. But in Eastern UP, Bihar, Madhya Pradesh and Odisha, its impact was relatively insignificant.
- (3) **Limited Farming Population:** The bulk of the farming population in India consists of small and marginal farmers. The gains of Green Revolution have eluded these farmers. Because, HYV technology require expensive inputs which are beyond the reach of marginal farmers.

However, rich farming population (though small in number) happens to own the bulk of farming area. Which is why the results of Green Revolution are found to be impressive in terms of overall rise in output.

- (4) **Economic Divide:** Thanks to Green Revolution, the economic divide—the gulf between the rich and the poor farmer—has substantially risen over time. Poverty is widespread and indebtedness is extremely high. Loan waivers are frequently offered. Yet, suicides among the farmers is emerging to be a serious challenge.

Briefly, while achievements of agrarian reforms (in terms of Green Revolution) are a laudable (praise-worthy), the gulf between 'haves' and 'have-nots' is a serious challenge in the Indian rural economy. Also, a big push of investment needs to be given to Indian agriculture to raise productivity levels at par with the advanced nations.

#### **Does India need another Green Revolution?**

'Yes' is an obvious answer. It is an undisputed fact that the gains of Green Revolution (of the 60's) have started shrinking. This is particularly true when the gains are viewed in relation to our needs and in relation to what other countries have achieved. Following observations would prove the need for yet another Green Revolution in the Indian agriculture:

- (i) Our productivity standards are extremely low compared to other nations.
- (ii) Our foodgrain stocks are at the point of uncertainty.
- (iii) Most farmers in India continue to face uncertainties of the weather.
- (iv) The farmers continue to be exposed to uncertainties of the market (which compels them to focus on unprofitable subsistence farming).
- (v) Loan waivers are becoming a recurring feature.

# Power Points & Revision Window

- **Importance of Agriculture in Indian Economy:** (i) Nearly 14.4 per cent contribution to GDP, (ii) A significant source of wage goods, (iii) A significant source of employment, (iv) A significant source of industrial raw material, (v) A significant source of demand for industrial goods, (vi) Substantial contribution to international as well as domestic trade, (vii) Support to transport industry, (viii) A significant source of national wealth in terms of land and related assets.
  - **Features of Indian Agriculture:** (i) Low productivity, (ii) Disguised unemployment, (iii) Dependence on rainfall, (iv) Subsistence farming, (v) Lack of modern inputs, (vi) Small holdings, (vii) Landlord-tenant conflict, (viii) Primitive technology.
  - **Problems of Indian Agriculture:** (i) Lack of permanent means of irrigation, (ii) Deficiency of finance, (iii) Conventional outlook towards farming, (iv) Small and scattered holdings, (v) Exploitative agrarian relations, (vi) Lack of organised marketing system.
  - **Agrarian Reforms in Indian Agriculture:** (i) Technical reforms, (ii) Institutional reforms (also called land reforms), and (iii) General reforms.
  - **Technical Reforms include:** (i) Use of HYV seeds, (ii) Use of chemical fertilizers, (iii) Use of insecticides and pesticides for crop protection, (iv) Scientific farm management practices, (v) Mechanised means of cultivation.
  - **Land Reforms include:** (i) Abolition of intermediaries, (ii) Regulation of rent, (iii) Consolidation of holdings, (iv) Ceiling on land holdings, (v) Cooperative farming.
  - **General Reforms include:** (i) Expansion of irrigation facilities, (ii) Provision of credit, (iii) Regulated markets and cooperative marketing societies, (iv) Price support policy.
  - **Achievements of Agrarian Reforms:** (i) Spurt in crop productivity, (ii) Substantial rise in acreage, or gross area under cultivation, (iii) Shift from subsistence farming to commercial farming, (iv) Change in farmers' outlook, (v) Self-sufficiency in foodgrain production.
  - **Green Revolution in Indian Agriculture:** It refers to a spurt in farm output during mid 60's, supported by: (i) a substantial rise in crop productivity, and (ii) a significant rise in gross area under cultivation. It was caused primarily by HYV technology, supported with the judicious use of chemical fertilizers, insecticides and pesticides.
  - **India needs yet another Green Revolution:** This is because, gains of Green Revolution of mid 60's have started shrinking, and because a mismatch between supply and demand of farm products is once again emerging to be a serious challenge.



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

## Choose the correct option:

1. Owing to agrarian reforms, productivity in the agricultural sector has tended to:

  - (a) rise
  - (b) fall
  - (c) remain constant
  - (d) none of these

2. Presently, what percentage of India's population depends on agriculture for their livelihood?

  - (a) More than 50%
  - (b) Between 40–50%
  - (c) Between 30–40%
  - (d) Less than 30%

3. Agrarian reforms refer to:

  - (a) technical reforms in agriculture
  - (b) land reforms in agriculture
  - (c) both (a) and (b)
  - (d) neither (a) nor (b)

4. Which of the following is the reason for the backwardness of agriculture in India?

  - (a) Deficient irrigation
  - (b) Dependence on rainfall
  - (c) Backward technology
  - (d) All of these

5. Consolidation of holdings refers to:

  - (a) conversion of scattered into a unified holding
  - (b) take over of small holdings by the government
  - (c) provision of inputs for higher output
  - (d) all of these

6. Price Support Policy focuses on:

  - (a) stability of farm output
  - (b) high price of farm output
  - (c) stability of income from farming
  - (d) stability of farm productivity

7. Use of chemical fertilizers has led to:

  - (a) rise in fallowing
  - (b) fall in fallowing
  - (c) rise in gross area under cultivation
  - (d) both (b) and (c)

8. Which of the following sector was the chief source of employment in the country on the eve of independence and continues to be so even today?

  - (a) Agriculture
  - (b) Manufacturing
  - (c) Industries
  - (d) Services

9. Disguised unemployment is a phenomenon inherent in which sector of the Indian economy?

  - (a) Services
  - (b) Manufacturing
  - (c) Industries
  - (d) Agriculture

10. Farming in India is subsistence-oriented for which category of farmers?

  - (a) Large farmers
  - (b) Small farmers
  - (c) Medium farmers
  - (d) All of these

11. Which of the following is a technical reform under the new agriculture strategy in agriculture in India?

  - (a) Regulation of rent
  - (b) Consolidation of holdings
  - (c) Ceiling on land holdings
  - (d) Use of chemical fertilizers

12. Which of the following is an institutional reform under the new agriculture strategy in agriculture in India?

  - (a) Expansion of irrigation facilities
  - (b) Ceiling on land holdings
  - (c) Use of HYV seeds
  - (d) Mechanised means of cultivation

13. Green Revolution in India is characterised by the following:

  - (a) Spurt in crop productivity
  - (b) Substantial rise in acreage
  - (c) Self-sufficiency in foodgrain production
  - (d) All of these

14. Which of the following is the limitation of Green Revolution in India?
- Un-even spread
  - Change in farmers' outlook
  - Self-sufficiency in foodgrain production
  - Mechanisation of agriculture

### Answers

- (a)
- (a)
- (c)
- (d)
- (a)
- (c)
- (d)
- (a)
- (d)
- (b)
- (b)
- (d)
- (a)

### B. Fill in the Blanks

#### Choose appropriate word and fill in the blank:

- Productivity means per hectare of land. (output/input)
- unemployment is the inherent characteristic of Indian agriculture. (Cyclical/Disguised)
- are the biggest institutional source of agricultural credit. (Commercial banks/Regional rural banks)
- For bulk of their financial needs, the small farmers depend upon sources. (institutional/non-institutional)
- Agricultural marketing is highly in India. (organised/unorganised)
- Use of insecticides and pesticides for crop protection is a/an reform in agriculture in India. (technical/institutional)
- With a view to reducing fragmentation, have been undertaken. (consolidation of holdings/ceiling on land holdings)
- Cooperative marketing societies have been established to enhance the bargaining power of the . (farmers/middlemen)
- is a practice of leaving land as uncultivated for some time, so that it regains its fertility. (Fallowing/Crop rotation)
- Spread of Green revolution uniform across all regions. (has been/has not been)
- Thanks to Green revolution, economic divide in the country has over time. (risen/fallen)

### Answers

- |                |                  |                              |                      |
|----------------|------------------|------------------------------|----------------------|
| 1. output      | 2. Disguised     | 3. Commercial banks          | 4. non-institutional |
| 5. unorganised | 6. technical     | 7. consolidation of holdings | 8. farmers           |
| 9. Fallowing   | 10. has not been | 11. risen                    |                      |

### C. True or False

#### State whether the following statements are True or False:

- Post independence, agriculture sector has been a significant contributor of GDP in India. (True/False)
- Cooperative farming is an automatic solution to fragmentation and sub-division of land holdings in India. (True/False)

3. Green revolution started happening in India in the year 1961-62. (True/False)
4. Land productivity is low when holdings are small. (True/False)
5. In the absence of organised agricultural marketing in the country, farmers are forced to sell their output in the local market at reduced rates. (True/False)
6. Green revolution has evenly spread across all the regions of the country. (True/False)
7. Abolition of intermediaries has been a technical reform in the system of agriculture in India. (True/False)
8. Indian agriculture continues to be rain-fed. (True/False)
9. With a view to promoting equity in the distribution of land, ceiling has been imposed on the holding size. (True/False)
10. Following Green revolution, a substantial rise in output has started generating marketable surplus. (True/False)

#### Answers

1. False    2. True    3. False    4. True    5. True    6. False    7. False    8. True    9. False    10. True

#### D. Matching/Chronological

##### I. From the set of statements given in Column I and Column II, choose the correct pair of statements:

Column I	Column II
(a) Agriculture sector	(i) An important source of demand for the industrial goods
(b) Subsistence farming	(ii) Generate surplus for investment
(c) Wage goods	(iii) Luxuries of life
(d) Regulation of rent	(iv) General reform in agriculture

#### Answer

(a) Agriculture sector — (i) An important source of demand for the industrial goods

##### II. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:

Column I	Column II
(a) Non-institutional sources of finance in Indian agriculture	(i) Technical reform in agriculture in India
(b) Scientific farm management practices	(ii) Institutional reform in agriculture in India
(c) Cooperative farming	(iii) To enhance the bargaining power of farmers in the market
(d) Cooperative marketing societies	(iv) <i>Mahajans</i>

#### Answers

(a)—(iv), (b)—(i), (c)—(ii), (d)—(iii)

## E. 'Very Short Answer' Objective Type Questions

1. What is support price?

Ans. It refers to the price at which the government is prepared to buy output of the concerned crop.

2. What is meant by disguised unemployment?

Ans. Disguised unemployment refers to hidden unemployment. It is a situation when more persons are engaged in farming than what is required to get the maximum output from a given piece of land.

3. What are land reforms?

Ans. Land reforms refer to reforms or changes in agriculture (brought about by the government) relating to:

(i) ownership of holdings,

(ii) landlord-tenant relationship,

(iii) land revenue, and

(iv) size of consolidation of holdings.

4. What is consolidation of holdings?

Ans. Consolidation of holdings means allotment of land to the farmer at one location, in lieu of his scattered pieces of land at several places.

5. What is ceiling on land holdings?

Ans. Ceiling on holdings refers to the maximum holding-size for an individual farmer as prescribed by the law.

6. What is cooperative farming?

Ans. Cooperative farming is a system wherein farmers voluntarily pool their resources for cultivating the soil. Also, they sell their output collectively. The idea is to minimise cost and maximise profit.

7. Define the concept of 'fallowing' in agriculture.

Ans. Fallowing is a practice of leaving land free of cultivation (for some time) so that it regains its fertility.

## 2. Reason-based Questions (Comprehension of the Subject-matter)

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**Read the following statements carefully. Write True or False with a reason.**

1. GDP growth often leads to decline in percentage contribution of agriculture to GDP.

Ans. True. It is basically because of this fact: Demand for agricultural goods is not as income elastic as the demand for industrial goods. As income of the people increases (following GDP growth), they tend to spend higher and higher percentage of it on industrial goods. Accordingly, demand for industrial goods expands faster than the demand for agricultural goods. The demand for services (the tertiary sector) also tends to expand. Following expansion of demand, more and more investment is induced in the secondary and tertiary sectors, rather than the primary sector. This leads to faster growth of the secondary and tertiary sectors, compared to the primary sector. Accordingly, there is a decline in percentage share of agriculture in GDP.

2. Land reforms are not related to technology and therefore do not contribute to increase in productivity in agriculture.

Ans. It is true that the land reforms are not related to technology. But it is not true to state that these reforms do not contribute to increase in productivity in agriculture. Land reforms (i) confer rights of ownership on the tillers of the soil, (ii) focus on the regulation of rent, (iii) aim at consolidation of holdings, and (iv) promote cooperative farming. These reforms prevent marginalisation of the tillers of the soil and promote their interest in farming. Accordingly, their contribution in raising farm productivity cannot be denied.

**3. Ceiling on holding-size promotes 'equity'.**

Ans. Yes, it is true that ceiling on holding-size promotes 'equity'. Ceiling sets the maximum limit upto which an individual farmer can hold land for cultivation. Once this limit is enforced, the government resumes the surplus land of the big farmers. The surplus land is distributed among the landless farmers or among the small and marginal holders of land (so that their holdings become economically and technically viable). This promotes 'equity'.

**4. Disguised unemployment is hidden unemployment and therefore is not a problem.**

Ans. False. Disguised unemployment is hidden unemployment, of course. But it is a serious economic problem. The problem relates to 'productivity' in agriculture. Because of disguised unemployment, marginal productivity of labour (productivity of an additional worker) tends to become zero. Add another worker to farming where there is disguised unemployment. You will find that his contribution to total output is zero. Likewise, if a worker is withdrawn from farming, total output will not fall. Deeper the disguised unemployment, larger is the number of unproductive workers. Thus, disguised unemployment is a sign of low productivity in agriculture.

**5. Marginal farmers are subsistence farmers.**

Ans. True, marginal farmers are subsistence farmers. Reason: The marginal farmers are so small farmers that they avoid exposing themselves to market-risks. Accordingly, they focus on subsistence farming—the farming which is not market-oriented, instead it is subsistence-oriented. Only those crops are grown which are needed for self-consumption by the farming families (even when commercial crops could yield good profit).

### **3. HOTS & Applications**

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**1. Features of Indian agriculture reveal the story of its backwardness. Do you agree?**

Ans. It is true that the features of Indian agriculture reveal the story of its backwardness. The notable features are: (i) low productivity, (ii) small size of holdings, (iii) subsistence-oriented farming, (iv) existence of disguised unemployment, and (v) use of backward technology. Each of these features points to the backwardness of Indian agriculture.

**2. Institutional reforms (Land reforms) have played a significant role in transforming Indian agriculture. How?**

Ans. Institutional reforms (land reforms) include: (i) conferment of ownership rights on the tillers of the soil, (ii) regulation of rent (iii) consolidation of holdings, (iv) ceiling on holdings and redistribution of surplus land, and (v) cooperative farming. These reforms have certainly brought about a transformation in Indian agriculture. Particularly, the abolition of intermediaries (the zamindars) and conferment of ownership rights on the tillers have led to stability of farming as an occupation. Redistribution of land has promoted 'equity'.

**3. How far would you rely on technology as a means to increase productivity in agriculture?**

Ans. Rise in productivity is basically related to the use of new technology. Technical reforms in India included: (i) use of HYV seeds, (ii) use of chemical fertilisers, (iii) use of insecticides and pesticides for crop protection, (iv) scientific farm management techniques, and (v) mechanised means of farming. Application of technical reforms has brought about a revolutionary rise in agricultural output in India (Green Revolution). However, technology as in its five components started above, has largely been used by the big holders. The small holders are still committed to conventional farming based on old technology. The new technology is beyond their means. Accordingly, they are to content with low yield and low income. It is required that inexpensive (labour-intensive) technology is developed to suit the needs and means of the small farmers.

Also, technology must be supplemented with the provision of institutional credit to the farmers. The farmers must also be provided facilities of warehousing and storage. Regulated markets (along with support price policy) are equally important. Above all, the government must offer crop insurance schemes to the farmers to ward-off the risks of droughts and floods. The non-technical support (in terms of the above facilities) will enhance ability of the farmers to adopt innovative technology to boost farm productivity.

## 4. Analysis & Evaluation

1. Now that agriculture in India has witnessed a Green Revolution, do you think we should shift our focus from agriculture to industrial development?

**Ans.** We should not think of shifting focus from agriculture to industry. Infact both the sectors are of distinct significance in the context of growth and development of the Indian economy. Unfortunately, after Green Revolution, the government in India became a little over-confident with regard to investments in agricultural sector. The focus was placed more on industry rather than agriculture. Consequently, there are emerging uncertainties of agricultural production, and there is no stability of income from farming. It is in the wake of such uncertainties that the growth rate of agricultural output has slumped to become notional or even negative. If there are examples of the farmers committing suicide and if this number is rising from scores to the centuries, then the loss of focus on agriculture cannot be dismissed simply as a criticism; it is to be accepted as a matter of fact. The government needs to seriously address this issue. Such a situation may lead to the re-emergence of food crises in India. Indeed, it is already contributing to hyper inflation of foodgrain prices in the country.

- 2 Do you think technical change in agriculture is more important than the institutional reforms?

**Ans.** Both, technical as well as institutional reforms are to be taken as complementary to each other. One cannot be taken as a substitute of the other. India has lacked in institutional reforms, particularly with regard to the size of holdings. Bulk of the farming population in India continues to be of 'small holders'. They are subsistence farmers, focusing on security of food for their families. They are wary of shifting to commercial farming. They lack means to adopt innovative techniques of production even when they are aware of such techniques which would cause a multiple rise in their farm output. Thus, we can say that while the role of technology is not denied in raising farm incomes, it must be supported with institutional reforms.

## 5. NCERT Questions (With Hints to Answers)

- ### 1. What are High Yielding Variety (HYV) seeds?

[Hint: HYV seeds are called miracle seeds as these seeds led to a revolutionary rise in productivity per hectare.]

- ## 2. What is marketable surplus?

[Hint: Marketable surplus refers to surplus of farmer's output over and above his 'on-farm consumption'. This surplus is available to the farmer for sale in the market. Hence, called marketable surplus.

Marketable Surplus of Wheat = Output of wheat – On farm consumption of wheat (or expected consumption of wheat by the farmer's family during the year.)]

3. Explain the need and type of land reforms implemented in the agriculture sector.

[Hint: With a view to tackling the problems of Indian agriculture, the government has taken a series of land reforms which include the following measures:

- (i) Abolition of intermediaries. (ii) Regulation of rent.

- (iii) Consolidation of holdings. (iv) Ceiling on land holdings.  
(v) Cooperative farming.]

**4. What is Green Revolution? Why was it implemented and how did it benefit the farmers? Explain in brief.**

[*Hint:* Green Revolution refers to a spurt in farm output during mid 60's, consequent upon the use of HYV seeds, chemical fertilizers and increase in crop productivity.]

Green Revolution focused on solving food problem in India. Besides, it was expected to raise the level of farm productivity, farm output and income from farming.

Green Revolution benefited the farmers in the following ways:

- (i) There has been a substantial jump in crop productivity.
- (ii) There has been a substantial rise in gross area under cultivation.
- (iii) Farmers have been prompted to gradually shift from subsistence farming to commercial farming because substantial rise in output (owing to increase in productivity and increase in acreage) has started generating marketable surplus.
- (iv) Commercialisation of agriculture has led to a change in outlook of the farmers. Now, farming is considered as a commercial venture, yielding profits rather than (merely) food for subsistence.]

**5. Explain the statement that Green Revolution enabled the government to procure sufficient foodgrains to build its stocks that could be used during times of shortage.**

[*Hint:* With the use of High Yielding Variety (HYV) seeds, the farmers were able to produce large quantity of foodgrains which were far more than their requirement for self-consumption. Those surplus quantities were purchased by the government to maintain the buffer stock to be used at times of food shortage due to natural calamities or due to war. Therefore, the Green Revolution enabled the government to procure sufficient foodgrains to build its stocks that could be used during times of shortage.]

**6. While subsidies encourage farmers to use new technology, they lead to a huge stress on the government finances. Discuss the usefulness of subsidies in the light of this fact.**

[*Hint:* —It is true that subsidies have facilitated the use of HYV technology leading to Green Revolution in India.

- In the absence of subsidies, it would have been impossible for the farmers (particularly the small farmers) to buy expensive inputs related to HYV technology.
- However, it is equally true that subsidies have caused a huge financial burden on the government.
- It is not only direct subsidies, but also the MSP (Minimum Support Price) which is a form of indirect subsidy which has mounted the government expenditure on agriculture.
- In fact, the financial burden on the government is further compounded when it is compelled to cope with 'loan waivers' for the farmers.
- Briefly, subsidies are useful when these are based on economic considerations of helping the 'small holders'. But these lead to a drain of wealth when based on political considerations, and when the rich farmers tend to benefit more than the poor.]

**7. Why, despite the implementation of Green Revolution, 65 per cent of our population continued to be engaged in the agriculture sector till 1990?**

[*Hint:* 65 per cent of our population continued to be engaged in the agriculture sector till 1990 because the industrial sector and the service sector failed to absorb the surplus labour in the agricultural sector.]

## 6. Miscellaneous Questions and Reference to the Text for Answers

1. "Agriculture is the backbone of Indian economy." Substantiate this statement. [Page 59–61]
2. Write your observations identifying the causes of backwardness of Indian agriculture. [Page 63–65]
3. Explain the problem of low productivity and small and scattered holdings in the context of Indian agriculture. [Page 61, 62, 64]
4. Enumerate the technical measures adopted to improve agriculture. [Page 66, 67]
5. What are the main land reforms undertaken in India? [Page 67, 68]



### ● Subsidies to the Farmers—A Debatable Issue

In India, new technology during 60's was packaged with subsidies to the farmers. It implied the supply of essential inputs to the farmers at rate lower than the market price. Initially subsidy was restricted to chemical fertilizers only. Subsequently, its scope was enlarged to include electricity as well. Continuation of subsidy has now become a debatable issue. Some are in favour of it, while the others are not.

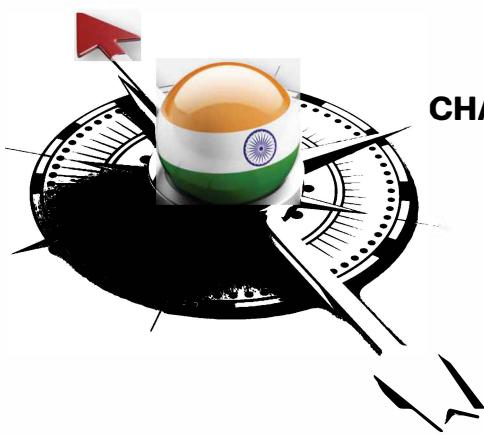
Those who suggest withdrawal of subsidy argue as under:

- (i) The objective of subsidy was to enable farmers to achieve economic viability of new technology. Now that the new technology has been widely adopted by the farmers, subsidy has done its job. It should no longer be offered.
- (ii) Subsidies on fertilizers are meant to help the farmers. But, by way of offering subsidy on the purchase of fertilizers, we are also helping the fertilizer industry. This industry is indirectly being offered the benefit of a 'market without competition'.
- (iii) Even rich farmers continue to enjoy the benefit of subsidy. Accordingly, they remain un-exposed to market competition.
- (iv) Subsidies, beyond a limit, encourage wasteful use of the resources. **Example:** Supply of free electricity to the farmers in Punjab has encouraged the use of electricity even for non-productive purposes, related to household needs. Subsidies, in such cases no longer remain an economic issue, it becomes a political issue.

Those who are in favour of subsidies argue this way:

- (i) Bulk of the farming population in India is poor. Withdrawal of subsidies would expose them to the uncertainties of the market for the purchase of essential inputs. Consequently, the farmers as well as their farming would suffer.
- (ii) Withdrawal of subsidies would enlarge the gulf between the rich and the poor farmers. The objective of 'equity' would be defeated.





## CHAPTER: 4

# STRATEGY OF INDUSTRIAL GROWTH (1947–1990)

TO DO

- *Importance of Industry*
- *Factors Necessitating Direct Participation of the State (Public Sector) in Industrial Development*
- *IPR—1956 (Industrial Policy Resolution—1956)—A Declaration on Leading Role of the State*
- *Development of SSI (Small-Scale Industry)—A Policy Instrument to Promote the Goals of Employment and Equity*

## I. IMPORTANCE OF INDUSTRY

Industry plays an important role in the context of growth and development of a country. Following points highlight the importance of industry in a developing economy like India:

(1) **Epicentre of Economic Growth:** Industry serves as the epicentre of economic growth. Note the following points carefully:

- ◆ As GDP rises, there is a structural transformation in the economy:
- ◆ Industry starts replacing agriculture as the engine of growth. This is because, unlike agriculture, industry produces a wide range of goods which the consumers would like to consume as their income rises.
- ◆ The rise in demand for agricultural goods consequent upon a rise in income is always very modest. Because, agricultural goods (like



rice and wheat) are the necessities of life and have low income elasticity of demand.

- ◆ Thus, industry replaces agriculture as an epicentre of growth.



Industry—A Significant Source of Employment

(2) **Source of Employment:** Industry is an important source of employment. This becomes significant when agriculture is already overburdened, and the labour force is rising rapidly.

In fact, with a rise in agricultural productivity, farming sector has released a large supply of labour force. It can be gainfully employed only in occupations outside agriculture. Industry plays an important role in this context.

(3) **Source of Mechanised Means of Farming:** Industry plays a crucial role in mechanisation of farming.

Use of machines (like tractors, threshers and harvesters) in farming has become possible only owing to the growth and development of industry.

Mechanisation has caused an exponential rise in farm productivity. It is owing to mechanisation in farming that India has succeeded in producing enough food for the second most populated country in the world.

(4) **Imparts Dynamism to Growth Process:** Industry imparts dynamism to growth process. This fact is supported with these observations:

- ◆ In the absence of industry, growth process would have been restricted to the production of food for survival.
- ◆ Industrialisation has added new dimensions to human life. It has generated a wave of consumerism (endless consumption of a wide variety of goods and services).

(5) **Growth of Civilisation:** Urbanisation (in the wake of industrialisation) has led to the growth of civilisation.

People become conscious of their quality of life. They work hard to achieve higher levels of education, and skill.

Culturally diverse societies are getting closer to each other. The world economies are merging into a Global Economy.

- (6) **Infrastructural Growth:** Industrialisation has led to infrastructural growth in the economy.

Industry tends to spread across different parts of the country. And, as it spreads, there is an expansion of infrastructural facilities (commonly used facilities by the industrial entrepreneurs) such as means of transport and communication, banking and insurance services, power (energy) and the like.

In fact, both (the industrial growth and infrastructural growth) are inter-linked. The growth of one escalates the growth of the other.

- (7) **Industrialisation—a Sine-qua-non of Growth:** Growth process and industrialisation are so intimately related to each other that industrialisation is often taken as a sine-qua-non of growth.

Implying that growth occurs as and when industrialisation spreads. It is a fact that most developed countries today are industrialised countries.

In fact, industrialisation has emerged as an inevitable route to the process of growth.

## 2. FACTORS NECESSITATING DIRECT PARTICIPATION OF THE STATE (PUBLIC SECTOR) IN INDUSTRIAL DEVELOPMENT

Along with the need to develop industry as the epicentre of growth, the planners and the politicians also realised that the process of industrialisation could not be left to the market forces of supply and demand. Also, it could not be left to the wisdom of private entrepreneurs. Direct participation of the state was considered essential in view of the following factors:

- (1) **Lack of Capital:** Industrial development in India needed a big push.

Implying a large amount of capital expenditure.

At the time of independence, Tata and Birla were the only established industrial houses in India. The requirement of capital for the country's industrial growth was far beyond the capacity of these industrial houses.

Accordingly, it became essential for the state (or the government) to achieve industrial growth through public sector undertakings.

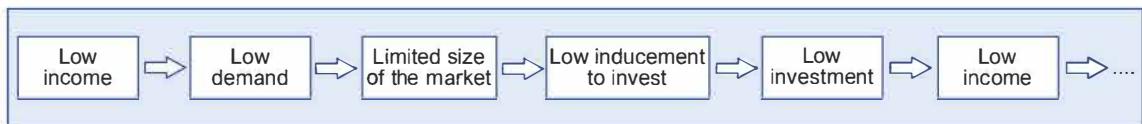
### Public and Private Sectors

■ **Public Sector** refers to those business enterprises which are controlled and run by the government. These are largely driven by considerations of social welfare.

■ **Private Sector** refers to those business enterprises which are controlled and run by private individuals. These are largely driven by considerations of profit-maximisation.

(2) **Low Inducement to Invest:** The private investors lacked inducement to invest. It was owing to limited size of the market. Limited size of the market was owing to low level of demand. Level of demand was low because of low level of income.

Thus, there was a sort of vicious circle operating like this:



Only a big push of public investment could break this vicious circle. Accordingly, public enterprises were the obvious choice to initiate the process of industrialisation.

(3) **Growth with Social Justice:** The government realised that this objective could be achieved only through direct participation of the state in the process of industrialisation. Because it requires investment that generates employment rather than investment that maximises profit.

Concentration of wealth was to be discouraged and public investment (rather than private investment) was considered as the best means to achieve it.

#### Control of Commanding Heights of the Economy

- Commanding heights of the economy refers to industries of strategic significance. These industries (including those like transport and communication) were of strategic significance because they provided an infrastructural base for the overall spread of industrialisation in the economy. The government decided to develop these industries as public sector undertakings.
- The 'commanding heights' also included industries of defence production which, owing to their strategic need of country's defence, could not be left in the hands of private entrepreneurs.

### 3. IPR–1956 (INDUSTRIAL POLICY RESOLUTION-1956)—A DECLARATION ON LEADING ROLE OF THE STATE

Industrial Policy Resolution 1956 was a clear declaration of the government on the leading role of the government in the process of industrialisation. This Resolution laid a roadmap of the Second Five Year Plan. Also, it was a milestone of achieving growth with social justice.

Following were the principal elements of IPR-1956:

(1) **Three-fold Classification of Industries:** Industries were classified into three categories:

- (i) Those which would be established and developed exclusively as public sector enterprises. These include atomic energy, defence and Railways.
- (ii) Those which could be established both as the private and public sector enterprises. However, the private sector was to play only a secondary role. New enterprises were to be established primarily in the public sector. This category includes fertilizer industry, mining industry, etc.
- (iii) All industries other than in categories (i) and (ii) were left to the private sector.

Thus, IPR-1956 clearly implied that the state was to spearhead (sponsor) the process of industrialisation in the economy.

(2) **Industrial Licensing:** Industries in the private sector could be established only through a licence from the government.

The basic idea of licensing policy was to encourage industry in backward regions of the country. This was to promote regional equality.

#### Licensing Policy to Promote Regional Equality

- ❑ Licensing policy of the government was to promote regional equality.
- ❑ Private entrepreneurs were expected to establish industry in backward regions of the country.
- ❑ Accordingly, licences were liberally issued for the backward regions rather than the developed regions of the country.

A licence was needed not only for establishing a new enterprise, but also for expanding production capacity of the existing ones. This was to regulate the allocation of resources to different uses. The focus was to promote social welfare rather than private profits.

(3) **Industrial Concessions:** The private entrepreneurs were offered many types of industrial concessions for establishing industry in the backward regions of the country. These concessions included:

- ◆ tax holiday (freedom from the payment of tax for sometime), and
- ◆ subsidised power supply.

Like the policy of industrial licensing, the industrial concessions were expected to promote regional equality.

## 4. DEVELOPMENT OF SSI (SMALL-SCALE INDUSTRY)—A POLICY INSTRUMENT TO PROMOTE THE GOALS OF EMPLOYMENT AND EQUITY

The process of industrialisation had two broad dimensions:

- (i) Growth of large-scale industry (like iron and steel, transport and communication) to generate infrastructural facilities, and
- (ii) Growth of small-scale industry to generate employment opportunities, besides social justice.

A small-scale industry is presently defined as one whose investment does not exceed ₹5 crore. At the beginning of Planning (1951) it was defined as one whose investment did not exceed ₹5 lakh.

The role of small-scale industry in achieving the goals of planning was underlined by Karve Committee (also called Village and Small-scale Industries Committee) in 1955. It underlined the significance of small-scale industries in terms of their **three principal characteristics** as under:

### Three Typical Characteristics of SSI



Small-scale Industry: Labour-intensive

**(1) SSI is Labour-intensive and therefore Employment Friendly:** Small-scale industry is generally considered to be labour-intensive, while large-scale industry is capital-intensive. To produce a given output, small-scale industry is expected to use more of labour than capital. A large-scale industry, on the other hand, uses more of capital than labour.

We inherited an economy from the British which was a 'capital-deficient economy' and a 'labour-surplus economy'. Accordingly, our planners rightly thought of achieving full employment by focusing on small-scale industry.

**(2) SSI shows Locational Flexibility and is therefore Equality- Oriented (referring to inter-regional equality):** Large-scale industry (like Bhilai Steels or Rourkela Steels) is often established close to the



Large-scale Industry: Capital-intensive

source of raw material. This is because raw material requirement of the large-scale industry is very huge. Its transportation from a distant place leads to high cost of transportation.

SSI, on the other hand, shows locational flexibility. It is therefore equality-oriented, contributing to balanced regional growth.

- (3) **SSI needs Small Investment and is therefore Equity-Oriented (referring to equality across different sections of the society):** SSI needs much smaller investment, compared to large-scale industry. Accordingly, it does not lead to concentration of economic power. Rather it promotes equality across different sections of the society. Equity is further promoted because of greater employment per unit of investment in SSI compared to large-scale industry.

### Salient Features of the Strategy of Industrial Growth during the Period 1950-1990 and its Good & Bad Effects

Principal features of the strategy of industrial growth during the period 1950-1990 were as follows:

- (i) Public enterprises were to play a central role in the process of industrialisation.
- (ii) Private enterprises were to play only a secondary role in the process of industrialisation and that too under Permit-Licence Raj. It was a system under which private entrepreneurs were to obtain a license for their industrial establishments, and in most cases were to produce goods within the legally prescribed limits of production capacity.
- (iii) Process of industrialisation focused on 'import substitution.' Implying that the production of such goods was to be accorded a high priority which were imported from rest of the world. The idea was to achieve self-reliance as well as to economise the use of foreign exchange.
- (iv) As far as possible, domestic industry was to be protected from foreign competition. Protection was to be offered through
  - (a) heavy duty on imports, and
  - (b) fixation of import quotas. It was realised that protection would foster the growth of the domestic industry.
- (v) Large-scale industry was to be developed with a view to building an infrastructural base in the country.
- (vi) Small-scale industry was to be developed with a view to achieving the objectives of employment and equity.

## **Good Effects**

This strategy of industrialisation yielded the following good effects:

- (i) Economic growth got a big push. Industrial output recorded a significant rise. There was about 6 per cent annual increase in output during the period 1950-1990.
- (ii) There was a marked diversification in the industrial sector. The then sunrise industry (electronics in particular) marked its emergence in the domestic economy.
- (iii) Growth of large-scale industry (like Rourkela and Bhilai Steel Plants) projected an infrastructural shift in the Indian economy. The Indian economy showed its ability to absorb the impact of large-scale industrialisation.
- (iv) Growth of SSI made a substantial contribution in achieving the objectives of growth with social justice.

Briefly, the overall growth pattern in the economy showed a marked thrust on socialistic pattern of society. Goals of Five Year Plans (growth, employment, modernisation, equity and self-reliance) emerged as the key parameters of growth and development.

## **Bad Effects**

Bad effects were as significant as good effects. These are under:

- (i) Public sector monopolies gradually turned out to be a 'dead social weight'. Inefficiency, corruption, leakage and pilferage emerged as their principal characteristics. By incurring huge losses, public sector enterprises led to inefficient use of scarce national resources.
- (ii) Protection of domestic industry stimulated its growth. But, it failed to achieve international standards of product-quality. Lack of competition prompted the domestic entrepreneurs to focus upon monopoly-control of the market. Growth through competition and diversification was conveniently avoided.
- (iii) Saving foreign exchange through import substitution (rather than generating it through export promotion) proved to be an inefficient policy instrument. Our foreign exchange reserves started shrinking, and by the end of 1990, these stocks reached their bottom. So much so that we had to pledge our gold reserves with the World Bank to salvage our borrowings.

With the passage of time, bad effects of the strategy of industrialisation started overshadowing the good effects. So much so, that the government was compelled to revisit the entire strategy of economic growth. This led to the emergence of NEP (New Economic Policy), the subject matter of chapter 6.

## Power Points & Revision Window

- **Importance of Industry in an Economy:** (i) Industry serves as the epicentre of growth, (ii) Industry is a source of employment, (iii) Industry offers mechanised means of farming, (iv) Industry imparts dynamism to growth process, (v) Industrialisation (along with urbanisation) leads to the growth of civilisation, (vi) Industry facilitates infrastructural growth, (vii) Industry—a sine-qua-non of growth.
- **Direct Participation of the State in the Process of Industrialisation** was favoured in view of the following facts: (i) There was lack of capital with private entrepreneurs, (ii) Private entrepreneurs lacked inducement to invest, owing to limited size of the market, and (iii) There was a growing realisation that the principal objective of planning (growth with social justice) could be achieved only through direct intervention by the state.
- **Industrial Policy Resolution (1956)** was an official declaration on the leading role of the government in the process of industrialisation. Private sector was assigned only a secondary role in the process of industrialisation. Industries in the private sector could be established only through a licence from the government.
- **Small-scale Industries (SSI)** were accorded high priority with a view to promoting the goals of 'employment' and 'equity'.
- **Three Important Characteristics of SSI:** (i) These industries are more labour-intensive than the large-scale industries. Accordingly, the planners relied on SSI for generating employment opportunities in the economy, (ii) SSI shows locational flexibility enabling them to achieve inter-regional equality, (iii) SSI needs small investment and therefore, do not cause concentration of wealth; instead, they promote equity.
- **Salient Features of the Strategy of Industrial Growth during 1950-1990:** (i) Public sector was to play a central role in the process of industrialisation, (ii) Private sector was to play a secondary role, and that too under Permit-license Raj, (iii) Process of industrialisation was to proceed in tandem with the key policy instrument of import substitution, (iv) Domestic industry was to be protected from foreign competition, (v) Large-scale industry was to be developed with a view to generating infrastructural base in the economy, (vi) SSI was to be developed to promote the objectives of employment and equity.
- **Strategy of Industrialisation generated Good Impact in terms of the following achievements:** (i) There was a marked rise in industrial output, (ii) Industrial sector was diversified, (iii) Large-scale industries (particularly in the area of iron and steel) were successfully launched, (iv) SSI recorded a substantial spread across different regions of the country.
- **Strategy of Industrialisation generated Bad Impact in terms of its following implications:** (i) Public sector monopolies started causing 'dead social weight', (ii) Protection shielded the domestic industry, but rendered it inefficient to cope with international competition, (iii) Relying upon import substitution, the forex (foreign exchange) reserves started dwindling.
- **Overtime, Bad Impact of the Strategy of Industrialisation started Overshadowing its Good Impact.** Accordingly, entire strategy of economic growth was revisited in the year 1991. It marked the beginning of NEP (New Economic Policy).



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

## Choose the correct option:

1. Which of the following statements is incorrect?
    - (a) Industry is the epicentre of growth
    - (b) Industry is an important source of employment
    - (c) Industry imparts dynamism to the process of growth
    - (d) Income elasticity of demand is higher in case of agricultural goods than the industrial goods
  2. Public sector enterprises are driven largely by considerations of:
    - (a) profit
    - (b) social welfare
    - (c) either (a) or (b)
    - (d) none of these
  3. Which of the following was an obstacle in the development of industries after independence?
    - (a) Lack of economic infrastructure
    - (b) Lack of inducement to invest
    - (c) Lack of capital
    - (d) All of these
  4. Industrial Policy Resolution, 1956 laid emphasis on the role of:
    - (a) public sector
    - (b) private sector
    - (c) joint sector
    - (d) none of these
  5. Which of the following is a typical characteristic of small scale industry?
    - (a) SSI is labour-intensive
    - (b) SSI shows locational flexibility
    - (c) SSI is capital-intensive
    - (d) both (a) and (b)
  6. Strategy of growth between the period 1951-90 focused on:
    - (a) import substitution
    - (b) export promotion
    - (c) leading role of public sector enterprises
    - (d) both (a) and (c)
  7. Investment limit for small scale industries is:
    - (a) ₹1 crore
    - (b) ₹2 crore
    - (c) ₹3 crore
    - (d) ₹5 crore
  8. The strategy of growth between 1951-90 gradually lost its significance, owing to:
    - (a) inefficiency of public sector enterprises
    - (b) inefficiency of private sector enterprises
    - (c) inefficiency of the government administrative departments
    - (d) all of these
  9. Which of the following highlights the importance of industry in a developing economy like India?
    - (a) Source of mechanised means of farming
    - (b) Epicentre of economic growth
    - (c) Infrastructural growth
    - (d) All of these

10. Which of the following were the factors that necessitated the direct participation of the state in industrial development of the country?
  - (a) Lack of capital
  - (b) Low inducement to invest on part of private investors
  - (c) Growth with social justice
  - (d) All of these
11. The basic idea of industrial licensing policy was to:
  - (a) ensure environment-friendly investment
  - (b) promote private investment in the economy
  - (c) encourage industry in the backward regions of the country
  - (d) none of these
12. Industrial concessions, offered for establishing industry in the backward regions of the country, include:
 

(a) tax holiday	(b) subsidised power supply
(c) both (a) and (b)	(d) none of these
13. Small-Scale Industries (SSI) are characterised by which of the following?
  - (a) SSI is labour-intensive and employment-friendly
  - (b) SSI shows locational flexibility
  - (c) SSI needs small investment
  - (d) All of these

#### **Answers**

- |         |         |         |        |        |        |        |        |        |         |
|---------|---------|---------|--------|--------|--------|--------|--------|--------|---------|
| 1. (d)  | 2. (b)  | 3. (d)  | 4. (a) | 5. (d) | 6. (d) | 7. (d) | 8. (a) | 9. (d) | 10. (d) |
| 11. (c) | 12. (c) | 13. (d) |        |        |        |        |        |        |         |

#### **B. Fill in the Blanks**

##### **Choose appropriate word and fill in the blank:**

1. \_\_\_\_\_ imparts dynamism to the growth process. (Agriculture/Industry)
2. Commanding heights of the economy refers to the industries of significance. (strategic/commercial)
3. Industrial Policy Resolution 1956 proposed a classification of industries in India. (three-fold/four-fold)
4. Licensing policy of the government was to promote . (regional equality/resource saving)
5. Small-Scale Industry (SSI) is . (labour-intensive/capital-intensive)
6. According to Industrial Policy Resolution 1956, was to play a key role in the process of industrial development in the country. (private sector/public sector)
7. Saving foreign exchange through import substitution proved to be an policy instrument. (efficient/inefficient)

#### **Answers**

- |                     |                  |                |                      |
|---------------------|------------------|----------------|----------------------|
| 1. Industry         | 2. strategic     | 3. three-fold  | 4. regional equality |
| 5. labour-intensive | 6. public sector | 7. inefficient |                      |

### C. True or False

State whether the following statements are True or False:

1. Industrialisation is often taken as a sine-qua-non of growth. (True/False)
2. On the eve of independence, capital required for country's industrial growth was abundantly available in the country. (True/False)
3. On the eve of independence, direct participation of the state in industrial development in the country was necessitated. (True/False)
4. Commanding heights of the economy also includes industries of defence production. (True/False)
5. Industrial Policy Resolution 1956 gave equal importance to private players in the industrial development process in the country. (True/False)
6. Large-scale industries show locational flexibility. (True/False)
7. Small-scale industries need small investment and are therefore, equity-oriented. (True/False)

#### Answers

1. True    2. False    3. True    4. True    5. False    6. False    7. True

### D. Matching/Chronological

I. From the set of statements given in Column I and Column II, choose the correct pair of statements:

Column I	Column II
(a) Agriculture	(i) Epicentre of economic growth
(b) Manufacturing	(ii) Source of industrial growth
(c) Industrialisation	(iii) Sine-qua-non for growth process
(d) Industrial concessions	(iv) A license was needed for establishing a new enterprise

#### Answer

- (c) Industrialisation — (iii) Sine-qua-non for growth process

II. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:

Column I	Column II
(a) Industry	(i) Led to the growth of civilisation
(b) Urbanisation	(ii) Capital-intensive
(c) Public sector	(iii) A source of employment
(d) Large-scale industry	(iv) Run and controlled by the government

#### Answers

- (a)—(iii), (b)—(i), (c)—(iv), (d)—(ii)

## E. 'Very Short Answer' Objective Type Questions

1. Define the policy of import substitution.
- Ans. It refers to the policy of domestic production of goods which the country is importing from rest of the world. It focuses on saving foreign exchange.
2. Define the policy of export promotion.
- Ans. It refers to the policy of exploring foreign demand for the domestically produced goods and services.
3. How is a small scale industry defined?
- Ans. A small scale industry is defined as the one of which investment does not exceed ₹ 5 crore.
4. What is meant by commanding heights?
- Ans. Commanding heights of the economy refers to industries of strategic significance.

## 2. Reason-based Questions (Comprehension of the Subject-matter)

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**Read the following statements carefully. Write True or False with a reason.**

1. Industrialisation leads to structural shift in the economy.
- Ans. It is true that industrialisation leads to structural shift in the economy. The epicentre of growth shifts from agriculture to industry. This is because the spread of growth requires the spread of demand. The demand potential is higher in case of industry (than agriculture). Because industrial goods show higher income elasticity of demand than the agricultural goods.
2. Growth of industry absorbs the surplus labour force of agriculture.
- Ans. True. Because when productivity rises in agriculture (owing to better technology) labour becomes surplus. Simultaneously, when the industry is expanding, the surplus labour (in agriculture) migrates to the urban areas for the industrial jobs.
3. SSI promotes balanced regional growth.
- Ans. True. Because SSI shows locational flexibility.
4. The policy of import substitution focuses on saving foreign exchange.
- Ans. True. Because this policy requires that we domestically produce such goods which we are importing from rest of the world.
5. SSI promotes equity.
- Ans. True. Because (i) SSIs are labour-intensive, so that the growth process becomes inclusive, and (ii) SSIs need small investment, so that the concentration of wealth is minimised.

## 3. HOTS & Applications

---

1. Explain the relative importance of large-scale and small-scale industry in the growth process of the Indian economy.
- Ans. Importance of Large-scale Industry:
- (i) It generates infrastructural base in the economy.
  - (ii) Large-scale industry induces the growth of small-scale industry. (Example: Car industry leads to the growth of small-scale industry making small components for the cars.)

- (iii) Large-scale industry promotes high-end technology which raises efficiency (productivity).
- (iv) Large-scale industry generates economies of scale (large-scale production leading to lower cost of production).

**Importance of Small-scale Industry:**

- (i) It generates more employment (than large-scale industries) as it is labour-intensive.
  - (ii) It promotes balanced growth as it shows locational flexibility.
  - (iii) It promotes equity as it minimises concentration of economic power.
- 2. Justify the direct participation of the state in industrial development of the country after independence.**

**Ans.** After independence, the industrial development of the country could not be left to the market forces of supply and demand. It needed direct participation of the government. Because:

- (i) the industrial development needed a big push of investment, which the private entrepreneurs could not afford,
  - (ii) there was low inducement to invest, owing to limited size of the market, and
  - (iii) the growth process placed high priority on socialistic pattern of the society (growth with social justice).
- 3. Large-scale industry is not a substitute of small-scale industry in the Indian economy. How do you view this statement?**

**Ans.** It is true that large-scale industry is not a substitute of small-scale industry in the Indian economy. The reasons are as follows:

- (i) Owing to massive poverty in the country, India must focus on employment generation. SSIs are more labour-intensive and therefore, must be accorded a priority over the large-scale industries.
  - (ii) India places high priority on growth with social justice. Doubtless, social justice (equity) is better promoted through SSIs, rather than large-scale industry.
  - (iii) Indian economy shows huge regional lopsidedness. It can be best addressed through SSIs.
- 4. Substantiate the statement that during the period 1951-90, good effects of the strategy of industrialisation were overshadowed by its bad effects.**

**Ans.** Good effect emerged in terms of the spread of large-scale industry in India. The contribution of industrial sector to GDP started rising. But the bad effect was more predominant: the public enterprises emerged as the breeding centres of corruption and inefficiency. The private sector failed to diversify. Foreign exchange reserves were reduced to a point of panic. GDP growth became uncertain. The economy suffered a huge 'trust loss' in the global markets.

- 5. Critically examine the strategy of industrialisation during the period 1950-90.**

**Ans.** [Hint] State the good effects and bad effects of the strategy of industrialisation during the period 1950-90. Also state how bad effects overshadowed good effects. It was owing to the overwhelming bad effects that we had planned a new strategy of growth, called 'New Economic Policy' in the year 1991.

## 4. Analysis & Evaluation

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### 1. Would you favour the idea of offering protection to the domestic industry?

Ans. Protection to the domestic industry implies its protection from global competition. It is achieved through the imposition of high tariff duty on imports. One may subscribe to this strategy so long as domestic industry is in the infant stage of growth reflecting high cost of production and low productivity. In such a situation, protection will provide a stable domestic market to the industry. But once the domestic industry is established and it starts generating surplus for reinvestment, it must be exposed to international competition so that it no longer exploits the domestic market like a monopolist. It is only when exposed to competition that the industry will diversify and modernise itself. Thus, while protection is recommended in the initial stages of growth, it would not be a prudent (rational) strategy once industrial growth becomes a self-sustaining process.

### 2. Can we depend on MNCs (Multinational Corporations) to achieve our objective of 'Inclusive Growth'?

Ans. Inclusive growth occurs when growth process generates employment so that the fruits of growth are widely shared by all sections of the society. MNCs use high-end technology which is labour-saving rather than labour-intensive. Accordingly, they are likely to contribute to 'jobless growth' rather than 'inclusive growth'.

## 5. NCERT Questions (With Hints to Answers)

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### 1. Why was public sector given a leading role in industrial development during the planning period?

[Hint: After independence, the industrial development of the country could not be left to the market forces of supply and demand. Instead public sector was accorded the leading role, laying stress on social welfare rather than profit maximisation. Following observations explain the need for it:

- (i) The industrial development needed a big push of investment, which the private entrepreneurs could not afford.
- (ii) There was low inducement to invest, owing to limited size of the market. Accordingly, private entrepreneurs were reluctant to come forward for the projects needing bulk investment.
- (iii) The growth process placed high priority on socialistic pattern of the society (growth with social justice). This contradicted with the primary objectives of profit maximisation of the private entrepreneurs.]

### 2. Though public sector is very essential for industries, many public sector undertakings incur huge losses and are a drain on the economy's resources. Discuss the usefulness of public sector undertakings in the light of this fact.

[Hint: Many public sector enterprises incurred huge losses but continued to function because it is very difficult, almost impossible, to close a government undertaking even if it is a drain on the nation's limited resources. This does not mean that private firms always remain profitable (indeed, quite a few of the public sector firms were originally private firms which were on the verge of closure due to losses; they were then nationalised to protect the jobs of the workers).]

### 3. Why and how was private sector regulated under the IPR-1956?

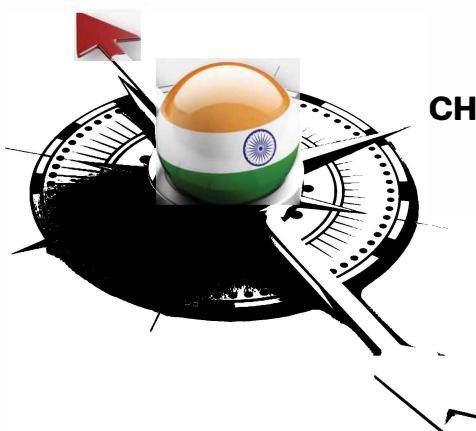
[Hint: It was to promote socialistic pattern of society that the private sector was regulated under the IPR-1956. The private sector was kept under state control through a system of licenses.]

## **6. Miscellaneous Questions and Reference to the Text for Answers**

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1. What is industrial licensing? How does it impact allocation of resources? [Page 87]
2. What was the principal objective of Industrial Policy Resolution, 1956? Did we really achieve it? [Page 86, 87, 90]
3. Why were small-scale industries relied upon to achieve the goal of employment and equity? [Page 88, 89]
4. What in your opinion are the bad effects of the strategy of industrial growth between the period 1947-90? [Page 90, 91]
5. What were the features of the Industrial Policy of 1956? [Page 86, 87]





## CHAPTER: 5

# INDIA'S FOREIGN TRADE

TO  
DO

- *What is International (Foreign) Trade?*
- *India's Foreign Trade at the time of Independence*
- *India's Foreign Trade after Independence*
- *Inward Looking Trade Strategy (Import Substitution Strategy)*

## I. WHAT IS INTERNATIONAL (FOREIGN) TRADE?

Domestic production of certain goods may exceed their domestic consumption. What does a country do with its surplus output (= Domestic production – Domestic consumption)? It exports it to other countries and earns money. Every country in the world exports certain goods and imports certain others. Export and import of goods and services across different countries is called international trade.



International Trade: Trade across the World

In the context of international trade, observe the following points:

- (i) While international trade is based on international specialisation, international specialisation is based on the principle of comparative cost advantage.
- (ii) A country specialises in the production of that good which it can produce at a cost lower than that in other countries.
- (iii) International trade, thus, facilitates export of goods to rest of the world at a price higher than in the domestic market.
- (iv) And, it facilitates import of goods at a price lower than in the domestic market. These are the gains of international trade.
- (v) Also, by offering a much wider size of the market (compared to the domestic market), international trade enhances opportunities of investment for the trading partners.
- (vi) Higher investment leads to higher GDP growth. Thus, it can be said that international trade serves as an engine of growth.

#### Gains of International Trade

- (i) International trade facilitates international specialisation.
- (ii) International trade helps finding markets (in rest of the world) for surplus domestic output.
- (iii) International trade facilitates import of essential goods and services which cannot be competitively produced in the domestic economy.
- (iv) International trade is an important means of earning foreign exchange, so essential for less developed countries to make developmental imports.
- (v) International trade promotes quality of life of the people of the trading countries. Because people get a variety of goods and services at the internationally competitive rates.
- (vi) International trade enhances opportunities of investment through expansion of the market.
- (vii) International trade serves as the engine of growth: it accelerates the pace of GDP growth.

## 2. INDIA'S FOREIGN TRADE AT THE TIME OF INDEPENDENCE

Note the following observations carefully for a glimpse of India's foreign trade at the time of independence:

- (i) Indian economy suffered its colonial exploitation during the British regime.
- (ii) The British used our natural resources as raw material for their domestic industrial output.

- (iii) Besides being a source of raw material, the Indian economy was also exploited as a market for the British industrial goods.
- (iv) Substantial exports of raw material from India gave some impetus to the volume of its international trade which had significantly declined owing to the decay of Indian handicrafts.
- (v) On the eve of independence, our balance of trade (exports – imports) was favourable (exports > imports).
- (vi) In 1946-47, excess of exports over imports were estimated as of ₹ 31 crore, though in 1947-48, the balance of trade had shrunk to ₹ 14 crore.
- (vii) As regards direction of trade, it was largely confined (restricted) to Britain, simply because, the British rulers exploited the Indian economy as a source of raw material and as a market for their exports.
- (viii) The composition of trade indicated backwardness of the economy as our exports included largely of raw material while our imports included largely of finished goods.

At the time of independence,

- (i) the **volume of international trade** was moderate, owing to the decay of Indian handicrafts during the British regime. However, the balance of trade was surplus (exports > imports),
- (ii) the **composition of trade** indicated backwardness of the Indian economy, as exports comprised largely of raw material and imports comprised largely of finished goods, and
- (iii) the **direction of trade** was restricted, largely between India and Britain.

### 3. INDIA'S FOREIGN TRADE AFTER INDEPENDENCE

Under planned programmes of development, India's foreign trade recorded a noticeable change. Following description offers a brief account of changes with respect to volume, composition and direction of trade.

#### Volume of Foreign Trade

Table 1 shows volume of India's foreign trade during different plan periods, starting with 1951.

#### What is Volume of Trade?

Volume of trade refers to the quantum (or value) of export and import of a country.

**Table 1. Volume of India's Foreign Trade during Different Plan Periods**

(₹ in crore)

Year/Period	Imports	Exports	Total
1st Plan (1951-56)	3,651	3,109	6,760
2nd Plan (1956-61)	5,402	3,063	8,465
3rd Plan (1961-66)	6,119	2,735	8,854
4th Plan (1969-74)	10,035	9,426	19,461
5th Plan (1974-79)	20,882	17,937	38,819
6th Plan (1980-85)	17,134	11,744	28,878
7th Plan (1985-90)	35,412	27,681	63,093
8th Plan (1992-97)	4,70,445	4,20,351	8,90,796
9th Plan (1997-2002)	11,75,975	8,59,530	20,35,505
10th Plan (2002-07)	26,58,294	19,52,041	46,10,335
11th Plan (2007-12)	78,68,723	49,44,356	1,28,13,079
12th Plan (2012-17)	1,31,89,647	90,01,485	2,21,91,132

[Source: Economic Survey 2017-18]

**Table 1** shows that the volume of India's foreign trade has increased considerably under Five Year Plans. It has risen from ₹ 6,760 crore in 1st plan to ₹ 2,21,91,132 crore in 12th plan, a rise of 3,282 times. During this period, while imports increased by 3,612 times, exports increased by 2,895 times.

#### Base Effect

It refers to the impact of base year value of a variable on its percentage change over time. Smaller the base year value, higher would be the percentage for a given absolute change in the value of the variable.

It seems to be an impressive story. However, there are elements of distress in this story. Following observations need to be noted in this regard:

- (i) Percentage rise in exports and imports has been high owing to the 'base effect'. It means, initially the volume of exports and imports was very low. Accordingly, even a small increase in the total volume shows a significant rise in terms of percentage rise.
- (ii) While over time India's exports and imports have tended to rise, India's share in the global trade has tended to decline. It declined from 1.8 per cent in 1950-51 to 0.5 per cent in 1991.
- (iii) It is only after the initiation of economic reforms that India's share in the world trade has tended to improve. In 2017-18, India's share in export trade was 2.1 per cent and in import trade it was 2.6 per cent.
- (iv) Again, it is only after the initiation of economic reforms that change in the volume of trade has become significant.

## Composition of Foreign Trade

Composition of trade refers to items of exports and imports. After independence, there has been a substantial change in the composition of India's foreign trade. Following observations highlight the principal changes with regard to export and import items of India's foreign trade:

(1) **Decline in Percentage Share of Agricultural Exports:** There has been a significant decline in percentage share of agricultural items in total exports. It happened owing to the facts:

- (i) that India started using its farm products as raw material for its domestic industry, and
- (ii) that a substantial rise in India's population has raised the domestic consumption of farm products.

(2) **Decline in Percentage Share of Conventional Items:** Conventional items of India's exports include jute, tea, foodgrains and minerals. These items constituted the bulk of India's exports at the time of independence. But with planned development programmes in place, domestic demand for the conventional items has tended to rise. Accordingly, their share in total exports has tended to fall.

(3) **Increase in Percentage Share of Manufactured Goods:** Percentage share of manufactured goods in total exports has tended to rise. Presently, gems and precious metals, machinery and vehicles are the notable exports of India. This points to the fact that planned development programmes (launched after independence) have started yielding results.



Gems and Jewellery—Notable Exporting Category of India

These changes in the composition of India's foreign trade suggest that India is no longer a static and backward economy. That the Indian economy is no longer merely an agrarian economy. **It is showing significant signs of structural transformation: from the predominance of primary sector to that of secondary and tertiary sectors.**

## Direction of Foreign Trade

Following observations present a brief account of the direction of India's foreign trade since 1951:

### What is Composition of Trade?

The composition of trade refers to the types of goods and services we export and import.

### What is a Agrarian Economy?

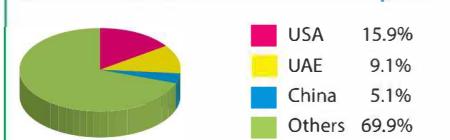
- An agrarian economy is that type of the economy which depends on agricultural sector including livestock farming or crop production.
- It is that form of the economy where major factor of production is the agricultural land.

### What is Direction of Trade?

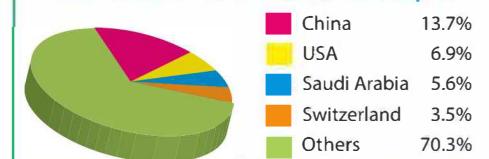
Direction of trade refers to the countries to which a country exports its goods and services and the countries from which it imports.

- (i) Since 1951, direction of India's foreign trade has also undergone a substantial change. List of our trading partners has tended to expand over time, which points to our stronger foothold in the international markets.
- (ii) Presently, our major trading partners are: UAE, China, USA, Switzerland, Singapore, Australia, Iran, Hongkong, Korea, Indonesia, UK, Japan and Belgium. This is in sharp contrast to pre 1951 scenario when our international trade was confined (restricted) largely to UK, USA and commonwealth countries.
- (iii) A notable feature of the directional pattern of India's foreign trade is that in the recent years, UAE has emerged as our leading trading partner. USA, which was our leading partner till 2007-08, continues to remain so, followed by UAE and China.
- (iv) USA's share in India's exports during 2018-19 was recorded to be 15.9 per cent, while that of UAE was 9.1 per cent. Likewise, China's share in India's export was recorded to be 5.1 per cent.
- (v) As far as India's import is concerned, China has occupied first position with 13.7 per cent share, followed by USA (6.9 per cent), Saudi Arabia (5.6 per cent), and Switzerland (3.5 per cent).
- (vi) Saudi Arabia has also emerged as our significant trading partner, recording about 4 per cent share in India's foreign trade between 2010-11 and 2018-19.
- (vii) It is interesting to note that in the wake of globalisation and free trade, Chinese goods have dominated the Indian markets much more than the Indian goods in the Chinese markets. Consequently, our imports from China have risen much more than our exports to China. So that, China has succeeded much more than India in harnessing the gains of international trade.

Share of Different Countries in India's Exports



Share of Different Countries in India's Imports



## 1991—A Year of Divide

Study of the behaviour of India's foreign trade brings out a significant point: that the volume of trade has tended to gain momentum only after 1990 (see [Table 1](#) for a statistical support to this point). Why? It is because:

- (i) Till 1990 we were relying on a different trade strategy.
- (ii) We were relying on '[Inward Looking Trade Strategy](#)' which failed to yield the desired results.
- (iii) It was only in 1991 that we shifted to the strategy of export promotion, which triggered a rise in our exports and imports.

## 4. INWARD LOOKING TRADE STRATEGY (IMPORT SUBSTITUTION STRATEGY)

Inward looking trade strategy refers to the policy of reliance on '[import substitution](#)' and protection to the domestic industry through import restrictions and import duties in the area of international trade. Note these points carefully:

- (i) Import substitution implies domestic production of those goods which the economy has been importing from rest of the world. This is a strategy to save foreign exchange by restricting the volume of imports.
- (ii) Foreign exchange (being extremely scarce) was to be utilised for developmental imports (referring to import of such plant and machinery which is essential for growth and development but cannot be produced domestically, owing to the lack of technology or the lack of investment funds).
- (iii) By adopting inward looking trade strategy, the government preferred to economise the use of foreign exchange (through import substitution) rather than maximise the generation of foreign exchange (through export promotion).
- (iv) Also, the government wanted to protect the domestic industry from international competition.

### Forms of Protection

Protection from imports took two forms:

- **Tariffs:** A tariff is a duty on the imported commodity. It directly increases the price of imported commodities thereby offering protection to the domestic producers from foreign competition.
- **Quotas:** Under it, the government fixes the quota of import of different goods from different countries. Thus, the quota is fixed keeping in view the needs of the country.

Both tariff and quota restrict the imports and, thereby, protect the domestic producers from foreign competition.

### Import Substitution and Export Promotion Strategies

- ❑ **Import Substitution** is a strategy to save foreign exchange by encouraging domestic production of such goods which the country has been importing from rest of the world. Domestic industry is offered protection from foreign competition through import restrictions and import duties.
- ❑ Contrary to it, **Export Promotion** is a strategy to earn foreign exchange by promoting domestic exports and making domestic industry competitive in the international market.

## **Impact of Inward Looking Trade Strategy on the Domestic Industry**

India pursued a trade strategy to protect its domestic industry from foreign competition, called Inward Looking Trade Strategy. It had both good as well as bad impact on the industrial health of the economy. Following is a brief description of the good and bad impacts of inward looking trade strategy pursued in India prior to 1991 (when New Economic Policy was launched).

### **Good Impact**

Following observations highlight the good impact of inward looking trade strategy:

**(1) High Rate of Industrial Growth with Structural Transformation:**

Despite Green Revolution, the percentage contribution of industrial sector to GDP increased from nearly 12 per cent in 1951 to nearly 25 per cent in 1991.

Rising share of industrial sector in GDP is a sign of economic growth based on structural transformation in the economy.

#### **Structural Transformation**

- ❑ Structural transformation occurs when there is a rise in the percentage share of secondary and tertiary sectors in GDP and the corresponding fall in the percentage share of the primary sector.
- ❑ Economic growth along with structural transformation is called economic development. It achieves the objective of growth with modernisation, equity and greater opportunities of employment.

**(2) Diversification of Industrial Growth:** The period 1950-1990 saw diversification of industrial growth, as indicated by the following observations:

- ◆ Modern industry was no longer confined to textile and jute. Thanks to ‘inward looking trade strategy’, industrial growth started spreading across engineering goods and a wide range of consumer goods.
- ◆ Owing to the inward looking trade strategy, there was a noticeable growth of the then sunrise industry, *viz.*, electronic industry. It is widely recognised that electronic industry would have failed to take roots in the domestic economy, had the policy of ‘protection’ not been pursued.
- ◆ Growth of automobile industry in India is also ascribed to the inward looking trade strategy. Exposed to international competition, these industries would have failed to survive.

### Growth of Sunrise Industry

- ❑ Rising industry of the time is called sunrise industry.
- ❑ 1950-1990 was an era of electronic goods industry in the global market. Therefore, electronic industry was then called 'Sunrise Industry'. Industrialisation tends to spin around the sunrise industry.
- ❑ If protection was not granted to this industry during its initial phase of growth, it would have failed to sustain the impact of competition in the international market.
- ❑ No wonder, that the government provided protection to this industry by imposing a very heavy import duty on the import of electronic goods which was as high as 400 per cent in the initial stages.

(3) **Opportunities of Investment:** Protection to SSI (Small-Scale Industry) opened new opportunities of investment for those who did not have much capital.

It also implied the use of latent resources in the country which otherwise would have remained idle.

New investment opportunities implied new opportunities of self-employment. It promoted growth with equity.

### Use of Latent Resources

- ❑ Latent resources refer to potential resources. These are the resources which remain hidden and therefore idle. These are hidden simply because they fail to find their productive use.
- ❑ The policy of protection offered small savers in India an opportunity to use their latent resources (savings) as productive investment in small-scale industry. The small savers were not having enough capital to start large-scale industry. Accordingly, in the absence of protection to small-scale industry, the latent resources would have remained unutilised.

## Bad Impact

Following observations highlight the bad impact of inward looking trade policy on domestic industry:

(1) **Growth of Inefficient Public Monopolies:** Protection of public sector industry led to the growth of inefficient monopolies.

Telecommunication was a Government Monopoly till about 1990. We all know that people had to wait for years and years just for a telephone connection.

But, now you get repeated SMS offering you a new telephone connection free of charge.

(2) **Lack of Competition implied Lack of Modernisation:** Old users of cars still remember that Ambassador and Fiat were the only two models produced by the domestic industry in India.

No doubt that the domestic car industry flourished as a near-monopoly, owing to the policy of protection. But, prolonged protection failed to prompt the domestic producers to upgrade or modernise their products.

Consequently, Fiat and Ambassador continued to be owner's pride as long as the policy of protection was pursued. And, after the policy of protection was withdrawn, people rejected these cars as a good riddance.

**(3) Indiscriminate Spread of Public Sector Enterprises:** The period 1950-1980 was marked with a trend to do anything and everything through public sector undertakings. So much so that the public sector undertakings, in their bid to play the role of a crusader, started swallowing up opportunities of investment for the private entrepreneurs.

One can appreciate commanding heights of the economy to be public sector undertakings, but one fails to understand the logic when public sector enterprises start producing bread and shoes. It amounts to an indiscriminate spread of public sector enterprises.

*Indiscriminate spread of public sector enterprises in producing such goods as bread and shoes (which could easily be left to the private enterprises) implied*

- (i) indiscriminate and irrational use of public resources, and*
- (ii) swallowing up opportunities of investment for the private entrepreneurs.*

**(4) Economically Unviable State Enterprises—A Political Compulsion:**

Any private sector enterprise would ultimately shut-down if found to be an economically unviable unit. But, in case of public enterprises, it always has been a political compulsion to bear the losses and continue operating unviable enterprises.

Trade unions and politicians opposed shutting down the unviable public enterprises on the pretext of social injustice to the workers.

Gradually, the government started realising that the bad impacts of inward looking trade policy (along with other features of the strategy of growth) were over-shadowing the good impacts. Accordingly, by the end of 1990, the government started giving a serious thought to NEP (New Economic Policy) which was put in place in 1991. Discussion of NEP is the subject matter of chapter 6.

# Power Points & Revision Window

- **International Trade** refers to export and import of goods and services across different countries of the world. It is based on international specialisation and the principle of comparative cost advantage.
  - **Gains of Trade** refer to the benefits of trade to the trading partners. Broadly, international trade opens new vistas of growth for the trading countries. It is a sine-qua-non of economic growth and global prosperity.
  - **At the time of Independence, volume of India's foreign trade** was moderate; **composition of trade** pointed to a stagnant and backward economy (as largely, raw material was exported and finished goods were imported); **direction of trade** was not so diversified (it was confined largely to Great Britain, followed by USA).
  - **After Independence**, there was a substantial increase in the volume of international trade, a noticeable change in the composition of trade and a marked change in the direction of trade. India emerged as an important destination for the import of plant and machinery to feed its development programmes.
  - **1990 was the Year of Divide.** Till the end of 7th Plan (1990), increase in the volume of trade was rather dismal. It was owing to Inward Looking Trade Strategy. After 1990, trade started surging with the adoption of New Economic Policy.
  - **Inward Looking Trade Strategy** refers to the policy of 'import substitution' and protection to the domestic industry through import restrictions and import duties. Contrary to it, outward looking trade strategy refers to the policy of 'export promotion' through competitive production environment in the domestic economy.
  - **Good Impact of Inward Looking Trade Strategy:** (i) High rate of industrial growth with structural transformation, (ii) Diversification of industrial growth, (iii) Wide opportunities of domestic investment.
  - **Bad Impact of Inward Looking Trade Strategy:** (i) Growth of inefficient public monopolies, (ii) Lack of competition, implied lack of modernisation, (iii) Indiscriminate spread of public sector enterprises, (iv) Growth of economically unviable state enterprises.



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

### Choose the correct option:

3. Which of the following countries is the largest trading partner of India?
  - (a) US
  - (b) UK
  - (c) UAE
  - (d) China
4. India's share in world export is:
  - (a) less than 1%
  - (b) 1%
  - (c) 2%
  - (d) 3%
5. Types of goods and services we export and import is called:
  - (a) composition of trade
  - (b) direction of trade
  - (c) balance of trade
  - (d) none of these
6. The countries to which a country exports its goods and services and the countries from which it imports refers to:
  - (a) composition of trade
  - (b) direction of trade
  - (c) balance of trade
  - (d) none of these
7. A strategy to earn foreign exchange by promoting domestic exports and making domestic industry competitive in the international market is called:
  - (a) inward looking strategy
  - (b) outward looking strategy
  - (c) import substitution strategy
  - (d) none of these
8. A strategy to save foreign exchange by encouraging domestic production of such goods which the country has been importing from rest of the world is called:
  - (a) inward looking strategy
  - (b) outward looking strategy
  - (c) export promotion strategy
  - (d) none of these
9. Inward looking trade strategy relies on:
  - (a) export promotion
  - (b) import substitution
  - (c) both (a) and (b)
  - (d) none of these
10. The strategy to earn foreign exchange by promoting domestic exports and making domestic industry competitive in the international market is called:
  - (a) export promotion
  - (b) import substitution
  - (c) export liberalisation
  - (d) import restriction
11. The rise in percentage shares of secondary and tertiary sectors in GDP and the corresponding fall in the percentage share of the primary sector is called:
  - (a) economic calibration
  - (b) industrialisation
  - (c) structural transformation
  - (d) economic adjustment
12. Which of the following instrument of trade protection directly raises the price of the commodity in the domestic economy?
  - (a) Import tariff
  - (b) Export subsidy
  - (c) Import substitution
  - (d) Import liberalisation
13. Which of the following industry will be classified under sunrise industry prior to 1991?
  - (a) Food processing industry
  - (b) Electronics industry
  - (c) Both (a) and (b)
  - (d) None of these

**Answers**

1. (d)      2. (a)      3. (a)      4. (c)      5. (a)      6. (b)      7. (b)      8. (a)      9. (b)      10. (a)
11. (c)     12. (a)     13. (b)

## B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. At the time of independence, the direction of trade was restricted, largely between India and (Greece/Britain)
2. Indian economy suffered its colonial exploitation during the regime. (Mughal/British)
3. India's highest exporting category of goods are . (petroleum products/engineering goods)
4. trade enhances opportunities of investment through expansion of the market. (Internal/International)
5. On the eve of independence, the economy. indicated the backwardness of the Indian (composition of trade/volume of trade)
6. Till 1990, we were relying on trade strategy. (inward looking/outward looking)
7. is a strategy to save foreign exchange by encouraging domestic production of such goods which the country has been importing from the rest of the world. (Import substitution/Import liberalisation)
8. Structural transformation occurs when there is a in percentage share of industrial and service sectors in GDP of the country. (fall/rise)
9. Latent resources refer to resources. (actual/potential)
10. Protection of public sector led to the growth of monopolies. (efficient/inefficient)

## Answers

- |                         |              |                       |                        |
|-------------------------|--------------|-----------------------|------------------------|
| 1. Britain              | 2. British   | 3. petroleum products | 4. International       |
| 5. composition of trade |              | 6. inward looking     | 7. Import substitution |
| 8. rise                 | 9. potential | 10. inefficient       |                        |

## C. True or False

State whether the following statements are True or False:

1. Domestic production of certain goods may exceed their domestic consumption. (True/False)
2. International trade facilitates international specialisation. (True/False)
3. Internal trade enhances opportunities of investment through expansion of the market. (True/False)
4. At the time of independence, the volume of trade was moderate, owing to decay of Indian handicrafts during the British regime. (True/False)
5. Even after more than seven decades of independence, the composition of India's foreign trade has remained the same. (True/False)

6. Import tariff lowers the price of imported commodity in the domestic economy. (True/False)
7. Both import tariff and quota restricts the imports and, thereby, protect the domestic producers from foreign competition. (True/False)
8. Export promotion is a strategy to earn foreign exchange by promoting domestic exports. (True/False)
9. Any private sector enterprise would continue functioning even if found to be an economically unviable unit. (True/False)
10. Gains of trade refer to the benefit of trade arising out of import and export of goods and services across different countries of the world. (True/False)
11. Till 1990, India was relying on 'outward looking' policy as the strategy of trade. (True/False)
12. Under import quotas, government fixes the quota of import of different goods, keeping in view the needs of the country. (True/False)

### Answers

1. True    2. True    3. False    4. True    5. False    6. False    7. True    8. True    9. False    10. True  
 11. True    12. False

### D. Matching/Chronological

#### I. From the set of statements given in Column I and Column II, choose the correct pair of statements:

Column I	Column II
(a) Import quota	(i) Lowers the price of the imported commodity
(b) Latent resources	(ii) Actual resources
(c) Protection to Small-Scale Industries (SSI)	(iii) Opened new opportunities of investment for those who did not have much capital
(d) Direction of trade	(iv) Quantum of export and import of a country

### Answer

- (c) Protection to Small-Scale Industries (SSI)—(iii) Opened new opportunities of investment for those who did not have much capital

#### II. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:

Column I	Column II
(a) Inward looking trade strategy	(i) A strategy to earn foreign exchange
(b) Import tariff	(ii) Items of exports and imports
(c) Export promotion	(iii) Reliance on import substitution
(d) Composition of trade	(iv) Increases the price of imported commodity

### Answers

- (a)—(iii), (b)—(iv), (c)—(i), (d)—(ii)

## E. 'Very Short Answer' Objective Type Questions

1. Define international trade.

Ans. International trade refers to the export and import of goods and services across different countries of the world.

2. What do you mean by 'gains of trade'?

Ans. Gains of trade refer to the benefits of trade arising out of export and import of goods and services.

3. What is volume of trade?

Ans. Volume of trade refers to the quantum (or value) of export and import of a country.

4. What is direction of trade?

Ans. Direction of trade refers to the countries to which a country exports its goods and services and the countries from which it imports.

5. What is composition of trade?

Ans. The composition of trade refers to the types of goods and services we export and import.

6. What is export promotion?

Ans. Export promotion is a strategy to earn foreign exchange by promoting domestic exports and making domestic industry competitive in the international market.

7. What is import substitution?

Ans. Import substitution is a strategy to save foreign exchange by encouraging domestic production of such goods which the country has been importing from rest of the world.

8. What is trade surplus?

Ans. Trade surplus occurs when export > import.

9. Before 1991, which country did India have the highest exports and imports with?

Ans. Before 1991, India had the highest exports and imports with the USA.

10. Define the concept of 'protection' in the context of international trade.

Ans. It refers to the policy of protecting domestic industry from international competition in the domestic market. Domestic market for the foreign goods is restricted through high import duty.

## 2. Reason-based Questions (Comprehension of the Subject-matter)

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Read the following statements carefully. Write True or False with a reason.

1. International trade is based on the principle of comparative cost advantage.

Ans. True. Because a country specialises in the production of that commodity for which its cost of production is less than that in most other countries of the world.

2. International trade yields gain only to the exporting trading partner.

Ans. False. International trade yields gain both to the exporting as well as importing trading partners. While exporters get market for their surplus output, importers are able to get goods cheaper than their cost of production in the domestic economy.

3. After independence, percentage rise in our exports has been significant, even when the volume of exports continues to be low.
- Ans. True. Percentage rise in exports has been significant because of the 'Base Effect'. The volume of exports during the base year (the year of comparison) has been extremely low. Accordingly, even a small rise in the volume would mean a high percentage rise.
4. Inward looking strategy of growth led to monopolistic exploitation of the market.
- Ans. True. Because, inward looking strategy offered protection to the domestic industry from foreign competition. In the absence of competition, domestic industry started monopolistic exploitation of the market.
5. Export promotion saves foreign exchange.
- Ans. False. Export promotion earns foreign exchange through expansion of exports.

### **3. HOTS & Applications**

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1. India's exports have declined even when rupee has depreciated in the recent past. How do you explain this fact?
- Ans. With the depreciation of rupee, a unit of foreign currency (say one US \$) can buy more goods in the domestic market. Accordingly, exports should have risen. But, paradoxically, exports have tended to decline. The reason is that the global economies (particularly China) are slipping into a state of recession. Because of recession, demand for goods and services in the international market has tended to decline. Accordingly, Indian exports have suffered a setback, despite the fact that the rupee has depreciated.
2. How GDP growth is linked with foreign trade of a country?
- Ans. In case foreign trade of a country remains subdued, and its exports are not significant, then certainly it is not generating enough demand for the domestic goods in the international market. Low demand leads to low investment and therefore, low GDP growth.
- Foreign trade has failed to emerge as an engine of GDP growth in the Indian economy. This is unlike the economy of China which has shown a tremendous growth of exports over time. Slow growth of India's exports is attributed largely to the lack of competitive strength of the Indian goods in the international market.
3. How has the shift from inward looking strategy to outward looking strategy impacted India's exports in the post NEP era?
- Ans. Inward looking strategy places a focus on import substitution, while outward looking strategy places a focus on export promotion. Inward looking strategy protects domestic industry from foreign competition. Taking advantage of this situation, the domestic producer avoided diversification. This led to loss of competitiveness in the global market. Accordingly, exports did not rise. When the economy shifted to outward looking policy, the Indian industry was exposed to international competition. Radical changes were brought about in the domestic industry by way of upgradation of production technology and managerial techniques. This led to a noticeable rise in India's exports in the NEP era. However, this rise (though relatively significant compared with our past performance) has not been 'absolutely' significant to cause any dramatic shift in India's GDP growth.

4. How significant is foreign trade in the context of growth and development of an underdeveloped economy like India?
- Ans. Foreign trade plays a significant role in the context of growth and development of an underdeveloped economy like India. Notable observations in this regard are as under:
- (i) Foreign trade offers a huge market for the goods produced in the domestic economy of less developed countries.
  - (ii) It offers opportunities of investment in the international markets. Less developed countries can benefit by offering their markets as a profitable destination for FII (Foreign Institutional Investment) and FDI (Foreign Direct Investment).
  - (iii) For the less developed countries, foreign trade facilitates specialisation in the production of those goods in case of which they enjoy comparative cost advantage.
  - (iv) Foreign trade is a source of foreign exchange, so very badly needed by the less developed countries to boost their growth and development.
  - (v) Foreign trade facilitates the import of high-tech plant and machinery which the less developed countries must obtain to trigger their GDP growth.

#### **4. Analysis & Evaluation**

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1. Should India rely more on 'import substitution' rather than 'export promotion' to improve its balance of trade (export – import of goods)?
- Ans. In the wake of globalisation (when market economies are increasingly shifting to the policy of free trade, and tariffs are being moderated) the policy of import substitution (supported with protection to the domestic industry) is no longer a viable option. India has to rely on the policy of export promotion to improve its balance of trade. However, we can certainly focus on greater domestic output so that our import bills are reduced. But it would be more through competition rather than the policy of protection (through tariffs).
2. Exports from India have tended to lag behind our imports. What do you think is the principal reason behind it?
- Ans. We have failed to promote our exports to the desired extent basically because of our low competitive power in the international market (owing to high domestic cost of production). On the other hand, imports have continued to expand largely because these are of essential goods (like oil and defence goods).
3. A massive fall in crude oil price has also led to a fall in our exports. Specify one possible reason for this fact.
- Ans. It is true that a massive fall in crude oil price has contributed to a fall in our exports. The most important reason for it is that a fall in crude oil price has led to a fall in income of the oil producing countries (the Gulf countries). Accordingly, their demand for our products has declined. Implying a fall in our exports.

## 5. NCERT Questions (With Hints to Answers)

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1. Explain how import substitution can protect domestic industry.

[Hint: Import substitution policy aims at replacing or substituting imports with domestic production. For example, instead of importing vehicles made in a foreign country, industries would be encouraged to produce them in the country itself. This policy restricts imports and, therefore, protects the domestic firms from foreign competition.]

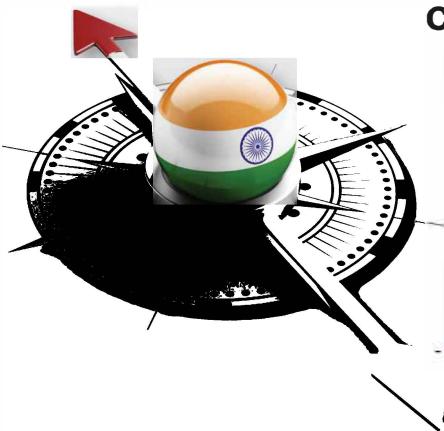
## 6. Miscellaneous Questions and Reference to the Text for Answers

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1. Write your observations on the direction of India's foreign trade. [Page 103, 104]
2. Describe the recent changes in the direction of India's exports and imports. [Page 103, 104]
3. What is inward looking trade policy? How relevant it is in the context of growth and development? [Page 105–107]
4. State the principal changes in the composition of India's foreign trade after independence. [Page 103]



# ECONOMIC REFORMS SINCE 1991 OR NEW ECONOMIC POLICY



- Meaning of Economic Reforms
- Elements of NEP (New Economic Policy)
- An Appraisal of LPG Policies

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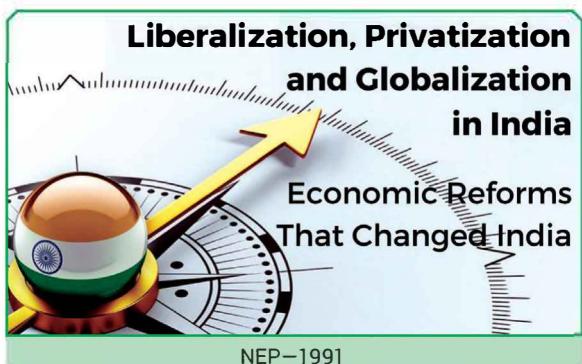
## I. MEANING OF ECONOMIC REFORMS AND NEW ECONOMIC POLICY

Economic reforms refer to a set of economic policies directed to accelerate the pace of 'growth and development'.

In 1991, the Government of India initiated a series of economic reforms to pull the economy out of the crises of 90's. These reforms came to be known as New Economic Policy (NEP). Three broad components of NEP are:

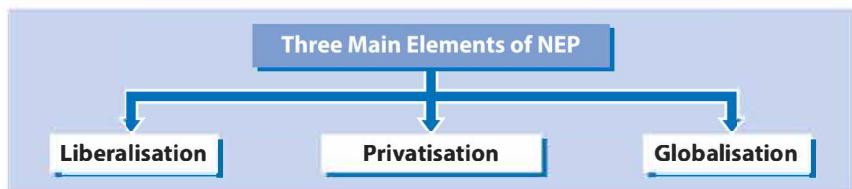
- (i) The policy of liberalisation (L) in place of licensing (L) for the industries and trade.
- (ii) The policy of privatisation (P) in place of quotas (Q) for the industrialists, and
- (iii) The policy of globalisation (G) in place of permits (P) for exports and imports.

Thus, **LPG** was set to replace **LQP** in 1991.



## 2. ELEMENTS OF NEP (NEW ECONOMIC POLICY)

Liberalisation, privatisation and globalisation are the three main elements of NEP.



### Liberalisation

#### Why Controls are imposed after all?

In the context of the Indian experience, controls were imposed by the government with a view to:

- (i) checking the growth of private monopolies, and
- (ii) minimising the hold of large industrial houses on the financial resources of the country.

**Illustration:** Some banks were nationalised in sixties because these were owned by the big industrial houses who would use banking funds primarily to meet their own financial needs.

Liberalisation of the economy means freedom of the producing units from direct or physical controls imposed by the government. Following are some notable observations in this regard:

- (i) Prior to 1991, government had imposed several types of controls on private enterprises in the domestic economy. These included industrial licensing system, price control or financial control on goods, import licence, foreign exchange control, restrictions on investment by big business houses, etc.
- (ii) It was experienced by the government that several shortcomings had emerged in the economy on account of these controls.
- (iii) These controls had given rise to corruption, undue delays and inefficiency.
- (iv) Growth rate of GDP had fallen sharply and high-cost economic system (rather than a low-cost competitive economic system) came into being.

In view of these facts, liberalisation of the economy was considered as a key component of NEP. Greater reliance was to be placed on market forces (of supply and demand) rather than checks and controls.

Examples of developing countries (Korea, Thailand, Singapore) that had achieved rapid growth due to liberalisation were considered as worthy of emulation.

Economic Reforms (with liberalisation as its key component) were based on the assumption that market forces would drive the economy towards the path of competitive growth and development.

### Economic Reforms under Liberalisation

Liberalisation included the following reforms:

## (1) Industrial Sector Reforms

Liberalisation virtually implied de-regulation of industrial sector of the economy. Following observations highlight how it happened:

- (i) **Abolition of Industrial Licensing:** In July 1991, a new industrial policy was announced. It abolished the requirement of licensing except for the following five industries: (a) liquor, (b) cigarette, (c) defence equipments, (d) industrial explosives, and (e) dangerous chemicals.
- (ii) **Contraction of Public Sector:** Under the new industrial policy, number of industries reserved for public sector was reduced from 17 to 8. In 2010-11, the number of these industries was reduced merely to two: (i) Atomic energy, and (ii) Railways.
- (iii) **De-reservation of Production Areas:** Many production areas which earlier were reserved for SSI (small-scale industries) were de-reserved. Forces of the market were allowed to determine allocation of resources (rather than the directive policy of the government).
- (iv) **Expansion of Production Capacity:** Earlier production capacity was linked with licensing. Now, freedom from licensing implied freedom from capacity constraints. 'What to produce and how much to produce' was now a matter of producer's choice depending on market conditions.
- (v) **Freedom to Import Capital Goods:** Liberalisation also implied freedom for the industrialists to import capital goods with a view to upgrading their technology. Permission was no longer required from the government to enter into international agreements for the import of technology.

## (2) Financial Sector Reforms

Financial sector includes: (i) banking and non-banking financial institutions, (ii) stock exchange market, and (iii) foreign exchange market.

In India, financial sector is regulated and controlled by the RBI (Reserve Bank of India).

Liberalisation implied a substantial shift in the role of the RBI from 'a regulator' to 'a facilitator' of the financial sector.

As a regulator, the RBI (prior to liberalisation) would itself fix interest rate structure for the commercial banks. But as a facilitator (after



RBI—The Apex Bank of the Country

liberalisation) the RBI would only facilitate the free play of the market forces and leave it to the commercial banks to decide their interest rate structure. Now, competition (rather than control) rules the decision-making process.

- Consequent upon the policy of liberalisation, there has been a substantial shift in the role of the RBI from 'a regulator' to 'a facilitator' of the financial sector.
- Now market forces (rather than controls) decide the interest rate structure, volume and the pattern of investment.

Free play of the market forces has led to the emergence of private bankers—both domestic as well as international—in the Indian banking industry.

Liberalisation has also allowed FII (Foreign Institutional Investors) to invest in Indian financial markets. (**Examples of FII:** Merchant bankers, mutual funds and pension funds.)

Consequent upon these changes, financial sector in India has shown a multi-dimensional growth and is playing a significant role in the growth and development of the economy.

## DEMONETISATION

Demonetisation, introduced in 2016, is closely related to financial sector reforms. Let us understand its concept and consequences in the context of the Indian economy.

### Concept

Demonetisation is a policy action of the government that withdraws the status of 'legal tender' from the existing currency. Once the status of 'legal tender' is withdrawn, the existing currency (or the currency notes) are reduced merely to pieces of paper. These notes lose their acceptance as a medium of exchange, or they lose their power to buy goods and services in the market.

It was on November 8, 2016 that the Government of India announced demonetisation of the currency notes of ₹ 500 and ₹ 1,000. The people were required to deposit the demonetised currency notes with the banks within a period of 2 months. The demonetised notes were replaced by new currency notes of ₹ 500 and ₹ 2,000.

### Basic Purpose

Basically, demonetisation aims at curbing illegal transactions and anti-social activities (funded through illegal transactions).

### Principal Merits

- (i) It helps unearth (find out) black money.
- (ii) Reduction of black money leads to shrinkage of shadow economy (an economy with unrecorded production activity and tax evasion).
- (iii) When shadow economy shrinks, and tax evasion is reduced, government revenue tends to rise.
- (iv) Demonetisation compels people to deposit their demonetised notes with the banks. Accordingly, financial-base of the banking sector tends to expand.
- (v) A check on funding to terrorists helps combat anti-social activities in the economy.

- (vi) With cash almost disappearing from the market, people were driven to **digital mode of transactions**. This was a big move towards cashless (or low cash) economy. It also promoted banking habits of the people, a big leap towards financial inclusion.

### **Principal Demerits**

- (i) In an underdeveloped economy like India, people are used to cash-transactions. With demonetisation, people are stripped of (deprived of) cash in hand. It impairs (disturbs) their routine transactions and therefore, their normal living. Thus, demonetisation in 2016 led to a serious social chaos (unrest) in India.
- (ii) Cash-crunch (owing to demonetisation) jolts production activity in the shadow economy. Accordingly, jobs are lost and poor people are further marginalised.
- (iii) A jolt to production activity in the shadow economy invariably hurts the overall level of economic activity (including production, consumption and investment) in the economy. The economy starts facing 'slowdown'. At the macro level, the process of slowdown is often a long-drawn process, as it tends to cumulate over time. India is yet to recover from the slowdown triggered by demonetisation in 2016.
- (iv) Nearly 90 per cent of the workforce in India is engaged in informal economy (or unorganised sector of the economy) for their livelihood. And this segment of the economy is highly cash dependent and cash-sensitive. A huge cut in liquidity (following note ban) implied that cash purchase of inputs and cash payment of wages became impossible. These led to an instantaneous cut in production activity. Consequently, **there was a large-scale lay-off**. Daily wagers lost their employment from day-1 of demonetisation.
- (v) Exchange of demonetised currency with the valid currency leads to long queues at the banks. People feel hurt when they find it difficult to use their own money. Accordingly, consumption is lowered and inducement to invest is lost.

In short, demonetisation causes loss and gain of opportunities. It is very difficult to precisely assess the net impact of demonetisation over a short period of time. Nevertheless, social unrest is an immediate short period loss, which people in India have successfully managed.

**Note:** For further details on Demonetisation, students are advised to refer to Project Work at the end of the text.

### **(3) Fiscal Reforms**

Fiscal reforms relate to revenue and expenditure of the government.

Tax reforms are the principal component of fiscal reforms.

Broadly, taxes are classified as: (a) direct taxes, and (b) indirect taxes.

**Direct taxes** are those taxes, the burden of which cannot be shifted onto others. (**Examples:** Income tax, wealth tax.) One who pays such a tax himself bears the burden of it.

**Indirect taxes** (levied on goods and services) are those taxes, the burden of which can be shifted onto others. [**Examples:** GST (Goods and Services Tax), custom duty.]) One who pays such a tax [**Example:** A shopkeeper paying GST (Goods and Services Tax) to the government] can shift the burden of this tax onto the final buyers of the goods by adding the tax amount to the basic price of the goods sold.

#### **Fiscal Policy**

- It refers to revenue and expenditure policy of the government.
- It is a policy that seeks to achieve stability in the economy by managing the revenue and expenditure of the government.

## GST

GST (Goods and Services Tax) has been introduced in India with a view to providing a uniform tax structure across all parts of the country. It is a one tax in place of all taxes on goods and services, and it is a uniform tax across all states of the country. Thus, GST carries the slogan of 'one tax, one nation, one market'. GST is expected to generate additional tax revenue for the government, increase tax compliance and reduce tax evasion.



Tax Reform

### The Basic Structure of GST

Goods and services have been classified into different categories. Each category of goods carries a specific rate of taxation. And, there is a category of goods which is 'tax-exempt', considering the needs and means of poorer section of the society.

Following flow chart shows the structure of GST:

#### Structure of GST

Category of Goods	Tax Rate
Sanitary napkins, fortified milk, fresh fruits and vegetables	0%
Coffee, tea, spices and electric vehicles	5%
Butter, frozen meat products, ayurvedic medicines and spectacles	12%
Pasta, pastries & cakes and detergents	18%
Automobiles, dishwasher and vending machines	28%

### Typical Characteristics

Three typical characteristics of GST must be noted:

- (i) GST is levied at each stage of value addition.
- (ii) GST focuses on the supply of goods rather than their production. Tax is levied as and when goods are supplied (or when goods leave their destination for their buyers).
- (iii) GST paid by the producers on the purchase of inputs is allowed to be adjusted by the producers in their payment of GST proceeds to the government.

### Principal Merits

Four principal merits of GST are as under:

- (i) It is simplified tax structure, as it is a one tax for all the indirect taxes, and it is a uniform tax across all parts of the country.
- (ii) Since refund of GST on inputs is available to the producers only when they buy inputs from the registered suppliers, it ensures higher degree of transparency in business: Black money transactions are reduced.
- (iii) Being a uniform tax across all parts of the country, GST has enhanced size of the market for the domestic producers.
- (iv) GST has raised government revenue as there is a higher degree of transparency in business.

### Some Teething Problems and Demerits

Any new concept always suffers from some teething problems when it comes to its implementation. So is GST. The teething problems of GST are often highlighted as its demerits. Two observations are notable in this context:

- (i) GST is yet to cover all goods produced in the country. Electricity generation, alcohol, petrol and diesel are some notable products out of the ambit of GST.
- (ii) GST rates across different goods and services are still not finally settled, and to that extent uncertainty looms in the economy. This uncertainty hampers decision-making and therefore, investment in production activity.

**Note:** For further details on GST, students are advised to refer to Project Work at the end of the text.

Prior to liberalisation, tax structure in the country has been highly complex and evasive. Fearing a heavy burden of taxation, people would often evade taxes.

Now tax structure has been simplified and moderated. This has raised tax compliance and therefore tax revenue of the government.

#### (4) External Sector Reforms

External sector reforms include: (i) foreign exchange reforms, and (ii) foreign trade policy reforms.

**Foreign exchange reforms** were initiated in 1991 with the devaluation of the Indian rupee against foreign currencies.

Devaluation implies a fall in the value of rupee vis-à-vis (say) US dollar or British pound. Implying that a US dollar or British pound can be exchanged for more rupees than before. Or, implying that a US dollar or British pound can buy more goods in the Indian market.

This increased the supply of foreign currency into the Indian economy by way of higher exports of the domestic goods and services.

##### Devaluation

- Devaluation implies lowering the value of our currency in relation to other currencies of the world.
- Consequently, a US dollar or a British pound can be exchanged for more rupees than before.
- Implying that a US dollar or a British pound can buy more goods in the Indian market.
- This is expected to increase the supply of foreign exchange into the Indian economy.

Followed by devaluation in 1991, the exchange value of the Indian rupee in the international money market (or foreign exchange market) was left to the free play of the market forces.

Presently, exchange rate is determined by the forces of supply and demand in the international exchange market.

**Foreign Trade Policy** underwent a substantial change in the wake of liberalisation.

Tariff restrictions have been considerably moderated, rather withdrawn from many items of export and import.

Instead of policy of protection to the domestic industry, now there is the policy of 'survival of the fittest'.

Market competition has replaced the policy of quotas and tariffs.

Efficiency is the benchmark of growth, not simply expansion.

### **Salient Features of Trade Policy after Liberalisation**

- (i) Import quotas have been abolished.
- (ii) Import licensing (except in case of goods which are not environment-friendly and are hazardous) has been abolished.
- (iii) There is a moderation/reduction of import duty to enhance competitiveness in the domestic market.
- (iv) Export duty has been withdrawn to enhance competitiveness of Indian goods in the international market.
- (v) Briefly, trade policy after liberalisation is to facilitate integration of the Indian market with the global market with a view to achieving growth through competition rather than protection.

### **DON'T CONFUSE LIBERALISATION WITH A LAISSEZ-FAIRE SYSTEM**

Let us first understand the concept of laissez-faire. It refers to a system in which there is no intervention by the state in the functioning of an economy. All decisions relating to allocation of resources and the goods & services to be produced are taken by producers on the basis of market forces of supply and demand. Role of the government is restricted just to the maintenance of law & order and defence of the country from external aggressions: it is nothing beyond being a night watchman of the country.

Liberalisation should not be confused with a laissez-faire system. Liberalisation only implies a situation wherein the government allows greater degree of freedom and flexibility to the private entrepreneurs in matters relating to allocation of resources. To illustrate, pursuing the policy of liberalisation, the government may abolish licensing/registration of the enterprises as an essential requirement. Likewise, the government may liberalise or abolish limits on the production capacity of the firms. But all this is in consonance with direct participation of the government in production activity. Thus, liberalisation does not exclude government's intervention in the economy; it does not rule out the existence of checks and controls by the government. It only implies greater degree of freedom to the private entrepreneurs in deciding their areas of economic activity and expanding their scale of production.

### **Privatisation**

Privatisation is the process of involving the private sector in the ownership or operation of a state owned enterprise.

It implies gradual withdrawal of government ownership/management from the public sector enterprises. It may happen in two ways:

- (i) Outright sale of the government enterprises to the private entrepreneurs or
- (ii) Withdrawal of the government ownership and management from the mixed enterprises (the enterprises jointly owned and managed by the government and the private entrepreneurs).

### **Disinvestment**

- Disinvestment is a policy instrument to promote privatisation.
- It occurs when the government sells off its share capital of PSUs (public sector undertakings) to the private investors.
- Argument in favour of disinvestment is the same as in case of privatisation.
- It is taken as a remedial measure to improve production and managerial efficiency, as well as to facilitate modernisation.
- Of course, disinvestment is also used as a means to manage fiscal deficit by the government.

### **Need for Privatisation**

Need for privatisation was felt mainly because of poor performance of PSUs. Note the following observations in this regard:

- (i) The process of industrialisation was initiated during Second Five Year Plan assigning a key role to PSUs.
- (ii) The Industrial Policy Resolution (1956) clearly and categorically stated the significance of PSUs in the process of growth and development.
- (iii) It is beyond doubt that it was through the spread of PSUs that India could diversify its industrial base between the period 1951-1991.
- (iv) It was on account of the spread of PSUs that the Indian economy underwent a structural transformation: people started shifting from agriculture to industry as their source of livelihood, and there was a gradual increase in the percentage contribution of industry to GDP. PSUs gave us Navratnas (nine jewels of the Indian industry, besides a host of mini ratnas).
- (v) Gradually, most public sector enterprises turned into a social dead-weight (or a social liability). Mounting losses of PSUs became unsustainable.
- (vi) Leakage, pilferage, inefficiency and corruption had become so rampant in PSUs that their privatisation was considered as the only remedy.
- (vii) Accordingly in 1991, the government decided to phase out public enterprises by selling its equity to the private entrepreneurs. Privatisation was to replace public ownership of a large number of enterprises.
- (viii) However, in view of their efficient performance, Navratnas were to be retained as public sector enterprises. Indeed, the government decided to upgrade their functional freedom with a view to enhancing their competitive strength.

## NAV RATNAS

In the context of PSUs in India, Navratnas refer to nine such profit making companies which are compared with nine courtiers in the court of king Vikramaditya who were men of eminence and rare wisdom. These nine industries are: (i) IOC (Indian Oil Corporation); (ii) BPCL (Bharat Petroleum Corporation Ltd.); (iii) ONGC (Oil and Natural Gas Corporation); (iv) SAIL (Steel Authority of India Ltd.); (v) BHEL (Bharat Heavy Electricals Ltd.); (vi) IPCL (Indian Petrochemicals Corporation Ltd.); (vii) VSNL (Videsh Sanchar Nigam Ltd.); (viii) NTPC (National Thermal Power Corporation); and (ix) HPCL (Hindustan Petroleum Corporation Ltd.)

However, with the passage of time, Navratna status was no longer confined to these nine industries only; it was accorded to other industries as well, like MTNL (Mahanagar Telephone Nigam Limited) and Oil India Limited. In all, 16 industries have earned the distinction of acquiring Navratna status.



Navratnas

- **Maharatnas:** In 2009, the government also started according Maharatna status. The PSUs having earned this status include: (i) Coal India Ltd. (CIL), (ii) Indian Oil Corporation (IOC) Ltd., (iii) National Thermal Power Corporation (NTPC) Ltd., (iv) Oil and Natural Gas Corporation (ONGC) Ltd., (v) Steel Authority of India Ltd. (SAIL), (vi) Bharat Heavy Electricals Limited (BHEL), (vii) Gas Authority of India Limited (GAIL), and (viii) Bharat Petroleum Corporation Limited (BPCL). Thus, quite a few industries (like IOC) have moved from Navratna to Maharatna status.
- **Miniratnas:** Recently, yet another status called 'Miniratna' has been created to encourage PSUs to improve efficiency and profitability. So far 75 PSUs have been awarded Miniratna status.

Navratnas have often been quoted by the government as the epicentre of growth in the Indian economy. And, it is not denying the fact that these enterprises brought about an exemplary shift in the concept of industrialisation in the economy. These enterprises served not only as a significant source of employment, but also as an infrastructural base that induced private investment in diverse areas of industrial growth.

In the wake of privatisation, the government had initially thought of disinvestment of Navratnas as well. But, owing to a stiff political resistance, it is now decided to develop Navratnas as global players in their respective areas of industrialisation.

## Obvious Gains and Imperative Losses of Privatisation

### Obvious Gains

- (i) Privatisation implies supremacy of 'self-interest' over 'social interest'. When 'self-interest' prevails, the entrepreneurs work with 100 per cent commitment, and 'efficiency' becomes the condition of survival for the workers. High productivity is the obvious result.
- (ii) Privatisation expects private enterprises to work in a competitive environment —both domestic as well as international. Competition induces upgradation and modernisation. These are the essential conditions of growth and development.
- (iii) Privatisation promotes diversification of production. Unlike PSUs, private enterprises invariably generate high profits. These are used for expansion and diversification of production. MNCs (Multinational Corporations) are a testimony to the fact that private sector enterprises are capable of redefining the benchmark of growth.
- (iv) Privatisation promotes consumers' sovereignty. Higher degree of consumers' sovereignty implies wider choice and better quality of life.

### Imperative Losses

- (i) Socialistic pattern of the society (in which 'social interest' is accorded top priority) is left to survive only as theoretical possibility. It loses its practical relevance once PSUs are sold off to the private entrepreneurs.
- (ii) Privatisation encourages the free play of market forces. But in the process, goods are produced only for those who have the means to buy them. When prices rise (which is an obvious tendency in a system driven by the free play of market forces), weaker sections of the society suffer deprivation. Sircilla Tragedy is a notable evidence to this point.

#### SIRCILLA TRAGEDY

Sircilla, in Andhra Pradesh, is a small town, known for its powerloom industry. This industry is the main source of livelihood for most people in the town. Privatisation of power supply to this industry led to a substantial hike in power-tariff. Implying an unsustainable burden on the industry. Cut in wages has been a serious consequence, as wages are linked to the production of cloth which has suffered a huge decline. When wages are cut beyond the point of subsistence, what do the workers do? Committing suicide is considered as a desperate option. This is what the workers did in Sircilla. About 50 workers committed suicide which is known as Sircilla Tragedy.

**Globalisation, in fact, is the outcome of the policies of Liberalisation and Privatisation**

At the international level, it is a process of bringing the world economies, economically and socially, closer to each other in a manner such that each country becomes an element of Global Growth.



Globalisation: Economic Integration of World Economies

## Globalisation

Globalisation means integrating the economy of a country with the economies of other countries under conditions of free flow of trade and capital across borders.

Globalisation may be defined as a process associated with increasing openness, growing economic interdependence and deepening economic integration in the world economy.

Economic reforms aim at integrating the Indian economy with the global economy.

As a result, there will be unrestricted flow of goods and services, technology and expertise between India and rest of the world.

Particularly, it is expected that capital and technology will flow from the developed countries of the world towards India.

## Outsourcing

- This is an important outcome of the process of globalisation.
- It refers to a system of hiring business services from the outside world. These services include: call centres, transcription, clinical advice, teaching/coaching and the like.
- India is emerging as an important destination of outsourcing particularly BPO (business process outsourcing, also called call centres). This is because of two important reasons:
  - (i) Availability of cheap labour in India, or relatively low wage rate for the skilled workers, and
  - (ii) A revolutionary growth of IT industry in India.



Outsourcing: Sourcing Services from Outside

## Policy Strategies Promoting Globalisation of the Indian Economy

Following are some important policy strategies that have influenced the process of globalisation of the Indian economy:

**(1) Increase in Equity Limit of Foreign Investment:** Equity limit of foreign capital investment has been raised from the initial 40 per cent. It now ranges between 51 to 100 per cent.

In 47 high priority industries, foreign direct investment to the extent of 100 per cent has been allowed without any restriction and red-tapism.

Export trading houses have also been allowed foreign capital investment up to 100 per cent.

However, Foreign Exchange Management Act (FEMA) has been enforced. Compliance to FEMA has been accorded high priority.

**(2) Partial Convertibility:** To achieve the objective of globalisation, partial convertibility of Indian rupee has been allowed for the following transactions:

- (i) Import and export of goods and services,
- (ii) Payment of interest or dividend on investment,
- (iii) Remittances to meet family expenses. It is called partial convertibility because it does not cover capital transactions.

Partial convertibility refers to the sale and purchase of foreign currency (for foreign transactions) at the market price.

**(3) Long-term Trade Policy:** In conformity with economic reforms, foreign trade policy is enforced for a longer duration (nearly five years). Implying that it is a liberal policy.

Under this policy, all restrictions and controls on foreign trade have been removed. Open competition is encouraged.

Barring some specific goods, most goods are traded free of restrictions.

**(4) Reduction in Tariffs:** In order to encourage competitiveness, tariff barriers have been withdrawn on most goods traded between India and rest of the world.

**(5) Withdrawal of Quantitative Restrictions:** Since 2001, the quantitative restrictions on all import items have been totally withdrawn. This is in conformity with India's commitment to the WTO.

#### Tariff and Non-Tariff Barriers

- Tariff barriers mainly refer to barriers on imports through high import duty.
- Non-tariff barriers generally refer to quota-barriers, implying quantitative restrictions on imports (or restrictions on the quantum of imports).

#### Bilateral and Multilateral Trade Agreements

- Bilateral trade agreements refer to trade agreements of one country with the other. Or, these are trade agreements between any two countries of the world.
- Multilateral trade agreements refer to trade agreements of one country with many countries of the world. Or, these are trade agreements among many countries of the world.

## **WORLD TRADE ORGANISATION (WTO)**

World Trade Organisation is expected to play an important role in the context of globalisation of the world economies. What is it supposed to do? It is supposed to promote free trade in the international market by reducing tariff barriers and by removing non-tariff barriers. It is focusing on the competition in the international market and free access to markets across different countries of the world. It is facilitating bilateral as well as multilateral trade agreements.



## **IMPACT OF WTO ON THE INDIAN ECONOMY**

Following are the expected benefits of WTO:

- (i) It is expected that WTO will offer greater export opportunities to the Indian economy. Accordingly, our share in international trade is expected to increase in future.
- (ii) Under Multi-fibre Arrangements (MFA), our textile and readymade garment trade was subject to quota restrictions. As per provisions of the WTO, all these restrictions have been removed. It has helped India to increase its exports of garments and textile. Particularly, our textile exports to America and European countries have shown a substantial rise. It has promoted textile industry and generated employment opportunities.
- (iii) Due to 'agreed' reduction in trade barriers and reduction in subsidies to the domestic producers of agricultural goods in the developed countries, prices of these goods are expected to rise in the international market. Accordingly, India's exports of agricultural products are expected to rise.



WTO Head Office in Geneva

With greater stability of the international trading system through WTO, India is expecting a marked decline in dumping as a strategy adopted by the developed nations to exploit markets of the less developed countries.

Dumping refers to 'bulk-sale' of goods by the developed countries in the domestic market of less developed countries at competitive rates. It discourages domestic investment and consequently, the growth of domestic industry of these countries.

But it must be noted with emphasis that WTO agreement is offering only an asymmetric treatment (something which is not uniformly distributed for all nations of the world) to capital market and labour market. WTO advocates free movement of capital across different nations, not the free movement of labour, while both labour and capital are commodities of the factor market. Certainly, free flow of capital fosters the commercial interests of MNCs of the developed nations. They can exploit markets in less developed countries. But the free flow of labour which would have fostered the commercial interest of LDCs like India is not encouraged by WTO. Accordingly, Indian labour does not find free access to the lucrative factor market in developed countries. (Lucrative factor market refers to the market offering high wage rate.)

## Two Parameters of Economic Reforms: Macroeconomic Stabilisation and Microeconomic Structural Adjustments

□ **Macroeconomic Stabilisation:** Macroeconomic stabilisation measures refer to those set of measures which affect the entire economy and are therefore, pervasive in nature (spreading across all sectors of the economy). These measures included review of (a) monetary policy, (b) fiscal policy and (c) exchange rate policy. The focus of these measures was to cope with the crises of confidence relating to ability of the government to manage the country's dwindling BoP status, particularly its ability to repay the loans taken from the rest of the world.

□ **Microeconomic Structural Adjustments:** Microeconomic Structural Adjustments refer to those measures by the government which focused on structural changes in the economy and which had specific bearing on different sectors of the economy. These measures included reforms in (a) industrial policy, (b) trade policy, (c) public sector policy, (d) price policy, (e) tariff policy, etc.

It may be noted that while Macroeconomic Stabilisers are short-term measures to correct overall imbalances in the system, Microeconomic Structural Adjustments are long-term measures aiming at improving the level of efficiency and productivity in different sectors of the economy.

### First Generation Reforms and Second Generation Reforms

Distinction is sometimes drawn between First Generation Reforms and Second Generation Reforms.

- First Generation Reforms are those which do not require any legislative action. These reforms can be carried out simply through the executive and administrative machinery of the government.
- Second Generation Reforms, on the other hand, are those which require legislative action. These reforms cannot be carried out through the existing administrative and executive set-up of the government. Accordingly, Second Generation Reforms are often delayed.

## 3. AN APPRAISAL OF LPG POLICIES

Briefly referred to as LPG policies, the term implies policies related to liberalisation (L), privatisation (P) and globalisation (G). An appraisal of LPG policies implies an appraisal of NEP (New Economic Policy) or an appraisal of Economic Reforms initiated since 1991. Appraisal of LPG or NEP requires that the reader appreciates or understands the merits and demerits of this policy with reference to the Indian economy.

### Merits of the LPG Policies

Following observations highlight the merits of LPG policies:

- (1) **Vibrant Economy:** Indian economy has definitely become a more vibrant economy. Overall level of economic activity has trended up as indicated by GDP growth. Post LPG policies, the growth of GDP shot up to as high as 8 per cent per annum.
- (2) **Stimulant to Industrial Production:** LPG policies have worked as a great stimulant to industrial production in the Indian economy. It is owing to these policies that IT industry in India has achieved global recognition.

(3) **A Check on Fiscal Deficit:** Mounting fiscal deficit has been a serious threat to the process of investment in the Indian economy.

From as high as 8.5 per cent of GDP has been brought down to around 3.5 per cent of GDP.

(4) **A Check on Inflation:** Owing to a greater flow of goods and services in the economy, rate of inflation has been lowered.

In the years 2011-12 to 2013-14, inflation was in the range of 6-9 per cent per annum.

For year 2018-19, it is estimated to be 3.4 per cent.

It may be noted that high inflation leads to a rise in interest rate, implying a rise in the cost of investment. Accordingly, growth rate is adversely impacted.

(5) **Consumer's Sovereignty:** Consumers sovereignty has expanded over time. This is evident from the fact that a large variety of goods and services from the diverse global markets are now within the easy reach of the buyers.

Producers are widely responding to the consumers choice and preference.

Consequently, overall level of expenditure of the households has tended to rise. Implying an overall rise in the welfare status of the people.

(6) **A Substantial Increase in Foreign Exchange Reserves:** Depletion of forex reserves was one of the compelling reasons for the government to shift to LPG policies.

Thanks to these policies, forex reserves of the country have now reached a comfortable level.

*Good amount of forex reserves enhances economic confidence of the global investors in the Indian markets.*

(7) **Flow of Private Foreign Investment:** Private foreign investment has taken a quantum jump after the adoption of LPG policies.

This has been a matter of great relief to the government in view of the facts that:

(i) domestic economy was not generating enough of surplus for reinvestment, and

(ii) indigenous technology was getting obsolete.

It is significant to note that private foreign investment is often accompanied with innovative techniques of production.

#### FDI and FII

Foreign investment includes FDI (Foreign Direct Investment) and FII (Foreign Institutional Investment).

■ FDI refers to investment by the foreigners by way of their business establishments in India. It implies ownership and control of business. **Examples:** Coke, Pepsi, Domino's, McDonald.

■ FII refers to investment in Indian companies (by way of purchasing their equity or shares) by the foreign banking and non-banking institutions. It does not involve any kind of direct control on the management of the Indian companies where investment is made. FII, unlike FDI, is simply an investment in the stock market in India by the foreign banking and non-banking institutions.

(8) **Recognition of India as an Emerging Economic Power:** It is owing to LPG policies and the consequent rise in the overall level of economic activity, that India is now being recognised as an emerging economic power in the world.

This recognition (particularly by developed nations of the world) not only raises India's economic ranking in the world, but also boosts confidence of the global investors in the Indian economy as their preferred destination of investment.

(9) **A Shift from Monopoly Market to Competitive Market:** Launch of LPG policies has caused a significant shift in the structure of the Indian markets.

Indian markets are now increasingly shedding its monopolistic character, and becoming more and more competitive in nature.

For instance, a couple of decades back, products like cars, refrigerators, ACs and PCs were the monopoly markets of select brands only. Now a variety of these products are available at competitive prices.

Briefly, owing to LPG policies, the Indian economy has definitely gained a 'growth momentum'. The process of growth has not only accelerated, but has also become more diversified. There is a definite change in welfare level of the people. Recognition of the Indian economy as an emerging economic power in the world is of crucial significance.

## Demerits of LPG Policies

All that glitters is not gold. There is a negative side of the story as well. Following observations highlight demerits or negative impact of LPG policies in India:

(1) **Neglect of Agriculture:** Post New Economic Policy (NEP) of 1991, growth of GDP has largely been driven by the secondary and tertiary sectors of the economy.

Agricultural sector has suffered a serious neglect and its growth rate has slided/slipped to a miserably low level (2-3 per cent per annum). This has led to a widening gulf between the rural and urban economies. Implying the spread of poverty.

In fact, slow growth of agricultural sector must ultimately hinder the process of growth of the industrial sector as well. This is because:

### Economic and Social Dualism

■ **Economic Dualism:** It refers to disintegration of the economy into traditional and modern sectors of production. While the traditional sector relies upon traditional technology, the modern sector is driven by modern technology.

■ **Social Dualism:** It refers to disintegration of the society into 'haves' (enjoying high social status) and 'have-nots' (living with low social status).

- (i) Agricultural sector is an important source of raw material for the industrial sector.
- (ii) Agricultural sector is the principal source of labour supply to the industrial sector, and
- (iii) Agricultural sector is a significant source of demand for the industrial products like tractors and thrashers.

(2) **Urban Concentration of Growth Process:** LPG policies have resulted in the concentration of growth process in urban areas.

Think of any MNC, you will hardly find its trace in the rural areas of the country.

All MNCs are focusing only on urban areas, where they find conducive infrastructural facilities. This has further widened the 'rural-urban gulf'.

Rural-urban gulf implies economic dualism which deepens social dualism as well.

Economic and social dualism are always a big threat to the process of growth and development.



(3) **Economic Colonialism:** India suffered nearly 200 years of political colonialism during the British rule.

Now, while MNCs are expanding their economic control, we might suffer a sort of economic colonialism.

Implying a situation where MNCs are exploiting the Indian markets to sell their products and in the process, domestic producers are marginalised owing to their poor competitive strength.

- (4) **Spread of Consumerism:** Spread of MNCs in the country as a consequence of LPG policies has resulted in a large-scale spread of consumerism.

A variety of global brands in the market has induced the masses to become spendthrift, going beyond their means.

The Indian society is adapting itself to the western culture of spending through borrowing.

This may expand size of the market for the traders and the manufacturers, but certainly enhances vulnerability of the households as consumers.

- (5) **Lopsided Growth Process:** LPG has accelerated the growth process of the Indian economy, but it is lopsided.

It is not an inclusive growth process. It does not include all the sectors of the economy. Instead, it is increasingly relying on 'service sector' of the economy.

In fact, it is just an 'IT-focused' growth process which is gradually over-shadowing the process of industrialisation, besides neglecting the farming sector.

It is alarming to note that, owing to liberalisation and globalisation, the Indian farmer is shifting to the production of cash crops for the foreign markets, causing a shortfall of domestic supplies of foodgrains.

Alas! We are often forced to import foodgrains despite Green Revolution.

Rising prices of food products towards the end of 2009 should serve as a wake up call to the fact that LPG policies are almost neglecting the farming sector of the economy.

- (6) **Cultural Erosion:** Globalisation has also led to cultural erosion in the Indian society. Following are some significant observations in this context:

- ◆ Economic prosperity has taken a lead over all other parameters of life.

- ◆ Everybody wants to be economically independent and well-off, regardless of his responsibility towards the family or the society.
- ◆ Loyalty towards the family and loyalty towards the society which used to be the strongholds of the Indian social culture are being discarded as useless virtues in the wake of materialism.

### **Which Way to Go?**

Should we or should we not subscribe to the LPG policies? It is a debatable issue. But avoiding the pros & cons of LPG, the +2 graders can definitely make one concrete observation:

That LPG policies are the only way out to accelerate the pace of growth and development.

Indeed perusal of LPG policies was to a great extent a matter of economic compulsion rather than a matter of choice for the politicians of the country.

However, a compulsion should never mean an abject surrender. It is strongly recommended that LPG policies are pursued with guarded precautions. Notably:

- (i) We must see to it that we do not surrender to big players in the international markets.
- (ii) We must see to it that we do not compromise with economic interest of our domestic producers, while allowing a free access to the foreign investors in the Indian markets.
- (iii) We must see to it that we do not become economically subservient to multinational corporations.
- (iv) We must be in a position to channelise FDI (foreign direct investment) more into areas of infrastructure rather than retail trading or fast-food junctions like KFC and Dominos.

# Power Points & Revision Window

- **Economic Reforms:** Economic reforms refer to all those measures which aim at rendering the economy more efficient, competitive and developed. Liberalisation, privatisation and globalisation are the principal elements of economic reforms in India.
  - **Liberalisation:** Liberalisation implies freedom of private enterprises from controls imposed by the government.
  - **Measures of Liberalisation:** (i) Abolition of industrial licensing, (ii) Contraction of public sector, (iii) De-reservation of production areas, (iv) Expansion of production capacity, (v) Freedom to import capital goods.
  - **Fiscal Reforms:** These refer to increasing the revenue of the government and lowering the expenditure in a way that it causes no adverse effect on production and economic welfare.
  - **Financial Reforms:** These refer to the reforms in country's monetary and banking policies.
  - **Privatisation:** It implies partial or full ownership and management of public sector enterprises by the private sector.
  - **Measures of Privatisation:** (i) Outright sale of the government enterprises to the private entrepreneurs, (ii) Withdrawal of the government ownership and management.
  - **Globalisation:** It is a process associated with increasing openness, growing economic interdependence and deepening economic integration in the global economy.
  - **Measures of Globalisation:** (i) Increase in equity limit of foreign investment, (ii) Partial convertibility, (iii) Long-term trade policy, (iv) Reduction in tariffs, (v) Withdrawal of quantitative restrictions.
  - **Positive Impact of the LPG Policies:** (i) Vibrant economy, (ii) Stimulant to industrial production, (iii) A check on fiscal deficit, (iv) A check on inflation, (v) Spread of consumer's sovereignty, (vi) A substantial increase in foreign exchange reserves, (vii) Flow of private foreign investment, (viii) Recognition of India as an emerging economic power, (ix) A shift from monopoly market to competitive market.
  - **Negative Impact of the LPG Policies:** (i) Neglect of agriculture, (ii) Urban concentration of growth process, (iii) Economic colonialism, (iv) Spread of consumerism, (v) Lopsided growth process, (vi) Cultural erosion.



## 1. Objective Type Questions (Remembering & Understanding based Questions)

## A. Multiple Choice Questions

### Choose the correct option:

3. Which of the following is not an element of fiscal reforms?

  - (a) Taxation reforms
  - (b) Public expenditure reforms
  - (c) Change in interest rate
  - (d) Control on public debt
4. Which of the following is not a component of privatisation?

  - (a) Contraction of public sector
  - (b) Disinvestment in public sector enterprises
  - (c) Sale of public sector's share
  - (d) Purchase of industrial shares by the government
5. Which of the following is an element of financial sector of the economy?

  - (a) Banking and non-banking financial institutions
  - (b) Stock exchange market
  - (c) Foreign exchange market
  - (d) All of these
6. Which of the following is an example of indirect tax?

  - (a) Income tax
  - (b) Wealth tax
  - (c) Goods and services tax
  - (d) None of these
7. Which of the following is the strategy to promote globalisation of the India economy?

  - (a) Partially convertibility
  - (b) Reduction in tariffs
  - (c) Increase in equity limit of foreign investment
  - (d) All of these
8. In the context of Indian experience, controls were imposed by the government with a view to:

  - (a) checking the growth of private monopolies
  - (b) minimising the hold of large industrial houses on the financial resources of the country
  - (c) both (a) and (b)
  - (d) none of these
9. Liberalisation of the economy under the new economic policy changed the role of RBI in the economy:

  - (a) from a 'regulator' to 'facilitator' of the financial sector
  - (b) from a 'controller' to 'manager' of the government debt
  - (c) both (a) and (b)
  - (d) none of these
10. Industrial sector reforms under the New Economic Policy (NEP) comprised which of the following?

  - (a) Abolition of industrial licencing
  - (b) De-reservation of production areas
  - (c) Contraction of public sector
  - (d) All of these
11. External sector reforms under NEP included:

  - (a) foreign exchange reforms
  - (b) foreign trade policy reforms
  - (c) both (a) and (b)
  - (d) none of these
12. Which of the following are the components of globalisation under the new economic policy?

  - (a) Partial convertibility of the Indian rupee
  - (b) Increase in equity limit of foreign investment
  - (c) Reduction in tariffs
  - (d) All of these

13. The parameters of economic reforms undertaken in an economy are:
- |                                 |  |
|---------------------------------|--|
| (a) macroeconomic stabilisation | (b) macroeconomic structural adjustments |
| (c) both (a) and (b)            | (d) none of these                        |

#### Answers

- |         |         |         |        |        |        |        |        |        |         |
|---------|---------|---------|--------|--------|--------|--------|--------|--------|---------|
| 1. (b)  | 2. (b)  | 3. (c)  | 4. (d) | 5. (d) | 6. (c) | 7. (d) | 8. (c) | 9. (a) | 10. (d) |
| 11. (c) | 12. (d) | 13. (c) |        |        |        |        |        |        |         |

### B. Fill in the Blanks

**Choose appropriate word and fill in the blank:**

1. Prior to 1991, government had imposed several types of controls on enterprises in the domestic economy. (public/private)
2. As a regulator of the financial sector, RBI would fix the interest rate structure for the commercial banks in the country. (regulator/facilitator)
3. Tax reforms are the principle component of reforms. (monetary/fiscal)
4. taxes are those taxes, the burden of which can be shifted onto others. (Direct/Indirect)
5. implies a fall in the value of the domestic currency vis-a-vis other currencies. (Revaluation/Devaluation)
6. Liberalisation and laissez-faire system are the terms. (same/different)
7. refer to the nine such profit making companies which are compared with nine courtiers in the court of king Vikramaditya who were men of eminence and rare wisdom. (Navratnas/Maharatnas)
8. implies supremacy of 'self-interest' over 'social interest'. (Liberalisation/Privatisation)
9. In conformity with economic reforms, foreign trade policy is enforced for duration. (shorter/longer)
10. Outsourcing is an off-shoot of . (liberalisation/globalisation)

#### Answers

- |              |              |                  |             |                   |
|--------------|--------------|------------------|-------------|-------------------|
| 1. private   | 2. regulator | 3. fiscal        | 4. Indirect | 5. Devaluation    |
| 6. different | 7. Navratnas | 8. Privatisation | 9. longer   | 10. globalisation |

### C. True or False

**State whether the following statements are True or False:**

1. The programme of economic reforms in India was started on 24th July, 1991. (True/False)
2. New economic policy implied replacement of LQP by LPG. (True/False)
3. Presently, 'gems and jewellery' is India's notable exporting category of goods. (True/False)
4. Licensing (as in case of liquor) is necessary for the regulation of the industry. (True/False)
5. Prior to 1991, physical reforms were introduced by the government with a view to increasing non-tax revenue. (True/False)
6. Rising share of industrial sector in the GDP is a sign of economic growth based on structural transformation in the economy. (True/False)

7. Demonetisation was a major event of the year 2015. (True/False)
8. Globalisation focuses more on the free movement of labour than capital in the international market. (True/False)
9. Economic growth along with structural transformation is called economic development. (True/False)
10. Despite Green revolution, the percentage share of industrial sector to GDP has increased between 1951 and 1991. (True/False)

#### Answers

1. True    2. True    3. True    4. True    5. False    6. True    7. False    8. False    9. True    10. True

#### D. Matching/Chronological

##### I. From the set of statements given in Column I and Column II, choose the correct pair of statements:

Column I	Column II
(a) Outsourcing	(i) An important outcome of the process of liberalisation
(b) Foreign exchange reforms	(ii) Initiated with the devaluation of the Indian rupee against foreign currency
(c) GST	(iii) A direct tax
(d) Contraction of public sector	(iv) A measure of privatisation

#### Answer

- (b) Foreign exchange reforms — (ii) Initiated with the devaluation of the Indian rupee against foreign currency

##### II. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:

Column I	Column II
(a) Partial convertibility	(i) Encourages competitiveness
(b) Non-tariff barriers	(ii) Regulated and controlled by the RBI
(c) Financial sector	(iii) Sale and purchase of foreign currency at the market price
(d) Reduction in tariffs	(iv) Quota barriers

#### Answers

- (a)—(iii), (b)—(iv), (c)—(ii), (d)—(i)

#### E. 'Very Short Answer' Objective Type Questions

1. What is meant by economic reforms?

Ans. Economic reforms refer to a set of economic policies directed to accelerate the GDP growth.

2. Define liberalisation.

Ans. Liberalisation means freedom from direct or physical controls by the government in the domestic economy.

3. Define privatisation.

Ans. Privatisation is the process of involving the private sector in the ownership or operation of a state owned enterprises.

**4. What do you mean by globalisation?**

Ans. Globalisation is a process of integrating the domestic economy with rest of the world through the market forces.

**5. What do you mean by fiscal reforms?**

Ans. Fiscal reforms relate to revenue and expenditure policy of the government. These reforms focus on tax reforms on the revenue side and fiscal discipline (rationalising government expenditure) on the expenditure side.

**6. Define devaluation.**

Ans. Devaluation refers to policy action of the government of a country to lower the value of domestic currency in relation to other currencies of the world.

**7. What is disinvestment?**

Ans. Disinvestment refers to selling off share capital of PSUs (public sector undertakings) to the private entrepreneurs.

**8. What is outsourcing?**

Ans. It refers to a system of hiring business services (like call centres, transcription, clinical advice, teaching/coaching, etc.) from the outside world.

## **2. Reason-based Questions (Comprehension of the Subject-matter)**

---

**Read the following statements carefully. Write True or False with a reason.**

**1. Fiscal deficit leads to price spiral.**

Ans. True. Fiscal deficit leads to price spiral. **Reason:** Often, the fiscal deficit is financed by the government by way of borrowing from the RBI. It leads to increase in the supply of money in the economy. Other things remaining constant, higher the supply of money, higher is the price spiral.

**2. The current account BoP deficit often leads to borrowing from rest of the world.**

Ans. True. Current account BoP deficit often leads to borrowing. **Reason:** There are two principal sources of finding the current account BoP deficit: (i) Borrowing from rest of the world, and (ii) Foreign investment in the domestic economy, including (a) FDI (foreign direct investment), and (b) FII (foreign institutional investment). Of these two sources, foreign investment is volatile (uncertain) owing to volatility (uncertainty) of the domestic market. Accordingly, the government often relies on borrowing from rest of the world.

**3. Disinvestment is a compulsion for the government to tackle budgetary deficit.**

Ans. False. Disinvestment is not a compulsion for the government to tackle budgetary deficit. The fact of the matter is that the government resorts to disinvestment (selling shares of public enterprises to private entrepreneurs) only when the public sector enterprises are found to be breeding centres of inefficiency and corruption. Of course, once disinvestment is done it helps the government to manage budgetary deficit.

**4. FDI leads to economic colonialism.**

Ans. True. FDI leads to economic colonialism. Because FDI implies ownership and management of the domestic enterprises by the foreign companies. Higher FDI leads to higher economic control of the foreign companies in the domestic market. This is what economic colonialism implies.

### **3. HOTS & Applications**

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**1. How does liberalisation of the economy lead to economic growth?**

Ans. Liberalisation included a set of economic reforms offering freedom to the private enterprises from government controls. It focused on (i) delicensing of the industrial establishment, (ii) simplification of trade and tariff policies, (iii) simplification of tax structure, (iv) fiscal consolidation/discipline, and (v) freedom to the banking sector to decide their interest rate structure. These reforms led to a rise in investment. Rise in investment led to a rise in GDP growth.

**2. How does privatisation lead to fiscal consolidation?**

Ans. Privatisation implies transfer of ownership and management of public sector enterprises to the private entrepreneurs. It is a process involving disinvestment in public sector enterprises. By and large divestment (disinvestment) is planned for such public sector enterprises which are inefficient and run into huge losses. Disinvestment leads to fiscal consolidation in two ways: (i) Losses of the public sector enterprises are plugged, and (ii) Revenue of the government rises on account of the sale of shares of public enterprises.

**3. Write a critical review of NEP.**

Ans. A critical review of NEP includes description of positive as well as negative impact of the economic reforms initiated in 1991. The positive impact is evident in terms of a substantial rise in the level of economic activity in the economy, as indicated by a sustained rise in GDP. The negative impact is evident in terms of sectoral imbalances and concentration of economic power. Sectoral imbalances have occurred on account of the fact that: (i) agricultural sector has suffered a neglect while the industrial and tertiary sectors have gained a momentum, and (ii) growth process has largely been confined to urban sector of the economy. Concentration of economic power has occurred owing to rapid control of the domestic market by the multinational corporations.

**4. What makes India a favourite destination for outsourcing?**

Ans. Two factors are significantly important in the context of India emerging as a favourite destination for outsourcing. These are:

- (i) India offers an abundant supply of labour at a low wage rate, and
- (ii) India has achieved a revolutionary breakthrough in the IT industry, which is the basic ingredient of outsourcing.

### **4. Analysis & Evaluation**

---

**1. Should devaluation always lead to a rise in our export earnings, because rupee value of the dollar increases?**

Ans. When rupee value of the dollar increases (owing to devaluation) purchasing power of the dollar in the Indian market rises. This prompts the foreign buyers to increase their purchases from the Indian markets. However, this need not necessarily lead to a rise in our export earnings. Because while the quantity of goods sold rises (after devaluation), price of the goods (in terms of dollars) falls in the domestic market. Accordingly, market value of the goods (= Quantity of the goods exported × Price of the goods) may increase, remain constant or even fall after devaluation. It will increase only if the percentage increase in the quantity of goods exported happens to be greater than the percentage fall in the price of these goods.

**2. Write your views on the need for inclusive growth for the Indian economy. Is inclusive growth achievable for a developing economy like India when exposed to the process of Privatisation and Globalisation?**

Ans. Inclusive growth refers to that process of growth, the fruits of which are equitably shared by all sections of the society. It happens only when the rate of participation improves and the rate of

unemployment is moderated/reduced. This is achievable when the state assigns a flagship role to the public sector enterprises as under 1956 Industrial Policy Resolution.

Now, when economic reforms are focusing on privatisation and globalisation, when the growth process is being increasingly exposed to the market forces of supply and demand (and when self-interest is overshadowing social interest), the concept of inclusive growth has become more like a political slogan rather than a sincerely pursued objective by the government. It no longer seems to be an achievable objective.

## 5. NCERT Questions (With Hints to Answers)

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1. How many countries are members of the WTO?

[Hint: 164 (July 2016).]

2. Why did RBI have to change its role from controller to facilitator of financial sector in India?

[Hint: It was in the wake of economic reforms (LPG policy 1991) that the RBI was expected to shift its role from being a regulator to a facilitator of the financial sector. It was a step towards free play of the market forces so as to revitalise the financial sector: making it more vibrant and efficient. Significantly, the commercial banks were now allowed to decide their own interest-rate structure. This led to a substantial rise in institutional funding of the production units in the economy.]

3. How is RBI controlling the commercial banks?

[Hint: CRR, SLR, Repo rate, Open market operations, etc.]

4. What do you understand by devaluation of rupee?

[Hint: Devaluation of rupee refers to the fall in the value of domestic currency (i.e., rupee) in relation to foreign currency as planned by the government in a situation when exchange rate is not determined by the forces of supply and demand but is fixed by the government.]

5. Distinguish between the following

(i) Strategic and Minority sale.

(ii) Bilateral and Multilateral trade.

(iii) Tariff and Non-tariff barriers.

[Hint: (i) Strategic and Minority Sale: A strategic sale is generally the privatisation process, wherein the majority stake, i.e., at least 51 per cent or more share in a government organisation is sold off to the highest bidder, thereby handing over the management of the organisation to the private or autonomous body. Whereas, in minority sale, the government sells a minority stake (retaining at least 51 per cent of the shares along with full management control). Minority sale does not disturb the public sector character of the companies.

(ii) Bilateral and Multilateral Trade: Bilateral trade agreements refer to trade agreements between the two trading countries. Multilateral trade agreements, on the other hand, refer to agreements among many countries of the world.

(iii) Tariff and Non-tariff Barriers: Tariff barriers refer to barriers on imports through high import duty. Whereas, non-tariff barriers generally refer to quota-barriers, implying quantitative restrictions on imports (or restrictions on the quantum of imports).]

6. Why are tariffs imposed?

[Hint: Tariffs are imposed to protect domestic industry and to restrict imports. It is also imposed to generate revenue for the government.]

7. What is the meaning of quantitative restrictions?

[Hint: Quantitative restrictions are specific limits imposed by countries on the quantity or value of goods that can be imported or exported.]

8. Do you think outsourcing is good for India? Why are developed countries opposing it?

[Hint: Outsourcing is good for India because:

- (i) It generates employment opportunities in the domestic economy.
- (ii) It contributes to GDP growth.
- (iii) It contributes to forex reserves.

Developed countries oppose it as it leads to loss of jobs in their domestic economies.]

9. India has certain advantages which makes it a favourite outsourcing destination. What are these advantages?

[Hint: India has the following advantages which makes it a favourite outsourcing destination:

- (i) India offers an abundant supply of labour at a low wage rate, and
- (ii) India has achieved a revolutionary breakthrough in the IT industry, which is the basic ingredient of outsourcing.]

10. Agriculture sector appears to be adversely affected by the reform process. Why?

[Hint: Investment in agriculture sector, particularly in infrastructure (including irrigation, power, roads, etc.), has fallen in the reform period. The withdrawal of fertiliser subsidy has led to increase in the cost of production, which has severely affected the small and marginal farmers. The agriculture sector has been experiencing a number of policy changes such as reduction in import duties on agricultural products, removal of minimum support price, lifting of quantitative restrictions on agricultural products, etc. These have adversely affected Indian farmers as they now have to face increased international competition.]

## 6. Miscellaneous Questions and Reference to the Text for Answers

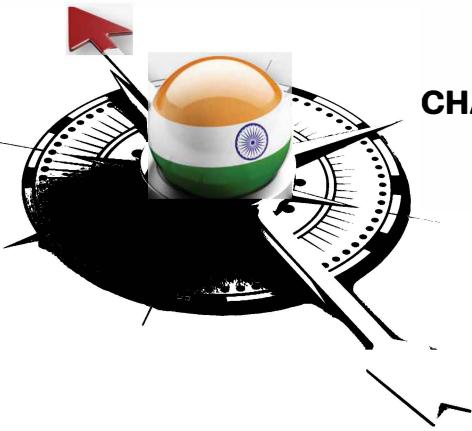
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1. What do you understand by economic reforms? [Page 117]
2. Write your observations on the financial reforms introduced under the new economic policy. [Page 119, 120]
3. Evaluate the fiscal reforms introduced under the new economic policy. [Page 121, 123]
4. Promoting privatisation is the objective of new economic policy. Discuss. Also state the measures taken to promote privatisation. [Page 124, 125]
5. What is meant by globalisation of the economy? State the measures adopted by the government to promote globalisation. [Page 128, 129]
6. State the three arguments in favour of NEP. [Page 131-133]
7. State the three arguments against NEP. [Page 133-136]
8. Describe the main components of the new economic policy.

Or

- What are the main economic reforms? [Page 118-129]
9. It is said, new economic policy is liberal. Do you agree? Give arguments in support of your answer. [Page 118-123]
  10. Distinguish between tariff and non-tariff barriers. Why should these be removed to promote globalisation? [Page 129]
  11. How are bilateral trade agreements different from multilateral trade agreements? Who facilitates these agreements? [Page 129, 130]





## CHAPTER: 7

# POVERTY

TO  
DO

- *What is Poverty and Who are the Poor?*
- *What is Poverty Line?*
- *Trend of Poverty in India: Number and Percentage of the Poor*
- *Causes of Poverty*
- *Measures of Remove Poverty*
- *Measures Adopted by the Government to Remove Poverty (and Unemployment) or Poverty Alleviation Programmes*

### I. WHAT IS POVERTY AND WHO ARE THE POOR?

Poverty is the inability to fulfil the basic requirements of life. The minimum requirements include food, clothing, housing, education and health facilities. If these minimum needs are not fulfilled, man undergoes pain and suffering. There is loss of health and efficiency. Sickness and disabilities render him helpless in all walks of life. Generation after generation he lives in poverty, grows in poverty and dies in poverty. Poverty breeds or multiplies itself.



Poverty leads to Deprivation

#### Relative and Absolute Poverty: How are the Poor Identified?

Relative poverty and absolute poverty are the two variants of poverty. Following is their brief description:

**(1) Relative Poverty:** It refers to poverty across different classes, regions or countries.

The country or class of people whose level of living is low is treated as poor or relatively poor in comparison to the country or class of people having high level of living.

Relative poverty is also interpreted in terms of inequality of income within the country. For example, in India, share in the national income of 20 per cent of the people at the bottom is barely 8.1 per cent while that of 20 per cent of people at the top is 45.3 per cent.

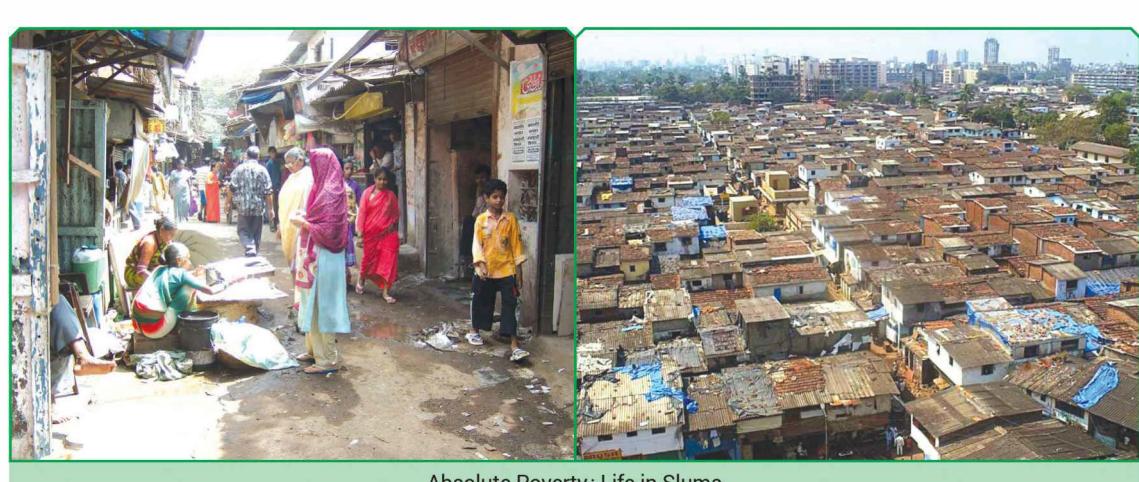
**(2) Absolute Poverty:** In India, the concept of poverty line is used as a measure of absolute poverty.

**Poverty Line** refers to the cut-off point (in terms of per capita expenditure) that divides people of a region as poor and non-poor.

In India, persons who spend ₹ 816 on consumption in rural areas and ₹ 1,000 in urban areas per month are treated as those below the poverty line.

Based on the new official poverty line, in 2011-12, poverty rate in India is estimated to be 21.9 per cent.

In terms of the total number of absolutely poor, 21.9 per cent in India covers over 50 per cent of the absolutely poor in the world.



Absolute Poverty: Life in Slums

## 2. WHAT IS POVERTY LINE?

It refers to a cut-off point (usually in terms of per capita expenditure) which divides people of a region as poor and non-poor. To illustrate, if per capita expenditure of ₹1,500 per month is taken as a cut-off point then those surviving on the monthly expenditure of less than ₹1,500 will be taken as poor and those making a monthly expenditure of more than ₹1,500 will be taken as non-poor. Percentage of population below poverty line is called 'head count ratio' or 'poverty incidence ratio'.

### The Concept of Head Count Ratio

It refers to the measurement of poverty in terms of the number of persons below poverty line, where poverty line means some cut-off point with respect to the individual consumption expenditure per month.

### Should the 'Poverty Line Cut-off' be Determined in terms of Income or in terms of Consumption?

Poverty line cut-off may be determined either in terms of income or in terms of consumption.



However, if one is to choose between the two, consumption should definitely be a preferred parameter than income. This is because:

- (i) Consumption reflects actual use of the goods and services by an individual, as well as the type of goods actually used, while income only shows the capacity to purchase, and
- (ii) Data is not available on the distribution of income.

## How is Poverty Line Fixed in India: Some Procedural Details

Following observations relate to procedural details while fixing the poverty line in India:

- (i) In the estimation of consumption cut-off, only private consumption expenditure is considered.
- (ii) In private consumption expenditure, we consider not only food items but non-food items as well.
- (iii) For the consumption of food items, we work out per capita consumption of calories. Frequency distribution is formed with different class intervals showing the range of calorie consumption and the level of calorie consumption. Higher class shows higher range of calorie consumption.
- (iv) Frequencies are recorded against each class interval. Each frequency counts the number of heads belonging to a particular consumption class.
- (v) Finally head-count ratio is worked out showing poor and non-poor (corresponding to the poverty line cut-off), separately for the rural and urban areas. The ratio shows the percentage of population below poverty line.

## Fixation of Calorie Norms for the Rural and Urban Households

Average calorie requirement is determined to be 2,435 and 2,045 respectively for the rural and urban population. It is higher in the case of rural population, because hard-working male population is found to be higher in rural areas.

### 3. TREND OF POVERTY IN INDIA: NUMBER AND PERCENTAGE OF THE POOR

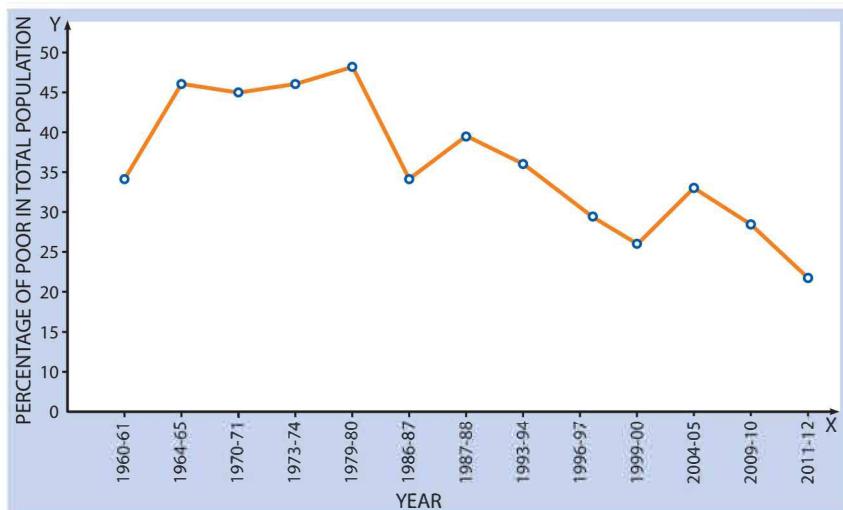
Table 1 and Fig. 1 offer an idea of the trend of poverty in India.

**Table 1.** Trend of Poverty in India

Year	Number of Poor	Percentage of Poor in Total Population
1960-61	17 crore	34
1964-65	22 crore	46
1970-71	25 crore	45
1973-74	32 crore	46
1979-80	33 crore	48
1986-87	27 crore	34
1987-88	31 crore	38.9
1993-94	32 crore	36
1996-97	27 crore	29.18
1999-00	26 crore	26.1
2004-05*	40.71 crore	37.2
2009-10*	35.46 crore	29.8
2011-12*	26.93 crore	21.9

[Source: Economic Survey 2013-14 and Planning Commission (Estimated by Tendulkar Method)]

\*Figures for 2004-05, 2009-10 and 2011-12 are based on the new poverty line.



**Fig. 1**

In 1960-61, about 17 crore people (34 per cent of the total population) lived below poverty line. In 1993-94, as many as 32 crore people (36 per cent of population) were living below poverty line. In 1999-2000, 26 crore people (26 per cent of population) were living below the poverty line. The Planning Commission of India estimated those below poverty line to be around 29.8 per cent of the population in 2009-10 based on the new poverty line. It declined to 21.9 per cent in 2011-12.

### Important Clarification

The upward trend in the poverty ratio in 2004-05 and 2009-10 is due to the application of new poverty line. It should not be interpreted as increase in poverty over time. To understand the actual trend, poverty estimates for 2004-05 and 2009-10 need to be compared with those for 1993-94 using the new methodology.

The following table shows that if the new methodology is used for the earlier estimates, the poverty ratio has, in fact, declined over time.

**Table. Poverty Ratios**

Year	Old Estimates	New Estimates (using the new methodology)
1993-94	36.0%	45.3%
2004-05	27.5%	37.2%
2009-10	—	29.8%
2011-12	—	21.9%

[Source: Economic Survey 2012-13; 2013-14 and NSSO Report]

### Inter-state Comparison

Here, following observations are of notable significance:

- The percentage of population below poverty line is different in different states of India.
- It is reported to be highest in UP, Bihar, Odisha, Chhattisgarh, Jharkhand, Manipur, Assam and Madhya Pradesh.
- Nearly 29.4 per cent of population of UP, 33.7 per cent of Bihar, 32.6 per cent of Odisha and 31.7 per cent of Madhya Pradesh population is estimated to be living below the poverty line.
- In Punjab only 8.3 per cent of population is below poverty line.
- In Haryana 11.2 per cent and in Rajasthan 14.7 per cent of the population is living below the poverty line.

#### Urban Poverty — A Spillover of Rural Poverty

- To a large extent, urban poverty is a spillover of rural poverty.
- People tend to migrate from rural areas to urban areas in search of jobs.
- But, not finding jobs beyond subsistence, they only add to the percentage of BPL (below poverty line) population in urban areas.

### Rural-Urban Picture of the Poverty Trends

Table 2 and Fig. 2 present a rural-urban picture of the poverty trends in India.

**Table 2. Percentage of Population below Poverty Line**

	1972-73	1987-88	1993-94	1999-2000	2004-05	2009-10	2011-12
Rural	54	39.1	37.3	27.1	41.8	33.8	25.7
Urban	42	38.2	32.4	23.6	25.7	20.9	13.7
Total	51	38.9	36.0	26.1	37.2	29.8	21.9

[Source: Economic Survey 2013-14 and Planning Commission  
(Estimated by Tendulkar Method)]

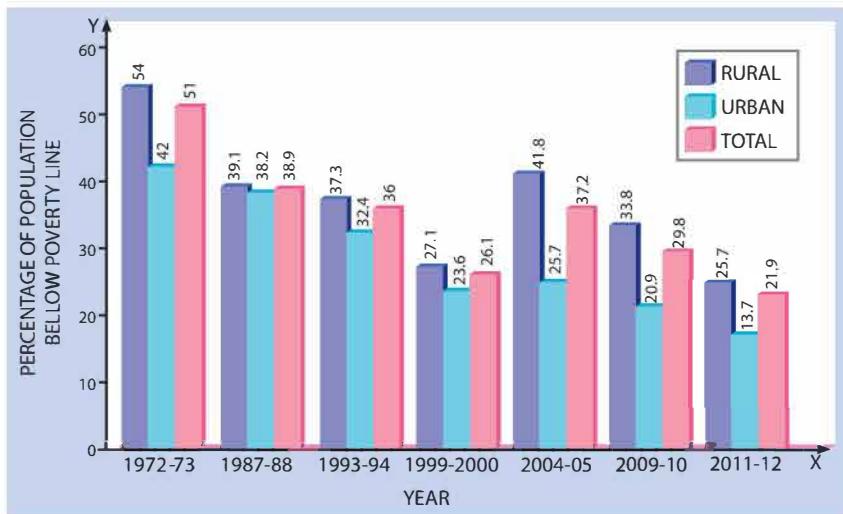


Fig. 2

**Table 2** offers these observations:

- (i) Rural poverty continues to have an edge over urban poverty, though both have shown a significant decline over time.
- (ii) Rural poverty has declined from 54 per cent in 1972-73 to 25.7 per cent in 2011-12, urban poverty has declined from 42 per cent to 13.7 per cent during the same period.

However, percentage decline by no means should be interpreted to mean the total decline as well.

Owing to an explosive rise in population over time, the total number of those below poverty line has continued to swell both in the rural and urban areas, despite a fall in their percentage number.

#### Rural and Urban Poor

- **The Rural Poor:** These include landless agricultural workers, marginal holders, and tenants-at-will.
- **The Urban Poor:** These include migrants from the rural areas in search of employment, casual factory workers and self-employed serving largely as street vendors. Urban poor are largely the spillover of the rural poor, migrating to urban areas in search of jobs.

#### Defining and Re-defining the Poverty Line

- There are no standard yardsticks of defining a poverty line.
- Often, it is defined considering the minimum consumption needs of the people.
- But, what are the minimum consumption needs? It is a debatable question.
- Some may argue that minimum consumption needs should include secondary level education, while others may not agree.
- It is a question involving value judgement and therefore, a precise answer may not be possible.
- However, the students must appreciate the implications of redefining the poverty line—fixing it high or low.
- When it is re-fixed at the higher level (pointing to a higher level of expenditure as a cut-off point), we shall get larger number of people below the poverty line.
- Likewise, if poverty line is re-fixed at a lower level of expenditure, we shall get smaller number of people below the poverty line.
- Thus, we may not get a correct picture of the economic and social status of the people over time in case poverty line is redefined/changed.

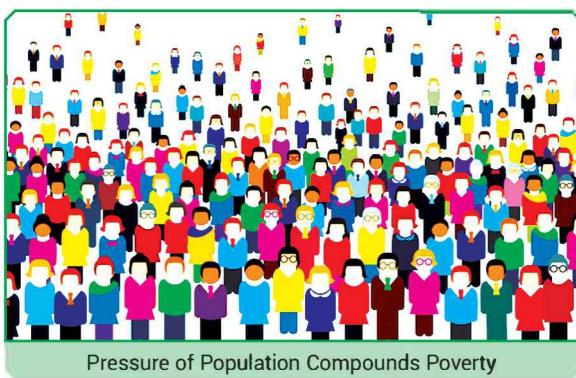
## 4. CAUSES OF POVERTY

In India, poverty is explained with reference to two sets of causes: one relating to underdevelopment of the economy and the other relating to unequal distribution of income. Details are as follows:

### Poverty with Reference to Underdevelopment of the Indian Economy

Underdevelopment of the Indian economy is the principal cause of poverty in India. Following factors support this observation:

- (1) **Low Level of National Product:** Net National Product of India is miserably low compared to its size of population. Low per capita income is the obvious consequence. The per capita income of the country falls in the category of poorest countries, according to UNO norms.
- (2) **Low Rate of Growth:** Rate of growth of economy has been quite low during Five Year Plans in India.  
During the period of planning, growth rate of GDP has been nearly 5 per cent.  
But owing to nearly 2 per cent growth rate of population, per capita income grew by 3 per cent only.  
Low growth rate of per capita income has tended to sustain poverty.



- (3) **Heavy Pressure of Population:** Population has been rising at a rapid pace. This rise is mainly due to a rapid fall in the death rate. Growth rate of population was 1.0 per cent in 1941-51, and 2.1 per cent in 1991-2001. In terms of its size, India's population was 84.63 crore in 1991 and 121 crore in 2011. Heavy pressure of population adds to dependency burden, implying greater poverty.

- (4) **Inflationary Spiral:** Owing to low GDP growth and high growth rate of population, less developed economies like India are vulnerable to inflationary spiral. It means a situation of persistent rise in prices. Inflation compounds poverty. It erodes real income of the households. Those who are marginally above the poverty line are driven down to the poverty line. Those already below the poverty line are compelled to suffer deprivation over a longer period of time.

- (5) **Chronic Unemployment and Underemployment:** India is a country sustaining chronic unemployment and underemployment. Poverty is just a reflection of unemployment. In 2011-12, the number of unemployed person in India was around 2.45 crore. It further increased to 4.35 crore till March 2016.
- (6) **Capital Deficiency:** Capital is one of the principal factors of economic growth. Accumulation of capital points to a rise in production capacity of a nation. Unfortunately, capital stock and capital formation continue to be highly deficient. Lack of capital points to low production capacity. In turn, low production capacity leads to low level of employment. And, low level of employment implies high level of poverty.

*Lack of capital → Low level of production capacity → Low level of employment  
→ High level of poverty*

- (7) **Lack of Able and Efficient Entrepreneurs:** GDP growth needs efficient and skilled entrepreneurs. Unfortunately, India lacks entrepreneurial skill. Consequently, production activity has failed to gather a momentum. Implying that we have failed to tackle poverty.
- (8) **Outdated Social Institutions:** The social structure of our country is full of outdated traditions and institutions like caste system and joint family system. Such traditions and institutions obstruct dynamic changes in the economy. Growth rate is hampered and poverty is sustained.
- (9) **Lack of Infrastructure:** Energy, transport and communication—the vital components of economic infrastructure as well as education, health and housing services—the principal components of social infrastructure, are grossly deficient. Economic and social infrastructure serves as the foundation of growth and development. But unfortunately, this foundation continues to be weak and unstable despite more than 68 years of planning. Slow pace of growth and persistence of poverty are the obvious consequences.

### Poverty with Reference to Unequal Distribution of Income

- (i) Poverty in India can also be explained with reference to unequal distribution of income.
- (ii) Efforts have been made by the government to moderate inequality (in the distribution of income) through a system of progressive taxation and other measures.

- (iii) But despite all such measures, poverty in India has only tended to compound over time.
- (iv) According to NCAER Report (in 2009-10), top 20 per cent of population appropriates 53.2 per cent of total income, while the bottom 40 per cent population appropriates only 15.3 per cent.
- (v) According to Monopoly Enquiry Commission, 1,536 companies in the country are controlled just by 75 families.
- (vi) Unequal distribution of income not only reflects the size of existing poverty but also points to the possibilities of widening gulf between the rich and the poor in the near future. Because those with higher income (and wealth) certainly have greater capacity to generate still higher income in the near future (than those with lower income).
- (vii) With huge stocks of wealth, the rich are able to build their fortune while the poor continue to struggle for survival.

## 5. MEASURES TO REMOVE POVERTY

Measures to remove poverty in India are placed in four categories, as under:

- Combating poverty through GDP growth.
- Combating poverty by improving the distribution of income (through fiscal and legislative measures).
- Combating poverty through population control.
- Other measures enhancing quality of life of the poor.

### Combating poverty through GDP Growth

GDP growth is an ultimate solution to the problem of poverty. When the pace of GDP growth is accelerated, new opportunities of employment are generated. More and more workers will find employment in farms and factories. **Greater the employment, more inclusive would be the growth process, implying lesser poverty.**

#### Avoid Jobless Growth

- Poverty will reduce with acceleration of the pace of growth only if jobless growth is avoided.
- Jobless growth occurs when GDP growth is 'technology driven' rather than 'employment driven'.
- The government must ensure that the production process is labour-intensive rather than capital/technology-intensive.

## Combating Poverty by Improving the Distribution of Income through Fiscal and Legislative Measures

Poverty can be combated by improving the distribution of income through fiscal and legislative measures:

(1) **Fiscal Measures:** Fiscal measures refer to the policy of taxation and subsidies. It is required that:

- ◆ The government places greater reliance on a progressive tax structure. It implies a higher tax on the rich, while the poor are exempted.
- ◆ Tax receipts of the government are used to subsidise purchases by poorer sections of the society.  
Subsidy is offered on the necessities of life including food, education and housing.
- ◆ Capital grants are offered to the poor for construction of their houses, besides grants for self-employment.

(2) **Legislative Measures:** Legislative measures refer to Minimum Wages Act, making it mandatory for the employers to offer the stipulated minimum wage to the employees.

Legislative measures also include such policies as of 'Price Floor' for the purchase of farm outputs.

This refers to the stipulated minimum price that must be offered to the farmers for the purchase of their output.

Laws like 'Right to Education' is yet another example of legislative measures to enhance quality of life of poorer segments of the society.

## Combating Poverty through Population Control

Indian experience shows that increase in national income fails to be reflected in quality of life of the people, owing to a rapid rise in population.

Per capita income  $\left( \frac{\text{National income}}{\text{Population}} \right)$  continues to be low, because population is rising to neutralise the rise in national income.

Poverty can be removed only if growth rate of population is moderated so that increase in GDP is translated into increase in per capita GDP.

Control of population would also mean reduction in the size of labour force. This would correct the structural imbalance between labour supply and capital stock.

Rate of participation (percentage of labour force gainfully employed) would increase. Increase in the rate of participation implies a corresponding decrease in the percentage of population below poverty line, other things remaining constant.

## Other Measures enhancing Quality of Life of the Poor

(1) **Development of Agriculture:** Dr. Minhas is of the opinion that to remove poverty, special efforts should be made to develop agriculture. It is recommended that:

- ◆ Agriculture should be mechanised and modernised.
- ◆ Better seeds, means of irrigation, chemical and composite fertilisers should be used.
- ◆ Small farmers should be given financial assistance.
- ◆ Landless farmers should be given land.

These measures are expected to reduce or remove poverty at the grass-roots level.

(2) **Stability in the Price Level:** Price stability is an essential pre-requisite of poverty alleviation.

If prices continue to rise, the standard of living of poor will continue to deteriorate.

Prices can be stabilised (i) when production of foodgrains and other goods of mass consumption is increased, and (ii) when goods of mass consumption are distributed to the poor through fair price shops.

(3) **Eradication of Unemployment:** Special measures should be taken to eradicate unemployment, underemployment and disguised unemployment. In this context, it may be noted that:

- ◆ The opportunities of employment in rural areas must be fully explored.
- ◆ Cottage industries and construction activities should be encouraged in rural areas.
- ◆ Vocationalisation of education should be given a high priority to tackle unemployment among the educated youth.



Eradication of Unemployment eradicates Poverty

- (4) **Labour-intensive Technique of Production:** Dr. Gunnar Myrdal is of the opinion that India should adopt labour-intensive technique of production. Its adoption will raise the level of employment and reduce the level of poverty.
- (5) **Provision for Minimum Needs of the Poor:** Government should take appropriate measures to meet minimum needs of the poor, such as supply of drinking water, provision of primary health centres, primary education, etc. Public sector should allocate more and more funds for this purpose.
- (6) **Special Focus on Backward Regions:** Government should offer special concessions and facilities to extremely backward and poor regions (like Odisha, Nagaland, UP and Bihar) so as to encourage private investment.
- (7) **Opportunities for Self-employment:** Opportunities for self-employment should be further explored. More and more Industrial Training Institutes (ITIs) should be opened to impart industrial and entrepreneurial education. Also, loans should be offered (through banking and other financial institutions) at low rate of interest for setting up small enterprises as means of self-employment. 'Start-ups' must be given a kick-start.
- (8) **Effective Public Distribution System (PDS):** An effective PDS must be in place for the supply of foodgrains and other essentials of life to the BPL population of the country. Foodgrains and coarse cloth must be provided at subsidised rates through Fair Price Shops under direct control and supervision of the government.

#### Provision of Income Generating Assets and Eradication of Poverty

- Provision of income generating assets can go a long way in eradicating poverty.
- Let us give land to the landless workers in rural areas.
- Let us give loans for the purchase of business assets to the educated unemployed in the urban areas. This would encourage people to be self-employed.
- Addressing the problem of poverty through self-employment schemes (based on the provision of income generating assets) is indeed the most effective means as it improves the rate of participation and also empowers the poor.
- This would mean multi-dimensional attack on poverty as it would not only combat poverty but also ensure skill formation, besides better health and higher literacy.

#### Three Major Programmes for improving the Food and Nutritional Status of the Poor

- PDS (Public Distribution System).
- Integrated Child Development Scheme.
- Mid-day Meal Scheme.

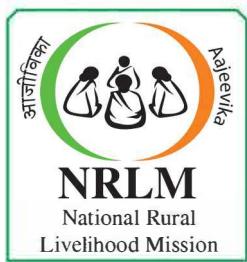
#### National Social Assistance Programme

- This is a scheme initiated by the central government offering social assistance to the elderly people in the form of monthly pension.
- Destitute women and widows are also covered under this scheme.

## 6. MEASURES ADOPTED BY THE GOVERNMENT TO REMOVE POVERTY (AND UNEMPLOYMENT) OR POVERTY ALLEVIATION PROGRAMMES

Following are some of the principal measures adopted by the government under Five Year Plans to remove poverty:

- (1) **Swarnajayanti Gram Swarozgar Yojana (SGSY):** To remove poverty from the rural areas, 'Swarnajayanti Gram Swarozgar Yojana' was launched in the villages, in April 1999. It replaced the earlier programmes like Integrated Rural Development Programme (IRDP), Training of Rural Youth for Self-Employment (TRYSEM), etc.



Under this programme, a large number of small enterprises were established in rural areas.

The small enterprises were organised as individual enterprises as well as on collective basis as Self-Help Groups (SHGs). In 2011-12, SGSY scheme was restructured into National Rural Livelihood Mission (NRLM).

- (2) **National Rural Livelihood Mission (NRLM):** This scheme is also known as 'Aajeevika'. In the first phase, this scheme was implemented in 150 districts in the year 2012-13. The scheme was expanded to another 150 districts by 2014-15 and by the end of 2016-17, this scheme was extended to whole of the country. NRLM is expected to provide self-employment to 90 lakh persons. The programme is now renamed as Deendayal Antyodaya Yojana.
- (3) **Sampoorna Gramin Rozgar Yojana (SGRY):** Sampoorna Gramin Rozgar Yojana was launched on 1st September, 2001. Jawahar Gram Samridhhi Yojana and Employment Assurance Scheme were integrated into a single Yojana. The main objectives of this Yojana are:
  - (i) To provide employment opportunity to the surplus workers.
  - (ii) To focus on the development of regional, economic and social conditions.
  - (iii) To focus on the development of infrastructure.

This Yojana has set a target of creating 100 crore man-days for labour. However, it has now been subsumed in MGNREGA.



Gramin Rozgar

- (4) **Pradhan Mantri Gramodaya Yojana (PGY):** It was launched in 2001. It aims at improving the standard of living of the rural people by developing five important areas: (i) Health, (ii) Primary Education, (iii) Drinking Water, (iv) Housing, and (v) Roads. It incorporated three projects, viz., (a) Pradhan Mantri Gram Sadak Yojana (its focus was on building all-weather roads by 2007 in all villages having population of 500 persons or more), (b) Pradhan Mantri Gramin Awas Yojana, and (c) Pradhan Mantri Gramin Drinking Water Yojana.
- (5) **Jai Prakash Rozgar Guarantee Yojana (JPRGY):** The scheme seeks to provide guaranteed employment in the most backward districts of the country.
- (6) **Swarna Jayanti Shahri Rozgar Yojana (SJSRY):** This Yojana was launched on December 1, 1997. Nehru Rozgar Yojana and Prime Minister's Integrated Urban Poverty Eradication Programme have been merged with this yojana. The objective of this yojana is to provide self-employment or wage employment to urban unemployed or underemployed persons. It includes the following two programmes:
- (i) Urban Self-Employment Programme (USEP), and
  - (ii) Urban Wage Employment Programme (UWEP).
- Of the total expenditure of this project, 75 per cent is borne by the central government and the remaining 25 per cent by the state government.
- (7) **Prime Minister's Rozgar Yojana (PMRY):** The scheme is for providing employment to educated unemployed. The scheme provides a loan of up to ₹ 1 lakh for opening his own enterprise and ₹ 2 lakh for other activities.
- (8) **Development of Small and Cottage Industries:** Special measures have been taken by the government to develop small and cottage industries with a view to removing poverty and unemployment through the spread of cottage and small-scale industries.
- (9) **Minimum Needs Programme:** To raise the standard of living of the poor, Minimum Needs Programme was launched during the Fifth Plan. The programme covers primary education, adult education, rural health, rural water supply, rural roads, rural electrification, rural housing, and ecological improvement of the urban slums. This is expected to improve the quality of life of poorer sections of the society.

#### Three Approaches to Combat Poverty

Since independence, the government has adopted three types of approaches to combat poverty in the country:

- (i) **Growth-Oriented Approach:** This seeks to alleviate poverty through 'trickle-down effect'. It is believed that rise in GDP would certainly offer greater economic opportunities to the poor.
- (ii) **Poverty Alleviation Programmes:** These are the specific programmes launched with a view to offering greater economic opportunities to the poorer sections of the society, particularly in the rural areas.
- (iii) **Meeting Minimum Needs of the Poor:** This focuses on catering to minimum needs of the poor including food, health, education and housing. Distribution of essentials of life through PDS is an important component of this approach.

**(10) Twenty-Point Programme:** A new 20-point economic programme was launched on 14th January, 1982 with a view to eradicating poverty. This includes: (i) Increase in irrigation capacity, (ii) Increased production of pulses and oilseeds, (iii) Extension of Integrated Rural Development Programme and National Rural Employment Programme, (iv) Fixation of ceiling on landholdings, (v) Minimum wages to agricultural workers, (vi) Rehabilitation of bonded labour, (vii) Expansion of scheduled castes and scheduled tribes programme, (viii) Drinking water in villages, (ix) Provision of houses in rural areas, (x) Improvement of slum areas, (xi) Development of power capacity, (xii) Development of forests and gobar gas, (xiii) Family Planning, (xiv) Setting up of primary health centres, (xv) Welfare programme for women and children, (xvi) Primary education for children between 6-14 years, (xvii) Expansion of public distribution system and fair price shops, (xviii) Simple industrial policy, (xix) Checking of generation of black money, (xx) Efficient management of public sector industrial units.



MGNREGA: Guarantee of Employment

**(11) Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA):** Under this Act, all those who are willing to undertake unskilled manual work at the minimum wage are offered employment for a minimum period of 100 days. Those seeking employment are to report in those rural areas where the employment programme is being launched. This programme is becoming extremely popular in the rural areas. According to one estimate, the total number of individuals who have benefited from this programme has risen from 6.22 crore in 2014-15 to 7.77 crore in 2018-19.



MUDRA Bank for Micro Enterprises

**(12) Micro Units Development Refinance Agency Bank (MUDRA BANK):** The Government has set up MUDRA Bank in April, 2015. Its objective is to meet credit needs of micro enterprises and self-employed persons. Under MUDRA Yojana, a micro enterprise is entitled for a loan up to ₹10 lakh per unit.

## Poverty Alleviation Programmes—A Critical Assessment

Studies conducted to evaluate the performance of PAPs suggest that there have been some noticeable changes over time. Thus,

- (i) Percentage of population below poverty line has declined from 46 per cent in 1973-74 to 21.9 per cent in 2011-12.
- (ii) Wage rate has tended to rise over time.

Yet, PAPs have failed to deliver the desired results. Causes are as under:

- (i) The administration and concerned staff were inefficient and could not work effectively because of complex procedures involved. Also, there was no one to monitor the follow-up action.
- (ii) Those incharge of the programmes favoured the educated, rich and resourceful persons as against the poor.
- (iii) Remote areas and poor households located in the interiors of the villages were neglected, owing to the constraints of accessibility.
- (iv) Institutions that were needed to provide facilities like credit, marketing, etc., were not very supportive.
- (v) Definition of 'poor' was not clear to many. As a result, many 'non-poor' took advantage of the programmes.
- (vi) Power groups in the villages started exercising control over delivery mechanism of the Poverty Alleviation Programmes. As a result, there was a large-scale leakage in the delivery package and the poor received only a fragment of the aid earmarked for them.
- (vii) The PAPs were largely government sponsored programmes and lacked participation of the people.
- (viii) The strategy of PAPs was not linked with the overall development strategy and did nothing to modify the overall functioning of the economy, which is the root cause of poverty. Also, it did not consider the fact that the poor would not be able to take advantage of the PAPs owing to their lack of awareness and initiative.

There is an urgent need to make PAPs more effective and meaningful.

No doubt that the government has spent huge amount of money on the poverty alleviation programmes. But certainly the desired results are not available. Inefficient 'delivery mechanism' of the government along with large-scale corruption are the principal factors behind failure of PAPs. Late Prime Minister, Rajiv Gandhi, once remarked that of the total help earmarked for the poor, only 15 per cent actually reached them.

### Three Major Deficiencies of PAPs

- (i) Owing to poor delivery mechanism, benefits of PAPs have largely been appropriated by the non-poor.
- (ii) Compared to the magnitude of the problem, the resources allocated (to tackle the problem) are quite deficient.
- (iii) Owing to the involvement of ill-motivated officials, the resources are wasted or inefficiently used.

### Descending into Poverty

NEP (in terms of liberalisation, privatisation and globalisation) along with PAPs may have accelerated the pace of growth and reduced the percentage of population below poverty line. But, there are millions, living under a constant threat of slipping below BPL. These are small and marginal farmers, particularly in the states of Andhra Pradesh and Maharashtra. NEP has exposed them to the uncertainties of the market. Market forces have driven them to commercial farming. Often they find themselves helpless in coping with high cost of commercial cultivation as well as in managing the uncertainties of the market. Consequently, they are being driven deep into the vicious circle of poverty. Thousands of them (in the states of AP and Maharashtra) have committed suicide, due to the unbearable burden of poverty and indebtedness.

## Power Points & Revision Window

- **Meaning of Poverty:** Poverty implies inability to get minimum consumption requirements for life, health and efficiency.
- **Relative Poverty:** Relative poverty refers to poverty of one set of people in relation to the other.
- **Absolute Poverty:** Those below poverty line are deemed as absolutely poor.
- **Poverty Line:** Poverty line refers to that line which indicates per capita average monthly expenditure required to satisfy minimum needs of the households.
- **Causes of Poverty:** (i) Low level of national product, (ii) Low rate of growth, (iii) Heavy pressure of population, (iv) Inflationary spiral, (v) Chronic unemployment and underemployment, (vi) Capital deficiency, (vii) Lack of able and efficient entrepreneurs, (viii) Outdated social institutions, (ix) Lack of infrastructure.
- **Combating Poverty:** Measures to combat poverty are placed in four categories: (i) Combating poverty through GDP growth, (ii) Combating poverty by improving the distribution of income through fiscal and legislative measures, (iii) Combating poverty through population control, (iv) Other measures enhancing quality of life of the poor.
- **Poverty Alleviation Programmes (PAPs) Adopted by the Government:** (i) Swarnajayanti Gram Swarozgar Yojana (SGSY), (ii) National Rural Livelihood Mission (NRLM) (iii) Sampoorna Gramin Rozgar Yojana (SGRY), (iv) Pradhan Mantri Gramodaya Yojana (PGY), (v) Jai Prakash Rozgar Guarantee Yojana (JPRGY), (vi) Swarna Jayanti Shahri Rozgar Yojana (SJSRY), (vii) Prime Minister's Rozgar Yojana (PMRY), (viii) Development of Small and Cottage Industries, (ix) Minimum Needs Programme (x) Twenty-point Programme, (xi) Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), (Xii) Micro Units Development Refinance Agency Bank (MUDRA Bank).
- **Critical Assessment of PAPs:** Owing to PAPs, percentage of population below poverty line has reduced (from 55 per cent in 1973-74 to 21.9 per cent in 2011-12). But the desired results are yet to be achieved. Aid under PAPs is substantial. But the delivery mechanism is extremely poor. A huge segment of India's population continues to struggle with staggering poverty with little hope of redemption.



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

## Choose the correct option:

10. Which of the following measures are aimed at combating poverty in India?
  - (a) Distribution of income
  - (b) GDP growth
  - (c) Population control
  - (d) All of these
  
11. Which of the following are measures aimed at enhancing the quality of life of the poor?
  - (a) Development of agriculture
  - (b) Labour-intensive technique of production
  - (c) Both (a) and (b)
  - (d) None of these
  
12. Which of the following is the principal poverty alleviation programme adopted by the government?
  - (a) Swarnajayanti Gram Swarozgar Yojana
  - (b) Mahatma Gandhi National Rural Employment Guarantee Act
  - (c) Mission Indradhanush
  - (d) Both (a) and (b)

#### **Answers**

1. (c)      2. (d)      3. (a)      4. (d)      5. (d)      6. (a)      7. (d)      8. (a)      9. (d)      10. (d)
11. (c)      12. (d)

#### **B. Fill in the Blanks**

**Choose appropriate word and fill in the blank:**

1. In the estimation of consumption cut-off, consumption expenditure is considered. (only private/both private and government)
  
2. poverty is defined with respect to minimum requirements of life. (Relative/Absolute)
  
3. Accumulation of capital points to a rise in capacity of a nation. (production/consumption)
  
4. Inflationary spiral is a situation of persistent in prices. (rise/fall)
  
5. Pradhan Mantri Rozgar Yojana is for providing employment to unemployed. (educated/uneducated)
  
6. Under fiscal measures to improve the distribution of income in an economy, the government places greater reliance on a tax structure. (regressive/progressive)
  
7. In the opinion of Dr. Gunnar Myrdal, India should adopt technique of production. (capital-intensive/labour-intensive)
  
8. Swarnajayanti Gram Swarozgar Yojana aims to remove poverty from areas. (rural/urban)
  
9. Incidence of poverty is in a socialist economy than a capitalist economy. (higher/lower)

10. Under MUDRA Yojana, a micro enterprise is entitled for a loan up to lakh per unit. (₹10/₹15)

### Answers

- |                 |                     |               |          |             |
|-----------------|---------------------|---------------|----------|-------------|
| 1. only private | 2. Absolute         | 3. production | 4. rise  | 5. educated |
| 6. progressive  | 7. labour-intensive | 8. rural      | 9. lower | 10. ₹10     |

### C. True or False

**State whether the following statements are True or False:**

1. Poverty breeds poverty. (True/False)
2. The people who never move above the poverty line are called occasional poor. (True/False)
3. Consumption reflects the actual use of goods and services, while income only shows the capacity to purchase. (True/False)
4. Average calorie requirement is determined to be 2,045 and 2,435 respectively for urban and rural areas. (True/False)
5. Urban poverty continues to have an edge over rural poverty, though both have shown a significant decline over time. (True/False)
6. Sampoorna Gramin Rozgar Yojana was launched on 1st September, 2001. (True/False)
7. Under MGNREGA, work is offered for a minimum number of 100 days. (True/False)
8. Poverty continues to persist in the country even after seven decades of independence. (True/False)
9. Poverty can exist even when real GDP is rising. (True/False)
10. A new 20-point economic programme was launched on 14th January 1981. (True/False)

### Answers

1. True    2. False    3. True    4. True    5. False    6. True    7. True    8. True    9. True    10. False

### D. Matching/Chronological

**I. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:**

Column I	Column II
(a) Relative poverty	(i) Measured in terms of poverty line
(b) Income	(ii) Poverty across different classes, regions, or countries
(c) Consumption	(iii) It only shows the capacity to purchase
(d) Absolute poverty	(iv) Reflects the actual use of goods and services by an individual

### Answers

- (a)—(ii), (b)—(iii), (c)—(iv), (d)—(i)

## **II. Choose the correct alternative showing chronological order of the following events:**

- (i) Swarnajayanti Gram Swarozgar Yojana
- (ii) Deendayal Antyodaya Yojana-National Rural Livelihood Mission
- (iii) Micro Units Development Refinance Agency Bank (MUDRA Bank)
- (iv) Swarna Jayanti Shahri Rozgar Yojana

### **Alternatives:**

- |                            |                            |
|----------------------------|----------------------------|
| (a) (ii), (iv), (iii), (i) | (b) (iv), (ii), (i), (iii) |
| (c) (ii), (iv), (i), (iii) | (d) (iv), (i), (ii), (iii) |

### **Answer**

(d)—(iv), (i), (ii), (iii)

## **E. 'Very Short Answer' Objective Type Questions**

**1. What do you understand by poverty?**

**Ans.** Poverty implies inability to fulfil minimum consumption needs for life, health and efficiency.

**2. What is meant by relative poverty?**

**Ans.** Relative poverty refers to poverty of one set of people in relation to the other.

**3. What is meant by absolute poverty in India?**

**Ans.** In India, concept of poverty line is used as a measure of absolute poverty.

**4. Define poverty line.**

**Ans.** Poverty line is that line which expresses per capita average monthly expenditure by which people can satisfy their minimum needs.

**5. What do the persons below poverty line indicate?**

**Ans.** The persons below poverty line indicate 'absolute poverty'.

**6. Which project has been launched to provide employment to educated unemployed youth in India?**

**Ans.** Prime Minister Rozgar Yojana (PMRY).

## **2. Reason-based Questions (Comprehension of the Subject-matter)**

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### **Read the following statements carefully. Write True or False with a reason.**

**1. Mr. X is relatively richer than Mr. Y. But both can be absolutely poor.**

**Ans.** True. Because Mr. X may have higher income than Mr. Y. But, both X and Y may not have enough income to buy the essentials of life. So that, both are absolutely poor.

**2. Inflation is the cause of poverty.**

**Ans.** True. Because, inflation (price spiral) erodes real income of the people. Other things remaining constant, price spiral may push certain people below the poverty line.

**3. Capital formation is the key to eradicate the poverty in India.**

**Ans.** True. Because:

— Lack of capital implies lack of production capacity.

- Low production capacity implies low opportunities of employment.
- Low level of employment implies high level of poverty.

**4. Progressive taxation helps reduce poverty.**

Ans. True. Because progressive taxation implies higher tax burden on the rich, and lower tax burden on the poor. It narrows down 'economic divide' between the rich and the poor. Accordingly, relative poverty is reduced.

**5. Poverty can reduce even when income of the poor does not rise.**

Ans. True. Because, the poor can be offered essentials of life at subsidised prices. **Example:** Rice and wheat are offered to the poor at a notional price of ₹3-4 per kg, to those who are absolutely poor. It enhances their quality of life. Accordingly, poverty is reduced.

**6. Eradication of poverty through GDP growth is only a short period remedy.**

Ans. False. Eradication of poverty through GDP growth is a long period remedy, not a short period remedy. Because, GDP growth is a long-drawn process. Also, GDP growth helps combat poverty only when it is accompanied with higher level of employment.

**7. Migration lowers poverty.**

Ans. True. Because, people migrate to those areas which offer better opportunities of employment. Getting employment or getting better employment leads to improvement in the quality of life. It may help people shift above the poverty line.

### **3. HOTS & Applications**

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**1. Do you think that urban poverty is a spillover of rural poverty?**

Ans. It is absolutely correct to say that urban poverty is a spillover of rural poverty in India. Poverty is so widespread in rural areas that the people are compelled to move to urban areas for job opportunities. The people are attracted to the urban areas because most industries (the principal source of employment) are located in urban areas. One would hardly find a trace of MNCs (multinational corporations) in rural areas. Accordingly, even the skilled workers in the rural areas are compelled to migrate to urban areas for jobs.

**2. When is growth converted into development?**

Ans. Growth is converted into development when poverty is reduced.

**3. Economic equality and GDP growth may not move in the same direction. Comment.**

Ans. Economic equality may not improve even when GDP increases. This happens when.

- increase in GDP is pocketed by the rich in terms of high profits, and the poor continue to get low wages, and
- increase in GDP is not linked with increase in employment.

**4. Sickness and inefficiency are related to poverty. How?**

Ans. A poor man cannot afford expenditure on nutritious food and healthcare. It leads to sickness, and sickness leads to inefficiency.

**5. Does population growth always compound the problem of poverty?**

Ans. It is true in case of overpopulated countries like India. Because of overpopulation, India is burdened with massive unemployment. In such a situation, growth of population would only compound the problem of unemployment. We all know that unemployment is just another name of poverty: higher level of unemployment implies higher level of poverty.

## 4. Analysis & Evaluation

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1. There are two broad approaches to eradicate poverty: (i) increase in social spending by the government, and (ii) GDP growth. Which of the two would you prefer, if you were the prime minister of the country?

Ans. Eradication of poverty through higher social spending implies that the government focuses on improving the quality of life of the poor people by offering them (i) free education, (ii) free healthcare, (iii) cheaper housing, and (iv) subsidised food. This is a short period approach to combat poverty.

Eradication of poverty through GDP growth is a long period approach to combat poverty. It focuses on the generation of employment opportunities through higher and higher investment across secondary and tertiary sectors of the economy. According to this approach, poverty is combated by way of 'trickle-down' effect of growth.

Both these approaches are complementary to each other. It is essential that a balance is struck between the two approaches. Choosing one against the other will not be a rational decision.

2. Visit any slum area in your town. You will find how poverty breeds itself there. Yet, those people prefer to have large families. Isn't it paradoxical? Write your observations.

Ans. It is not denying the fact that large families are preferred by poorer sections of the society, even when it compounds their poverty. However, this fact cannot be explained in terms of irrational behaviour of the poor. The poor people also do cost-benefit analysis of having an additional child. While the cost of an additional child (in terms of pre-natal, post-natal care as well as in terms of education of the child) is almost nil for a poor family, the benefit of an additional child are assessed to be fairly high. Because, it is at the early age that poor children become a helping-hand to their parents and start supplementing income of their families.

Thus, it is not paradoxical that poorer families are larger families. It is the consequence of poverty itself.

3. What, in your opinion, is the lasting solution to the problem of poverty in India?

Ans. The lasting solution to the problem of poverty in India is to generate more and more opportunities of gainful employment in the economy. It is only when the people are gainfully employed for longer periods of time that they are able to break the shackles of poverty. Measures such as food security for the people below poverty line or cash grants to the poor people will bring only short period relief from poverty; these measures cannot eradicate poverty.

4. What is MGNREGA? Do you think it will finally address the problem of poverty in India?

Ans. MGNREGA offers guaranteed employment for 100 days to all those who are willing to work at the minimum wage as fixed by the government. As it is working in India, this programme is more like a financial aid to the poor. It is a programme which is more like 'dig the ditches and fill them up'. It has not been linked to 'asset creation'. It is important that MGNREGA workers are engaged in productive activities like construction of roads, dams and bridges. This is called 'asset creation' (or creation of income-earning assets). This adds to national wealth. So that national wealth is increased and MGNREGA workers are converted from an unproductive labour force to a productive labour force. Only when this happens that MGNREGA can emerge as a significant policy programme to eradicate poverty in India.

## 5. NCERT Questions (With Hints to Answers)

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**1. Why is calorie-based norm not adequate to identify the poor?**

[Hint: A major problem with calorie-based norm is that it groups all the poor together and does not differentiate between the very poor and the other poor. It is difficult to identify who among the poor needs help the most.]

**2. Why are employment generation programmes important in poverty alleviation in India?**

[Hint: Unemployment and underemployment lies at the core of poverty. For the poor, labour is often the only asset they can use to improve their well-being. Hence, employment generation is essential for poverty alleviation.]

**3. How can creation of income earning assets address the problem of poverty?**

[Hint: Creation of income earning assets can go a long way in eradicating poverty. Let us give land to the landless workers in rural areas. Let us give loans for the purchase of business assets to the educated unemployed in the urban areas. This would encourage people to be self-employed. Addressing the problem of poverty through self-employment schemes (based on the provision of income earning assets) is indeed the most effective means as it improves the rate of participation and also empowers the poor. This would mean multi-dimensional attack on poverty as it would not only combat poverty but also ensure skill formation, besides better health and higher literacy.]

**4. What programmes has the government adopted to help the elderly people, poor and destitute women?**

[Hint: National Social Assistance Programme.

This is a scheme initiated by the central government offering social assistance to the elderly people, poor and destitute women in the form of monthly pension. Widows are also covered under this scheme.]

**5. Is there any relationship between unemployment and poverty? Explain.**

[Hint: Unemployment and poverty are positively related to each other. In fact one is the reflection of the other.

Unemployed persons live in poverty as they do not have any source of income. In fact, poverty of the unemployed persons breeds itself. Because, owing to their poverty, they raise loans at high interest rates. And, owing to their inability to re-pay loans, they pushed them into a vicious circle of poverty. Poverty thus breeds itself. Lack of employment further accentuates this cycle.]

**6. Illustrate the difference between rural and urban poverty. Is it correct to say that poverty has shifted from rural to urban areas? Use the trends in poverty ratio to support your answer.**

[Hint: Rural poor (or rural poverty) include landless agricultural workers, marginal holders, and tenants-at-will. On the other hand, urban poor (or urban poverty) include migrants from the rural areas in search of employment, casual factory workers and self-employed serving largely as street vendors. Urban poor are largely the spillover of the rural poor, migrating to urban areas in search of jobs.

Yes, to a large extent, poverty has shifted from rural to urban areas. People tend to migrate from rural areas to urban areas in search of jobs. But, not finding jobs beyond subsistence, they only add to the percentage of BPL (below poverty line) population in urban areas.

The following table shows trends of rural-urban poverty in India:

**Table. Percentage of Population below Poverty Line across Rural and Urban Areas in India**

	1972-73	1987-88	1993-94	1999-2000	2004-05	2009-10	2011-12
Rural	54	39.1	37.3	27.1	41.8	33.8	25.7
Urban	42	38.2	32.4	23.6	25.7	20.9	13.7
Total	51	38.9	36.0	26.1	37.2	29.8	21.9

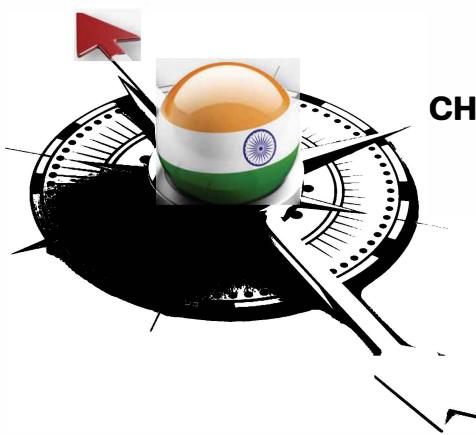
The above table shows that both rural and urban poverty have declined over time.

But decline in rural poverty is more pronounced than the decline in urban poverty. This is because urban poverty to a large extent is the spill-over of rural poverty: poverty has been shifting from rural to urban areas.]

## 6. Miscellaneous Questions and Reference to the Text for Answers

1. How is relative poverty different from absolute poverty? [Page 145, 146]
2. Can you identify the three main causes of poverty in India? [Page 152-154]
3. Give three suggestions to remove poverty in India. [Page 154-157]
4. How has poverty line been defined in India? [Page 147, 148]
5. Which four measures have been taken by the Government of India to remove poverty? [Page 157-160]
6. Write a short note on Swarnajayanti Gram Swarozgar Yojana. [Page 157, 158]
7. How are poverty and inequality related to each other? [Page 153, 154]
8. Write your observations on the poverty alleviation programmes in rural India. [Page 157-160]





## CHAPTER: 8

# HUMAN CAPITAL FORMATION IN INDIA

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DO

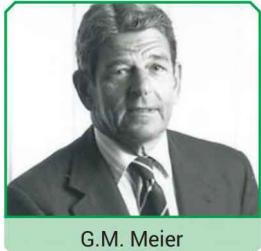
- Concept of Human Capital and Human Capital Formation
- Determinants/Sources of Human Capital Formation
- Role of Human Capital Formation
  - Or
  - Human Capital Formation and Economic Growth
- Problems Facing Human Capital Formation in India
- Education as an Essential Element of Human Resource Development

## I. CONCEPT OF HUMAN CAPITAL AND HUMAN CAPITAL FORMATION

Human capital refers to the stock of 'skill and expertise' of a nation at a point of time. It is the sum total of skill and expertise of engineers, doctors, professors and workers of all types who are engaged (or have the capacity and expertise to be engaged) in the process of production.



Skill and Expertise—The Core Determinants of Growth



G.M. Meier

Human capital formation is the process of adding to the stock of human capital over time. If 'human capital stock' of a nation consists of 10,000 skilled workers at the beginning of 2018, and if at the beginning of 2019 it increases to 12,000 skilled workers (implying an increase of human capital stock by 2,000 workers in a year), there is human capital formation to the extent of 2,000 skilled workers in a year.

*"Human Capital Formation is the process of acquiring and increasing the number of persons who have the skill, education and experience which are essential for the economic and political development of a country."*

—G.M. Meier

### Human Capital is Different from Physical Capital and Financial Capital

- ❑ Physical capital refers to the produced means of production. Stock of physical capital measures production capacity of a nation.
- ❑ Financial capital refers to paper claims against physical capital.
- ❑ Human capital refers to skill and expertise acquired by man over time. Human capital is the cause behind physical capital. Indeed, it is the ultimate cause of an exponential pace of growth and development in advanced economies of the world.

## 2. DETERMINANTS/SOURCES OF HUMAN CAPITAL FORMATION

Determinants of human capital refer to the sources of human capital formation, or the ways of adding to the stock of human capital.

Following are some important ways of adding to the existing stock of human capital:

- (1) **Expenditure on Education:** Expenditure on education is the most effective way of raising a productive workforce in the country. It is, therefore, a very important determinant of human capital formation.



Education: Raises Productive Workforce in the Country

Most families decide to incur huge expenditure on education, even when they have to raise loans. **Reason:** Returns on such expenditures are substantially large.

Education enables an individual to make a good living throughout his life. His total earnings during his life span would far exceed his initial expenditure on education.

- Monetary benefits of education (in terms of earnings of the educated person during his life time) far exceed the cost of education.
- The difference between benefit and cost is an approximate market value of human capital formation.

**(2) Expenditure on Health:** “A sound mind in a sound body” is an old saying. Expenditure on health makes a man more efficient and, therefore, more productive. His contribution to the production process tends to rise. He adds more to GDP of the nation than a sick person.

Expenditure on health, therefore, is an important determinant of human capital formation.

**(3) On-the-Job Training:** On-the-job-training helps workers to hone/sharpen their specialised skills. It enables them to raise the level of their efficiency/productivity.

Firms are always inclined to undertake ‘on-the job-training’ programmes. Because, returns (on account of enhanced productivity) far exceed the cost of such programmes.



On-the-Job Training raises Efficiency

Expenditure on such training programmes, therefore, is yet another important determinant (and a source) of human capital formation.

**(4) Study Programmes for Adults:** Other than formal education at the primary, secondary and university levels, the Government and NGOs organise study programmes for adults to make them proficient in their work areas. This enhances their productivity, serving as a source of human capital formation.

**(5) Migration:** Migration contributes to human capital formation as it facilitates utilisation of (otherwise) inactive skills of the people, or it facilitates fuller/better utilisation of the skills.

Migration involves cost:

- (i) cost of transportation from one place to the other, and
- (ii) cost of living in different social environment.



Migration helps Fuller Utilisation of Skill

Yet people migrate in search of better job opportunities. Because: Gains of migration (in terms of higher salaries) are greater than the cost of migration.

Implying that migration leads to human capital formation, through fuller/better utilisation of skills.

(6) **Expenditure on Information:** Information relating to job markets and educational institutions offering specialised skills is an important determinant of skill formation. It enables people to actualise their productive potential. Accordingly, expenditure on information is another determinant of human capital formation.

Briefly, human capital formation is promoted by investment on education and health, besides ‘on-the-job training’ programmes. Investment on migration and information relating to availability of specialised skills and job markets also contributes to human capital formation.

#### Human Capital and Human Development

- Human Capital and Human Development are related concepts, but certainly not identical.*
- Human capital is a means to an end.*
- Human capital is a means in the sense that it consists of ‘skills’ as used in the process of production. It consists of ‘know-how’, abilities and expertise used as inputs in the production activity. Increase in productivity (referring to output per unit of input) is the end result. Thus, we want to achieve higher and higher levels of output through extensive and intensive application of human capital.*
- Human development is an end itself. It refers to development of the individuals as valuable personalities by acquiring good education and attaining good health. Human development occurs when more and more individuals in a society are educated, healthy and skill-oriented.*

### 3. ROLE OF HUMAN CAPITAL FORMATION

OR

### HUMAN CAPITAL FORMATION AND ECONOMIC GROWTH

Following observations highlight how human capital formation contributes to the process of growth and development:

(1) **Change in Emotional and Material Environment of Growth:**

Human capital formation generates a change in emotional and material environment of growth.

- ◆ Emotional environment becomes conducive to growth as people tend to acquire growth-oriented attitude and aspirations.
- ◆ Material environment becomes helpful to growth as the society now possesses higher number of skilled and trained workers to implement the plans and programmes of economic growth.

(2) **Higher Productivity of Physical Capital:** Human capital formation increases productivity of physical capital (referring to output per unit of capital). Specialised engineers and skilled workers can certainly handle machines better than the others. It enhances productivity and accelerates the pace of growth.

(3) **Innovative Skills:** Human capital formation facilitates innovations, the under-current of growth and development. Larger the number of skilled and trained personnel, greater the possibilities of innovations in the area of production and related activities. Innovation is the life-line of growth, we all know.

(4) **Higher Rate of Participation and Equality:** By enhancing productive capacities of the labour force, human capital formation induces greater employment.

This increases the rate of participation (percentage of labour force participating in the process of production or simply the percentage of employment of the existing labour force).

Higher the rate of participation, greater is the degree of economic and social equality in the society.

Thus, there is a cause and effect relationship between human capital and economic growth: human capital formation stimulates the process of economic growth. However, economic growth also impacts human capital formation. Growth implies increase in per capita real income (or increase in per capita availability of goods and services). Higher income facilitates higher investment on education and skills. Implying human capital formation. Thus, human capital formation prompts the process of growth, and growth prompts the process of human capital formation.

#### **Chain Effect of Human Capital Formation**

*Human Capital Formation [increase in the stock of human capital] → Better/Efficient utilisation of physical capital → Increase in productivity (output per unit of labour/capital) → Increase in GDP growth along with higher rate of participation/employment → Higher level of income of the individuals and households → Higher expenditure on education and health → Increase in the stock of human capital (implying human capital formation).*

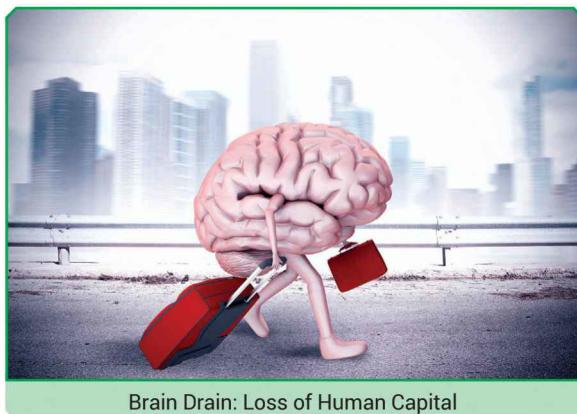
## 4. PROBLEMS FACING HUMAN CAPITAL FORMATION IN INDIA

The major problems facing the human capital formation are as under:

(1) **Rising Population:** Rapidly rising population adversely affects the quality of human capital. This is because it reduces per head availability of the existing facilities relating to housing, sanitation, drainage, water-system, hospitals, education, power supply, etc.

Reduced availability of these facilities leads to a fall in the quality of life.

In turn, this leads to a fall in the capacity to acquire specialised skills and knowledge.



(2) **Brain Drain:** Migration of persons (born, educated and trained in India) to developed countries is a serious threat to the process of human capital formation in the country.

Those who decide to migrate are persons of high calibre such as scientists, administrators, executives, engineers, physicians, educationists, etc.

This is described as the problem of brain drain. This slows down the process of human capital formation in the domestic economy.



(3) **Deficient Manpower Planning:** Not enough efforts have been made to maintain the demand-supply balance of the ever-rising labour force in the country.

As a result, India is facing an explosive problem relating to graduate unemployment.

It is a sad reflection on the wastage of human power and human skill.

(4) **Insufficient On-the-Job Training in Primary Sector:** Primary sector (agriculture in particular) is the backbone of Indian economy. Unfortunately, it has not received due attention in the area of professional skills. Two notable points are that:

The traditional wisdom predominates the primary sector, and that ‘On-the-job training programmes’ are highly scant, if not listless.

Accordingly, there is a serious deficiency of human capital formation in primary sector of the economy.

(5) **Low Academic Standards:** In our enthusiasm to spread higher education, we have been opening many universities, unmindful of their academic standards. Consequently, we have a large army of half-baked graduates and post-graduates whose deficient skills only lowers the level of efficiency/productivity.

This also impairs our competitiveness in the international market of human capital.

#### Measurement Problem

- In case of physical capital formation, the change can be measured in terms of units. But, it is difficult in case of human capital formation.
- This is because, a large number of factors that impact productivity of human beings are non-quantifiable.
- Further, it is difficult to identify a suitable scale of measuring human capital formation.

## 5. EDUCATION AS AN ESSENTIAL ELEMENT OF HUMAN RESOURCE DEVELOPMENT

Education is an essential element of human resource development.

Education implies the process of teaching, training and learning, (especially in schools or colleges). It improves knowledge and develops skills.

Education is the under-current of economic and social change.

However, compared to other countries of the world, spread of education in India has not been so encouraging.

Even literacy rate in the country continues to be very low.

According to the Census 2011, barely 74.04 per cent of the population is literate as against 90 to 95 per cent literacy in developed countries of the world.



Education: An Essential Element of Human Resource Development

### **Education and Literacy are not Identical Terms**

- Education is a much wider concept than literacy.
- Literacy just refers to the ability to read and write.
- Education, on the other hand, encompasses three parameters, viz., primary education, secondary education and tertiary or higher education.
- While all educated people are literate, all literate people are not necessarily educated.

## **Importance and Objectives of Education**

Following points highlight the importance and objectives of education:

- (i) Education produces responsible citizens.
- (ii) It develops science and technology.
- (iii) It facilitates use of natural and human resources of all regions of the country.
- (iv) It expands mental horizon of the people.
- (v) It helps economic development through greater participation of the people in the process of growth and development.
- (vi) It promotes cultural standard of the citizens.
- (vii) It develops human personality.

## **Need for Government Intervention in Education and Health**

Need for government intervention in education and health arises primarily on account of the following facts:

- (i) These sectors need huge investment with a very high fixed expenditure.
- (ii) It is difficult to expect private investors to invest in health and education unless they are allowed to recover their huge costs through high price of these services.
- (iii) People in a poor country like ours cannot afford high price for education and health.

Accordingly, these services would remain beyond the reach of most people unless these are subsidised or directly provided by the government.

## **Growth of Education Sector in India**

Following observations indicate the growth of education sector in India:

**(1) Expansion of General Education:** Table 1 shows the expansion of general education during the period of Five Year Plans:

**Table 1. Expansion of General Education**

Item	1950-51	2015-16
<b>I. Institutions</b>		
(i) Primary and Middle Schools	2.23 lakh	12.70 lakh
(ii) Secondary and Senior (Higher) Secondary Schools	7.4 thousand	2.52 lakh
(iii) Colleges (General)	578	39,071
(iv) Universities (including Deemed Universities)	27	799
<b>II. Number of Students</b>		
(i) Primary and Middle	19.15 lakh	17 crore
(ii) High and Higher Secondary Schools	15.0 lakh	3.2 crore
(iii) Higher Education	3.6 lakh	346 lakh

[Source: Statistical Outline of India 2012-13, Economic Survey 2018-19 and www.ncert.nic.in]

**(Note:** Primary and middle school education together is called elementary education.)

Table 1 suggests that substantial progress has been made in the field of education.

During the plans, the number of educational institutions providing elementary education has increased roughly by five times and the number of students has increased ten-fold.

In 1951, hardly 18.33 per cent of the total population was literate. In 2011, the percentage of literates increased to 74.04 per cent.

**(2) Elementary Education:** Elementary education covers students from class 1 to class 8 (primary and middle) in the age-group of 6 to 14 years.

The number of primary and middle schools has considerably increased.

In 1950-51, their number was 2.23 lakh. In 2015-16, it increased to 12.70 lakh.

However, low percentage of admission of children in primary classes points to educational backwardness in the country.

Social and economic poverty is the principal cause of educational backwardness.

### Important

Considering the importance of education in human capital formation, the Government of India tries to regulate education sector through various organisations. Important among these are:

- (i) **NCERT (National Council of Educational Research and Training):** It is basically engaged in designing text material upto the senior secondary level.
- (ii) **UGC (University Grants Commission):** It is primarily the funding authority for university education. It also enforces the rules and regulations regarding higher education in the country.
- (iii) **AICTE (All India Council of Technical Education):** It enforces rules and regulations regarding technical/ engineering education in the country.
- (iv) **ICMR (Indian Council for Medical Research):** It enforces rules and regulations relating to education and research in the health sector.



Elementary Education: Essential but lacking in India

### Paradoxical Truth about Elementary Education in India

Gross enrolment for a particular category of education is generally estimated as the ratio between the total number of students enrolled and the total number of individuals belonging to the relevant age group. To illustrate, in India gross enrolment ratio for elementary education is worked out as under:

Gross Enrolment Ratio for Elementary Education

$$= \frac{\text{Number of students enrolled for elementary education}}{\text{Total number of the individuals in the age group of 6-14 years}} \times 100$$

Here, is a paradoxical truth:

In the year 1951, gross enrolment ratio was found to be 43 per cent. Presently, it is found to be more than 100 per cent.

How can gross enrolment ratio be more than 100 per cent? Yes, it has happened because in our country lots of students even beyond the age group of 6-14 years enrol themselves for elementary education.

**(3) Secondary and Senior Secondary Education:** In 1950-51, there were 7.4 thousand secondary and senior secondary level schools with 15.0 lakh students.

In 2015-16, the number of secondary and senior secondary schools rose to 2.52 lakh and the number of students went up to 3.2 crore.

In 1987-88, [Navodaya Vidyalaya](#) were established to impart modern education of good standard to talented students of rural areas. These schools provide boarding facilities to the students.

Presently, 565 Navodaya schools are functioning.

Central government has established [Kendriya Vidyalaya](#) (Central Schools) for the benefit of the children of transferable employees.

Currently, the number of central schools in the country is estimated to be 1,128 as against 931 in 2007 and the number of students in these schools is about 12.6 lakh.

Three Kendriya Vidyalayas, one at Kathmandu, one at Moscow and another at Tehran are also functioning.

### Areas of Limited Success in Secondary Education

- (i) Enrolment ratio referring to enrolment of students in the age group of 14-18 years for the secondary (classes IX and X) and senior secondary (classes XI and XII) is far from satisfactory. Presently, it is around 52 per cent for secondary classes and 28 per cent for senior secondary classes even though it has significantly risen from just 5 per cent in 1951.
- (ii) Vocationalisation of education remains a far cry. Against the target of diverting nearly 25 per cent of senior secondary students to the vocational streams, actual achievement is limited just to 5 per cent.

**(4) Higher Education:** After independence, higher education has shown a convincing growth over time.

As many as 799 universities are providing higher education in the country.

Of these, there are 44 central universities. Besides, there are 40 deemed to be universities.

The total number of colleges for general education in the country is 39,071.

The number of students in all universities is 346 lakh in 2015-16.

University Grants Commission regulates and guides higher education in India.

#### **Areas of Concern in Higher Education**

Higher education includes general education as well as technical, managerial, medical and other forms of professional education. It has substantially expanded over time. But the areas of concern are:

- (i) That the expansion is largely confined to general education. Of the total enrolment for higher education nearly 80 per cent is for the general education, and only 20 per cent for the professional education. It deprives the educated youth of the possibility of self-employment.
- (ii) There is a growing gulf between the supply of job seekers with higher education and their demand. Accordingly, the problem of unemployment is assuming alarming proportions. Reservation policy of the government for the various categories of people largely points to the failure of the government to provide employment opportunities proportionate to their demand.

**(5) Vocationalisation of Secondary Education:** In February 1988, the central government launched a plan to vocationalise secondary education.

Under the plan, financial assistance is given to those schools who start vocational course at higher secondary (+2) level.

Also, efforts are underway to draw employment plans for those who successfully complete vocational courses.

By 2012-13, permission was granted to nearly 11,000 schools in the country to start vocational courses.

About 10 lakh students are getting vocational education in these schools.

Vocational courses have been introduced in the areas of agriculture, trade and commerce, engineering, technology, health and medicines.

#### **An Alarming Fact**

- In India, spread of education has not been linked with vocationalisation.
- Accordingly, there is an acute problem of educated unemployment.

### Development of Literacy and its Problem Area

- Overall literacy rate has shot up from 18.33 per cent in 1951 to 74.04 per cent in 2011.
- Total number of illiterates which was increasing till 1991 (from 22.8 crore in 1951 to 32 crore in 1991) has started decreasing thereafter. In the census of 2001, the total number of illiterates was recorded to be 30.3 crore. This is a new development in the census of 2001.
- Female literacy rate (65.46 per cent) is still far behind the male literacy rate (82.14 per cent).
- Literacy rate in the rural areas (68.9 per cent) is less than the literacy rate in urban areas (nearly 85 per cent). Rural female literacy rate is just 58.8 per cent which is miserably low compared to urban female literacy rate of 79.7 per cent.

Hence, focus is needed to promote female literacy rate particularly in the rural areas.



Expanding Rural Education

**(6) Technical, Medical and Agricultural Education:** Since independence, the number of institutions imparting technical and professional education has increased significantly.

In 1951, there were 43 diploma level polytechnical institutions. Their number has significantly risen to 1,914.

There are 3,400 recognised engineering colleges offering degree level courses in different disciplines.

The admission capacity of these courses is 15,00,000 students per year.

Presently, there are 289 medical colleges in the country with an admission capacity of 32,815 students.

Number of dental colleges is 282 with an admission capacity of 22,680 students.

Many research centres have also been set-up in the country, e.g., Indian Institute of Technology, Agriculture Research Institute, Indian Statistical Institute, National Physical Laboratory, National Chemical Laboratory, Institute of Economic Growth, etc.

Many agricultural universities have also been set-up in the country.

With a view to spreading technical education in rural areas, Community Polytechnics have been set-up.

Presently, as many as 617 Community Polytechnics had been established.

Presently, the admission capacity of degree and diploma level institutions is 6.53 lakh and 3.54 lakh respectively.

**(7) Rural Education:** Rural areas have also witnessed wide expansion of education. National Rural Higher Education Council has been set-up for this purpose. Under this Council, 14 rural educational institutions have been functioning. Children of scheduled castes and scheduled tribes get free education in all the states.

**(8) Adult and Female Education:** In order to eradicate illiteracy among the adults, special arrangements have been made for adult education. Importantly, National Literacy Mission was set-up in 1988. Since 1976, formal education programme has been launched.

It aims at providing meaningful education to the youth of the age group of 15-25 years.

In order to provide technical education to the women, many women polytechnics have also been established. 'Women Education Council' is a significant step to promote education among women.

(9) **Total Literacy Campaign:** National Literacy Mission was launched to render everybody literate in the country. This programme has now been recast as '[Saakshar Bharat](#)' with a central focus on female education. The programme covers all those in the age group of 15 and above.

It may be noted that there are 11 crore illiterates in the country between the age group of 15-25 years.

In short, as a result of persistent efforts during the post-independence period, the number of literates has increased four-fold. The number of schools and the number of students has increased many times. Rate of literacy in the country has shot up from 18.33 per cent to 74.04 per cent. In the state of Kerala, it is 94 per cent. In December 1993, in the conference of nine most populous countries of the world held in Delhi, a plan to give concrete shape to the objective of 'Education for All' has been formulated.

#### RTE (Right to Education)

- In the year 2009, the Government of India has brought about an Act, called RTE.
- It promises free and compulsory education to all.
- It makes education a matter of right to all children in the age group of 6-14 years.
- This programme is yet to yield its results.
- However, it is hoped that RTE will transform dreams into reality by offering basic education to all, free of cost.



#### EDUCATIONAL FINANCE: WHO SPENDS ON EDUCATION AND HOW MUCH?

- (i) The State Governments: A state government is spending between 10-30 per cent of its total annual budget. State government budgets amount to approximately 74 per cent of the total education budget for India.
- (ii) The Central Government: ₹45,000 crore annually (nearly 3 per cent of its total annual budget).
- (iii) Total Percentage Expenditure by the Governments (states as well as the centre): 80-90 per cent.
- (iv) The Parents (by way of fees) for their children: 4-5 per cent.
- (v) The Private Trusts: 7 per cent.
- (vi) Endowments: 3 per cent.

A broad conclusion thus emerges that in India, despite a significant trend towards privatisation of education, the bulk of spending is done by the central and the state governments.

### Education still a Challenging Proposition

Focus on education has tremendously increased over time. It is encouraging to note that nearly 96.5 per cent children are now the school goers. But in the backdrop of this statistics there is a bitter truth:



CHILD RIGHTS AND YOU

www.cry.org

## Ensuring lasting change for children

Child Rights and You (CRY)

despite the constitutional provision for free and compulsory education for the children between the age group of 6-14 years, quality of education and infrastructure continues to be disappointing. Administrative callousness compounds the problem further. A survey by the “Child Rights and You” (CRY) finds that children continue to be refused admission to schools because of the lack of transfer documentation, birth registration and proof of residence. In some cases, parents of school-going children are compelled to pay fees. Such instances point to a serious bottleneck in the education system of the country. This along with the following facts and figures makes education still a challenging proposition in India:

- (1) **Large Number of Illiterates:** India harbours the largest number of illiterates in the world. Presently, nearly 36 crore people are estimated to be illiterate. The number exceeds even the total population of most countries in the world.
- (2) **Inadequate Vocationalisation:** Education continues to be largely degree-oriented throwing millions of educated youths down to the corridors of employment exchanges. Vocationalisation of education is still a far cry.
- (3) **Gender Bias:** There is still a significant ‘gender-bias’ in offering opportunities of education to male and female children. The enrolment ratio is relatively low for the female candidates and their drop-out ratio is considerably high. Education system in India thus needs a substantial change in the attitudes of the people.
- (4) **Low Rural Access Level:** There is a high degree of disparity in access to education. The ‘access level’ is considerably low for the rural population compared to the urban population.
- (5) **Privatisation:** There is a growing trend towards privatisation of education. Being very expensive, private education has tended to widen the gulf between access level for the rich and the poor. There is almost a drought of educational opportunities for poorer sections of the society.

**(6) Low Government Expenditure on Education:** The government has failed to fulfil its commitment of spending nearly 6 per cent of GDP on education: actual expenditure has been around 4-5 per cent only. This points to the gap between what is intended or desired and what is actually achieved.

Given these facts, there follows an obvious inference that education in India has failed to reach the masses, and has also failed to break the vicious circle of illiteracy—illiteracy breeding poverty and poverty breeding illiteracy.

## Power Points & Revision Window

- **Human Capital:** It refers to the stock of 'skill and expertise' of a nation at a point of time.
- **Human Capital Formation:** It refers to the process of adding to the stock of human capital over time.
- **Determinants/Sources of Human Capital Formation:** (i) Expenditure on education, (ii) Expenditure on health, (iii) On-the-job training, (iv) Study programmes for adults, (v) Migration, (vi) Expenditure on information.
- **Role of Human Capital Formation:** (i) Change in emotional and material environment of growth, (ii) Higher productivity of physical capital, (iii) Innovative skills, (iv) Higher rate of participation and equality.
- **Problems Facing Human Capital Formation:** (i) Rising population, (ii) Brain drain, (iii) Deficient manpower planning, (iv) Insufficient on-the-job training in primary sector, (v) Low academic standards.
- **Importance and Objectives of Education:** (i) Education produces good citizens, (ii) It develops science and technology, (iii) It facilitates use of resources in the country, (iv) Education expands mental horizon of the people, (v) It helps in economic development through greater participation of the people in the process of growth and development, (vi) It promotes cultural standard of the citizens, (vii) Education develops human personality.
- **Growth of Education Sector in India:** It includes: (i) Expansion of general education, (ii) Elementary education, (iii) Secondary and senior secondary education, (iv) Higher education, (v) Vocationalisation of secondary education, (vi) Technical, medical and agricultural education, (vii) Rural education, (viii) Adult and female education, (ix) Total literacy campaign.
- **Problems Relating to Development of Education in India:** (i) Large number of illiterates, (ii) Inadequate vocationalisation, (iii) Gender bias, (iv) Low rural access level, (v) Privatisation, (vi) Low government expenditure on education.



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

### Choose the correct option:

11. The process of addition to the stock of human capital over time is called:
  - (a) human capital addition
  - (b) human capital formation
  - (c) human capital augmentation
  - (d) human capital stock
12. Which of the following is the important way of adding to the stock of human capital?
  - (a) Expenditure on education
  - (b) Expenditure on health
  - (c) On-the-job training
  - (d) All of these
13. Human capital and human development are:
  - (a) opposite concepts
  - (b) different concepts
  - (c) both mean the same
  - (d) related concepts, but certainly not identical
14. Which of the following highlight the fact that human capital formation contributes to the process of growth and development?
  - (a) Higher productivity of physical capital
  - (b) Innovative skills
  - (c) Both (a) and (b)
  - (d) None of these
15. The need for government intervention in education and health arises because:
  - (a) these sectors need huge investments with a very high fixed expenditure
  - (b) it is difficult for private investors to invest under price regulation framework
  - (c) both (a) and (b)
  - (d) none of these
16. Education is still a challenging proposition in the country on account of which of the following?
  - (a) Large number of illiterates
  - (b) Inadequate vocationalisation of education
  - (c) Gender bias
  - (d) All of these

### Answers

1. (b)      2. (d)      3. (c)      4. (d)      5. (c)      6. (c)      7. (c)      8. (d)      9. (a)      10. (d)  
 11. (b)      12. (d)      13. (d)      14. (c)      15. (c)      16. (d)

### B. Fill in the Blanks

**Choose appropriate word and fill in the blank:**

1. Financial capital refers to paper claims against capital. (natural/physical)
2. Monetary benefits of education the cost of education. (exceed/are less than the)
3. Migration to human capital formation. (contributes/does not contribute)
4. Human capital is . (the means to an end/an end in itself)
5. is responsible for the implementation of rules and regulations for technical education in the country.  
(All India Council of Technical Education/University Grants Commission)
6. Right to Education (RTE) Act, 2009 makes education a matter of right to all children in the age group of years. (6-14/6-15)
7. Human capital and human development are concepts. (identical/related)
8. Physical capital human capital. (excludes/includes)

9. Rising population is a/an \_\_\_\_\_ to human capital formation in India.  
(impediment/stimulant)

10. Stock of \_\_\_\_\_ capital measures production capacity of a nation. (financial/physical)

## Answers

- |   |               |                |                        |
|---|---------------|----------------|------------------------|
| 1. physical                                 | 2. exceed     | 3. contributes | 4. the means to an end |
| 5. All India Council of Technical Education | 6. 6-14       | 7. related     |                        |
| 8. excludes                                 | 9. impediment | 10. physical   |                        |

### C. True or False

**State whether the following statements are True or False:**

1. Expenditure on health is an important determinant of human capital formation. (True/False)
  2. Gains of migration are lesser than the costs of migration. (True/False)
  3. Human capital formation enhances the productivity of physical capital. (True/False)
  4. Human capital formation generates a change in emotional and material environment of growth. (True/False)
  5. There is no cause and effect relationship between human capital formation and economic growth. (True/False)
  6. Economic growth affects the human capital formation. (True/False)
  7. Rising population is not such a huge roadblock in the process of human capital formation in India. (True/False)
  8. Ultimately human capital formation prompts the process of growth, and growth prompts the process of human capital formation. (True/False)
  9. National Council of Educational Research and Training (NCERT) is the regulating body for school education in the country. (True/False)
  10. Human capital formation causes a higher rate of participation. (True/False)

## Answers

1. True    2. False    3. True    4. True    5. False    6. True    7. False    8. True    9. False    10. True

#### D. Matching/Chronological

**I. From the set of statements given in Column I and Column II, choose the correct pair of statements:**

Column I	Column II
(a) Right to Education	(i) 2010
(b) UGC	(ii) Funding Authority for University Education
(c) Elementary education	(iii) Covers students from class I to class V in the age group of 6 to 11 years
(d) Education	(iv) Ability to read and write

## Answer

- (b) UGC – (ii) Funding Authority for University Education

**II. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:**

Column I	Column II
(a) Total Literacy Campaign	(i) Source of human capital formation
(b) Navodaya Vidyalayas	(ii) Established for the benefit of children of transferable employees
(c) Study programme for adults	(iii) Saakshar Bharat
(d) Kendriya Vidyalayas	(iv) To impart modern education to talented students of rural areas

**Answers**

(a)—(iii), (b)—(iv), (c)—(i), (d)—(ii)

**E. 'Very Short Answer' Objective Type Questions**

**1. Define human capital.**

**Ans.** Human capital refers to the stock of 'skill and expertise' of a nation at a point of time.

**2. What is meant by human capital formation?**

**Ans.** Human capital formation refers to the process of adding to the stock of human capital over time.

**3. What are the possible sources of human capital formation?**

**Ans.** Sources of human capital formation are: (i) Expenditure on education, (ii) Expenditure on health, (iii) On-the-job training, (iv) Study programmes for adults, (v) Migration, and (vi) Expenditure on information.

**4. What is human development?**

**Ans.** Human development refers to development of the individuals as valuable personalities by acquiring good education and attaining good health.

**5. What is physical capital?**

**Ans.** Physical capital refers to the produced means of production. Stock of physical capital measures production capacity of a nation.

**6. What is financial capital?**

**Ans.** Financial capital refers to paper claims against physical capital.

**7. What is 'on-the-job training'?**

**Ans.** On-the-job training is a form of training taking place in a normal working situation.

**8. What is migration?**

**Ans.** Migration refers to movement of people across different areas (like from rural to urban areas) of the country in search of job opportunities.

**9. What is brain drain?**

**Ans.** Brain drain refers to migration of skilled manpower to developed countries of the world.

**10. What is Right to Education?**

**Ans.** In the year 2009, the Government of India has passed an Act, called RTE. It makes education a matter of right to all children in the age group of 6-14 years.

## **2. Reason-based Questions (Comprehension of the Subject-matter)**

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**Read the following statements carefully. Write True or False with a reason.**

1. 'Skill India' programme launched by the government is an attempt to increase human capital formation.

Ans. True. Because 'skill' is an important element of human capital.

2. 'Start-ups' and 'Skill India' programmes are complementary to each other.

Ans. True. Because, one programme promotes the other. Thus:

(i) 'Start-ups' (new business ventures) helps utilisation of the idle entrepreneurial abilities of the people. It, thus, promotes skill formation.

(ii) Skill formation (through higher education and training) helps the establishment of 'start-ups'.

3. Higher salaries in developed countries are ultimately related to higher level of human capital in these countries.

Ans. True. Because, salaries are related to productivity (higher productivity implies higher salaries) and productivity is related to the level of human capital (higher level of human capital implies higher productivity).

4. Benefits of education always exceed the cost of education.

Ans. True. Because, the benefits of education accrue throughout the service span of an individual (spread over several years) while the cost of education is restricted only to the period of education (spread over a few years).

However, the underlying assumption behind this assertion is that after education, an individual remains employed throughout his service span of life.

5. Skill formation facilitates conversion of 'economic growth' into economic development.

Ans. True. Because, skill formation improves the rate of participation/employment in the process of growth. Higher the rate of participation, faster is the conversion of growth into development (when the fruits of growth are shared by larger percentage of population).

6. Education, not the vocationalisation of education is the core element of skill formation.

Ans. False. It is the vocationalisation of education (rather than mere education) which is the core element of skill formation. Education may just be degree-oriented. Vocationalisation, on the other hand, is skill-oriented.

7. Gender bias in India is a hindrance to the process of skill formation.

Ans. True. Because, gender bias (particularly in rural India) does not favour female education as much as male education.

## **3. HOTS & Applications**

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1. Migration leads to human capital formation. How?

Ans. It is true that migration leads to human capital formation. Unemployed and underemployed people often migrate from rural to urban areas. This is because: (i) those who are unemployed get opportunities of actualising their skill, and (ii) those who are underemployed get opportunities of fuller utilisation of their skills. In a market economy, migration offers the best opportunities of higher supplies of skill corresponding to higher wages.

**2. Education is an important ingredient of growth. Comment.**

Ans. It is true that education is an important ingredient (input) of growth. This is because: (i) education produces civilised citizens, (ii) education produces scientists, engineers, doctors and educationists. These serve as important agents of growth, (iii) education increases the rate of participation through skill formation. It lends momentum to the pace of growth, and (iv) education generates the sense of the social dynamism. It promotes collective effort to frame programmes and policies of growth.

Briefly, education gives momentum to the process of growth. Uneducated societies are often backward societies. Educated societies, on the other hand, are developed societies of the world.

**3. Human capital formation increases the efficiency of physical capital. How?**

Ans. This happens in two ways, as under:

- (i) Human capital formation leads to higher level of skills and expertise. Accordingly, labour force is better equipped to handle 'plant and machinery' (physical capital). This raises the efficiency of physical capital by way of higher output per unit of input (of physical capital).
- (ii) Human capital formation leads to innovations. Implying, new ways of doing things, or doing things better than before. Accordingly, efficiency/productivity rises.

**4. How can enrolment ratio (for a particular level of education) be higher than 100?**

Ans. Enrolment ratio refers to the percentage of students of a particular age group enrolling themselves for the relevant level of education.

**Example:** Enrolment ratio for elementary education in India is measured as:

$$= \frac{\text{Number of students enrolling for elementary education}}{\text{Total number of students in the age group of 6-14 years}} \times 100$$

It is found to be more than 100 in case students enrolling themselves for elementary education happen to be not only of the relevant age group (6-14 years), but even beyond it.

## **4. Analysis & Evaluation**

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**1. Brain drain is a serious bottleneck/constraint in human capital formation and growth process in India. Comment.**

Ans. Brain drain refers to migration of skilled manpower to developed countries of the world. Obviously, they migrate for greener pastures (higher wages and better quality of life). Those who migrate include scientists, engineers, doctors and educationists. These are the people of high Calibre. Migration of such people is a serious bottleneck in human capital formation in India. We know 'skill' is an important ingredient of growth. 'Loss of skill' causes a dent in the process and pace of growth.

**2. How is human capital formation helpful in reducing inequality of income?**

Ans. Human capital formation is an important means of reducing inequality of income. Higher the rate of human capital formation, greater would be the rate of participation (percentage of population engaged in production activity). Increase in the rate of participation would lead to increase in the share of wages in national income. Accordingly, inequality would reduce.

**3. In developed countries, salaries are higher than in underdeveloped countries, because workers are more productive. Do you agree with this statement? Write your observations using your knowledge of the relationship between human capital formation and productivity.**

Ans. This is absolutely true that there is a strong relationship between human capital formation and productivity per worker. Human capital formation occurs when the workers acquire skill and knowledge to do things better than before. This makes them more efficient and therefore more productive.

Accordingly, workers get higher wages, as in developed countries of the world. It is owing to the low level of skill formation in underdeveloped countries that the workers are relatively inefficient and therefore, earn relatively low wages (as in India).

4. As a student of Class XII, you must have drawn your plans of acquiring some specialised skills; may be as an economist or sociologist. How, do you think, your education would become a productive resource? Do you think, benefits of education would exceed the cost of education? Write your observations.

Ans. It is an undisputed fact that education is a productive resource that contributes to the process of growth in the economy. This is because education is the source of knowledge and skill, the critical determinants of productivity. However, to achieve higher levels of productivity, it is important that education is not simply degree-oriented; it should be skill-oriented.

Benefits of education always exceed the cost of education, because skill and knowledge generate a multiplier effect on growth and development through innovations and discoveries.

## 5. NCERT Questions (With Hints to Answers)

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1. What are the two major sources of human capital in a country?

[Hint: (i) Investment in health, and  
(ii) Investment in education.]

2. What are the indicators of educational achievement in a country?

[Hint: Adult literacy level, primary education completion rate and youth literacy rate.]

3. Bring out the differences between human capital and human development.

[Hint: The differences between human capital and human development are as follow:

Human capital is a means to an end. Human capital is a means in the sense that it consists of 'skills' as used in the process of production. It consists of 'know-how', abilities and expertise used as inputs in the production activity.

Human development, on the other hand, is an end itself. It refers to development of the individuals as valuable personalities by acquiring good education and attaining good health. Human development occurs when more and more individuals in a society are educated, healthy and skill-oriented.]

4. What factors contribute to human capital formation?

[Hint: The main sources/determinants of human capital formation are as follows:

- (i) **Expenditure on Education:** Expenditure on education is the most effective way of raising a productive workforce in the country. It is, therefore, a very important determinant of human capital formation.
- (ii) **Expenditure on Health:** Expenditure on health makes a man more efficient and, therefore, more productive. His contribution to the production process tends to rise. He adds more to GDP of the nation than a sick person.
- (iii) **On-the-Job Training:** On-the-job-training helps workers to sharpen their specialised skills. It enables them to raise the level of their efficiency/productivity.
- (iv) **Study Programmes for Adults:** Other than formal education at the primary, secondary and university levels, the Government and NGOs organise study programmes for adults to make them proficient in their work areas. This enhances their productivity, serving as a source of human capital formation.
- (v) **Migration:** Migration contributes to human capital formation as it facilitates utilisation of (otherwise) inactive skills of the people, or it facilitates fuller/better utilisation of the skills.

(vi) **Expenditure on Information:** Information relating to job markets and educational institutions offering specialised skills is an important determinant of skill formation. It enables people to actualise their productive potential.]

**5. How do government organisations facilitate the functioning of schools and hospitals in India?**

[**Hint:** The Union Ministry of education and Ministries of education at State level, Departments of education and various organisations like National Council of Educational Research and Training (NCERT), University Grants Commission (UGC) and All India Council of Technical Education (AICTE) facilitate the functioning of schools and institutions related to education. Similarly, the Ministries of health at the Union and State level, Departments of health and various organisations like Indian Council for Medical Research (ICMR) facilitate institutions which come under the health sector.]

**6. Education is considered to be an important input for the development of a nation. How?**

[**Hint:** Education is considered to be an important input for the development of a nation. This is because:

- (i) Education produces good citizens.
- (ii) It facilitates use of natural and human resources of all regions of the country.
- (iii) It expands mental horizon of the people.
- (iv) It helps economic development through greater participation of the people in the process of growth and development.]

**7. Discuss the following as a source of human capital formation:**

(i) **Health infrastructure.**

(ii) **Expenditure on migration.**

[**Hint:** (i) **Health Infrastructure:** Expenditure on health makes a man more efficient and, therefore, more productive. His contribution to the production process tends to rise. He adds more to GDP of the nation than a sick person.

(ii) **Expenditure on Migration:** Migration contributes to human capital formation as it facilitates utilisation of (otherwise) inactive skills of the people, or it facilitates fuller/better utilisation of the skills. Gains of migration (in terms of higher salaries) are greater than the cost of migration.]

**8. How does investment in human capital contribute to growth?**

[**Hint:** Human capital formation is indicated by a rise in the level of education and health of the residents of a country. It is also indicated by a rise in the level of skill formation in the country. It contributes to the process of growth as under:

- (i) Availability of educated and skilled labour force through human capital formation raises the emotional and material environment of growth.
- (ii) It raises productivity of physical capital.
- (iii) It facilitates innovative skill that accelerates the process of growth.
- (iv) It raises the rate of participation and equality in the country.]

**9. Bring out the need for on-the-job-training for a person.**

[**Hint:** On-the-job-training helps workers to sharpen their specialised skills. It enables them to raise the level of their efficiency/productivity.]

**10. Discuss the need for promoting women's education in India.**

[**Hint:** Women's education in India is imminent as it improves their economic independence and social status. It enhances their empowerment.]

11. Argue in favour of the need for different forms of government intervention in education and health sectors.

[Hint: Yes, need for different forms of government intervention in education and health sectors is necessary on account of the following facts:

- (i) These sectors need huge investment with a very high fixed expenditure.
- (ii) It is difficult to expect private investors to invest in health and education unless they are allowed to recover their huge costs through high price of these services.
- (iii) People in a poor country like ours cannot afford high price for education and health.]

12. What are the main problems of human capital formation in India?

[Hint: Following are the main difficulties/problems being faced in the human capital formation in India:

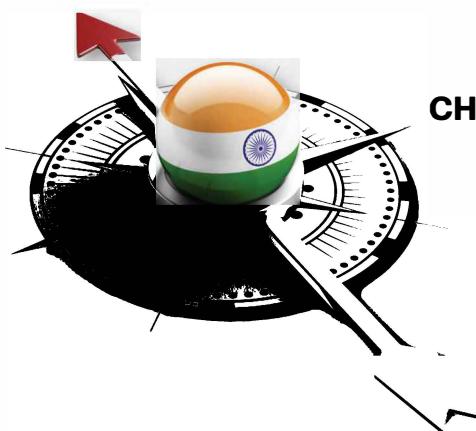
- (i) **Rising Population:** Rapidly rising population adversely affects the quality of human capital. This is because it reduces per head availability of the existing facilities relating to housing, sanitation, drainage, water-system, hospitals, education, power supply, etc. In turn, this leads to a fall in the capacity to acquire specialised skills and knowledge.
- (ii) **Brain Drain:** Migration of persons (born, educated and trained in India) to developed countries is a serious threat to the process of human capital formation in the country. This is described as the problem of brain drain. This slows down the process of human capital formation in the domestic economy.
- (iii) **Deficient Manpower Planning:** India is facing an explosive problem relating to graduate unemployment. It is a sad reflection on the wastage of human power and human skill.
- (iv) **Insufficient On-the-Job Training in Primary Sector:** Primary sector (agriculture in particular) is the backbone of Indian economy. Unfortunately, it has not received due attention in the area of professional skills.
- (v) **Low Academic Standards:** As a result of opening up of many universities (in enthusiasm to spread higher education), we have a large army of half-baked graduates and post-graduates whose deficient skills only lowers the level of efficiency/productivity.]

## 6. Miscellaneous Questions and Reference to the Text for Answers

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1. Explain the concept of human capital formation with some illustrations. [Page 171, 172]
2. Is rapidly rising population a constraint in the process of human capital formation? Write your observations. [Page 176]
3. Explain how educational planning is necessary for human capital formation. [Page 177, 178]
4. Do you agree with the statement that human resource has developed into the main economic factor? [Page 174, 175]
5. Whom do you call literate? How is literacy different from education? [Page 178]
6. What in your opinion, should be the principal objectives of education in India? [Page 178]
7. How is health a source of human capital formation? [Page 173]
8. How migration promotes human capital formation? [Page 173, 174]
9. Expenditure on information is a source of human capital formation. Explain how? [Page 174]





## CHAPTER: 9

# RURAL DEVELOPMENT

TO  
DO

- *Challenges of Rural Development*
- *The Lingering Challenges of Rural Development*
- *The Emerging Challenges of Rural Development*

## I. CHALLENGES OF RURAL DEVELOPMENT

### What does Rural Development Mean?

Rural development means an ‘action-plan’ for the social and economic growth of the rural areas. The action-plan is to focus on the lingering and emerging challenges in rural areas. The principal lingering challenges are: (i) challenge of rural credit, and (ii) challenge of rural marketing. Emerging challenges include basically: (i) exploring options of sustainable livelihood, other than farming, and (ii) the challenge of organic farming.



Rural Development: Lingering and Emerging Challenges

#### Lingering and Emerging Challenges

- There are certain lingering and emerging challenges in the context of rural development in India.
- Two principal lingering challenges are: (i) Rural credit, and (ii) Rural marketing. Two principal emerging challenges include: (i) Options of sustainable livelihood, other than farming, and (ii) Organic farming.
- It needs to be noted that these four challenges (two lingering and two emerging as notable above) are the core elements of the action-plan of rural development.
- The action-plan includes other elements as well. These are: (i) development of the means of transport, linking rural areas with the urban areas, (ii) provision of power/energy for the rural areas, (iii) permanent means of irrigation, and (iv) facilities for agricultural research.
- However, the present chapter focuses only on the four core elements (in accordance with the syllabus specification).

## 2. THE LINGERING CHALLENGES OF RURAL DEVELOPMENT

### (A) The Challenge of Rural Credit

Rural or agricultural credit means credit for farming. Credit is the lifeline of farming activity in rural areas. This is because of two reasons:

- (1) Most farming families in India are small and marginal holders, producing just enough for subsistence. They seldom generate surplus for further investment. The need for credit, therefore, is unavoidable, and
- (2) The gestation lag between sowing and harvesting of the crops is quite long. This compounds the need for credit.

Credit needs of the typical Indian farmer are broadly classified into three categories as under:

**(1) Short-term Credit:** Short-term credit is basically required for the purchase of inputs like seeds, fertilisers, pesticides and insecticides, besides making payments of electricity bills. Small and marginal farmers hardly save enough to fulfill their short-term credit needs. Hence, the need for credit. These loans are raised generally for a period ranging between 6 to 12 months.



Digging Wells needs Medium-term Credit

**(2) Medium-term Credit:** Medium-term credit is required for (a) the purchase of machinery, (b) construction of fences, and (c) digging the wells. Such loans are raised generally for a period ranging between 12 months to 5 years.

**(3) Long-term Credit:** Long-term credit is required for (a) the purchase of additional land or (b) for carrying out permanent improvements on the existing land. The period of such loans ranges between 5 to 20 years.

The credit requirement of the farmers may also be classified as **productive and unproductive**. The productive requirement of credit relates to production activity. The unproductive requirement of credit relates to consumption activity.

## Sources of Rural Credit

Sources of rural or agricultural credit are broadly classified as: (i) Institutional, and (ii) Non-institutional. Of the two, non-institutional sources are the conventional/traditional sources, while the institutional sources are modern/emerging sources. The details are as under:

### Non-institutional Sources

(i) Landlords, (ii) village traders, and (iii) moneylenders are the three important sources of non-institutional rural credit in India.

Traditionally, most credit needs of the farmers were met through these sources.

Non-institutional sources accounted for 93 per cent of the total borrowing of the farmers in the beginning of First Five Year Plan.

But by 1981, the institutional sources emerged as the principal channel of rural credit.

### Institutional Sources

The institutional sources include: (i) government, (ii) cooperatives, (iii) commercial banks, and (iv) the regional rural banks.

Together, they accounted for only 7 per cent of the credit needs of the farmers in the beginning of First Five Year Plan, but presently their share has increased to over 66 per cent.

Out of total institutional credit, cooperative credit contributes nearly 15 per cent and commercial banks about 75 per cent.

Apart from substantial expansion in the flow of credit by commercial banks and Regional Rural Banks (RRBs), the cooperative credit institutions have emerged as important institutional agencies offering credit support and related services.

Following is a brief description of some important institutional agencies offering rural credit in India:

**(1) Cooperative Credit Societies:** The cooperative credit societies provide adequate credit to the farmers at reasonable rate of interest.

These societies also provide guidance in diverse agricultural operations with a view to raising crop productivity.

Currently, cooperatives account for 16-17 per cent of rural credit flow.

These societies are to ensure:

(i) timely and rapid flow of credit to the farmers.

### Important

- At the time of independence, institutional credit showed only a notional existence.
- Non-institutional credit ruled the roost. It was dominated by moneylenders, traders and commission-agents who charged exorbitantly high interest rates, and manipulated the accounts to exploit the illiterate farmers.
- In fact, non-institutional credit often led to a debt trap for the farmers.
- A significant change occurred in 1969 with nationalisation of commercial banks.
- It was then that the concept of social banking was put into practice and credit needs of the farmers were addressed as a priority issue in the context of rural development.

- (ii) elimination of the moneylenders as credit agencies.
  - (iii) spread credit facilities across all regions of the country.
  - (iv) provision of adequate credit in areas covered by special programmes of development.
- (2) State Bank of India and Other Commercial Banks:** The State Bank of India was set-up in 1955 with a focus on rural credit. The government realised that rural credit needs could not be met by the cooperative credit societies alone, and that commercial banks should play an important role. This prompted nationalisation of certain banks in 1969. The nationalised commercial banks (through their branch expansion programmes) were directed to offer credit directly to the farmers as well as indirectly through cooperative societies.



#### Multi-agency System

Institutional structure of rural banking consists of:

- (i) Commercial banks,
- (ii) Regional Rural Banks (RRBs),
- (iii) Cooperative Credit Societies, and
- (iv) Land Development Banks.

This institutional structure of rural banking is called multi-agency system.

#### **(3) Regional Rural Banks (RRBs) and Land Development Banks:**

RRBs and Land Development Banks were set-up to promote credit supplies, particularly in the remote rural areas and backward districts. These banks operate at the district level and are under obligation to focus on credit needs of weaker sections of the rural population.

#### **(4) National Bank for Agricultural and Rural Development (NABARD):**

NABARD is an apex institution handling policy, planning and operations in the field of rural credit and related economic activities. Its main functions are as these:

- (i) To serve as an apex funding agency for the institutions providing credit in rural areas.



- (ii) To take appropriate measures to improve the credit delivery system. The bank was to focus on restructuring of credit institutions and training of personnel.
- (iii) To coordinate the rural financing activities of all credit institutions and maintain liaison with Government of India, State Government, Reserve Bank, and other national level institutions concerned with policy formulation.
- (iv) To undertake monitoring and evaluation of projects refinanced by it.

#### **RBI and Rural Credit**

- ❑ If the rural credit system in India has acquired its present size and significance, it is essentially due to the key role played by RBI.
- ❑ Since its beginning in 1935, the Reserve Bank of India has been playing an important role in providing credit to agriculturists and strengthening credit institution, primary cooperative credit societies and Land Development Banks in particular.
- ❑ It focuses on:
  - (i) short-term refinance facilities for agriculture and allied activities,
  - (ii) development of cooperative credit institutions,
  - (iii) expansion of the sources of funds for short-term and long-term wings of the cooperative credit system,
  - (iv) provision of long-term funds to bring about state partnership in cooperative credit agencies,
  - (v) training and professionalisation of cooperatives,
  - (vi) conducting rural credit surveys to determine the coverage of rural households by credit institutions,
  - (vii) helping bank-branch expansion programme to provide cheaper remittance facilities for banks operating in rural areas, and
  - (viii) guidance to all concerned on matters relating to rural credit.
- ❑ Thus, the role of RBI in the field of agricultural credit has been multi-dimensional, though largely regulatory in nature.

#### **Rural Banking—A Critical Evaluation**

Rural banking in India has significantly expanded over time. The expansion has been significant particularly since nationalisation of major commercial banks in 1969.

Nationalisation of commercial banks marked the beginning of social banking in rural areas, implying provision of institutional credit at moderate rates of interest.

## SHGs AND MICRO CREDIT PROGRAMMES

Self Help Groups (SHGs) and Micro Credit Programmes are an emerging phenomenon in the context of rural credit.

SHGs promote thrift (saving-habit) among rural households.

Small savings are mobilised by the SHGs and offered as credit to its different members, depending on their need.

Credit is offered without any security and at a moderate rate of interest. Presently, more than seven lakh SHGs are operating across different rural areas. Credit provisions are known as Micro Credit Programme. These programmes are becoming popular among small borrowers owing to their 'informal credit delivery mechanism' involving minimum legal formalities.



### Kisan Credit Card (KCC) Scheme

- The Kisan Credit Card Scheme aims at adequate and timely support to the farmers for their short-term credit needs.
- Under the scheme, banks may issue Kisan Credit Cards to the farmers who are otherwise eligible for short-term credit for crop production, allied activities and other non-farm activities.
- The farmers under the scheme are issued a credit card cum passbook incorporating the name, address, particulars of land holding, borrowing limits, validity period, etc.

Establishment of NABARD (as an apex body coordinating activities of all financial institutions engaged in rural credit programmes) has made a substantial difference in the institution of rural credit. Rural financing has become much more organised than ever before.

It is not denying the fact that institutional credit has gone a long way in liberating the farmers from the debt trap of mahajans and moneylenders. Also, it is not denying the fact that institutional credit has promoted commercialisation of agriculture. But there is a flip side also.

Deficiencies of rural banking system are equally glaring. Notable observations in this regard are as these:

- (i) Banking credit or institutional credit has invariably been tied to collateral (security or guarantee of a property for the loans), because of which a large section of small and marginal holders are often left out.
- (ii) Owing to political populism, the government has often shown laxity (lack of strictness) in the recovery of loans. As a result, default rate has tended to swell/rise over time.
- (iii) Apart from commercial banks, most financial institutions have failed to develop a culture of thrift (saving for the future) among the farming families. Mobilisation of deposits has remained rather subdued.

Social banking in rural areas has taken a hit in the wake of economic reforms of 1991.

Impact of debt on the farmers is generally becoming so huge that suicidal deaths are rising from scores to centuries, particularly in the states of Andhra Pradesh and Maharashtra.

It is high time that the government considers rural banking as a social need for production purposes rather than an activity to achieve political popularity.

## (B) The Challenge of Agricultural (Rural) Marketing

After harvesting, the farmers need to assemble their produce on the farm, process it, grade it, package it and store it before it is finally brought to the market for sale. Agricultural marketing includes all these processes between harvesting and final sale of the produce by the farmers. Thus, agricultural marketing may be defined as the process that involves:

- (i) gathering the produce after harvesting,
- (ii) processing the produce (like separating the straw from the grains),
- (iii) grading the produce according to its quality,
- (iv) packaging the produce according to buyers' preferences,
- (v) storing the produce for future sale, and
- (vi) selling the produce when the price is lucrative.

- ❑ Agricultural marketing does not simply refer to the farmers' act of bringing their produce to the market for sale.
- ❑ It includes all those activities/processes which help him getting best price for his produce.
- ❑ Among others, these processes include grading, packaging and storage.

At the time of independence, agricultural marketing was almost under the complete control of the moneylenders, traders and commission agents. In order to pay off their debts, the farmers often made a distress sale of their produce. Their holding capacity was almost zero. Having taken loans from the moneylenders (who happened to be traders and commission agents as well), the farmers were obliged to sell their crop to them only. Often, it implied a low price, besides a substantial loss on account of underweighing and customary commissions.

### Distress Sale

- ❑ Distress sale refers to a situation when the farmers are compelled to sell their produce immediately after the harvest, no matter how low the market price is.
- ❑ The compulsion to sell arises because: (i) the farmers need immediate cash to pay off their debts, and (ii) they lack storage facilities or the cost of storage is very high.

### An Alarming Fact

- Default rate among the borrowers is assuming alarming proportions.
- While many may be genuine defaulters, investigations suggest that nearly 50 per cent are willful defaulters.
- This certainly is an alarming development and may shake the very foundation of rural banking system.

## **Measures Initiated by the Government to Improve Marketing System**

In order to improve the system of agricultural marketing, the government has initiated a series of measures, as under:

**(1) Regulated Markets:** Regulated markets have been established where sale and purchase of the produce is monitored by the Market Committee including representatives of government, farmers and the traders. Market system is made transparent with a strict vigil on the use of proper scales and weights. The market committees ensure that the farmers get appropriate price for their produce.

### **Regulated Market Yards**

- The government has built Regulated Market Yards on the outskirts of most towns in the country.
- The farmers can come to these yards for a fair sale of their produce. These yards also offer storage facility to the farmers.
- The farmers can store their produce for future sale, hoping for a better price.

**(2) Cooperative Agricultural Marketing Societies:** The government is encouraging the formation of Cooperative Agricultural Marketing Societies. As members of these societies, farmers find themselves better bargainers in the market, getting better price of their produce through collective sale.

### **Cooperative Marketing**

- Cooperative marketing is a significant progressive step in the context of agricultural market system.
- Milk cooperatives in Gujarat are a brilliant example of cooperative marketing in rural India. These cooperatives have not only changed the social and economic fabric of the economy of Gujarat, but also have played a key role in bringing about White Revolution in the country.
- However, of late, some kinks have emerged in the system of cooperative marketing. These are: (i) poor coordination between the marketing cooperatives and processing cooperatives, and (ii) snags (shortcomings) in financial management of the cooperative.

**(3) Provision of Warehousing Facilities:** With a view to avoiding distress sale, the government is offering warehousing facilities to the farmers.

Central and State warehousing corporations are the principal government agencies offering storage space to the farmers.

Storage helps the farmers to sell their produce at a time when the market price is lucrative.

- (4) **Subsidised Transport:** Railways are offering subsidised transport facility to the farmers to bring their produce to the urban markets where often they get a better deal.
- (5) **Dissemination of Information:** Electronic media and print media are actively engaged in offering market related information to the farmers, particularly information related to price behaviour in the market. This helps the farmers in deciding how much to sell and when to sell.
- (6) **MSP Policy:** MSP Policy (minimum support price policy) is an important step initiated by the government to improve agricultural marketing system.

MSP is an assurance to the farmers that their produce would be purchased by the government at the specified price.

Of course, the farmers are free to sell their produce at a price higher than MSP in the open market.

Thus, the farmers are always assured of some minimum income from the sale of their crop.

### Buffer Stocks and PDS

- MSP purchases from the farmers are kept as buffer stocks by the government. These stocks (of grains) are used, primarily for Public Distribution System (PDS), besides meeting urgent needs during periods of low output and scarcity.
- PDS implies distribution of foodgrains (and other essentials like sugar and kerosene) through 'fair price shops' at subsidised rates, so that the poorer sections of the society have an easy access to these things.



Buffer Stock to Support MSP

On account of these measures by the government, agricultural marketing system has made some notable improvements. But, it has yet to go a long way before the millions of small and marginal farmers are able to defend their self-interest at all stages of the marketing process. The fact is that small and marginal farmers still continue to be the victims of distress sale to the rural moneylenders and commission agents. Surprisingly enough, nearly 90 per cent of agricultural marketing is still handled by the private traders, while the government agencies and cooperative societies are handling merely 10 per cent.

### Defects of Agricultural Marketing

- Lack of transportation facilities
- Forced sales
- Numerous market changes
- Lack of credit facilities
- Lack of storage facilities
- Presence of middlemen
- Lack of standard weights and measures
- Inadequate market information

## Alternative Marketing Channels—A Ray of Hope

Emerging alternatives of agricultural marketing are a ray of hope to the small and marginal farmers who have been silent sufferers at the hands of middlemen.

Direct sale by the farmers to the consumers is one such channel.



Big Bazaar: A Centre for Direct Sale by the Farmers to the Consumers

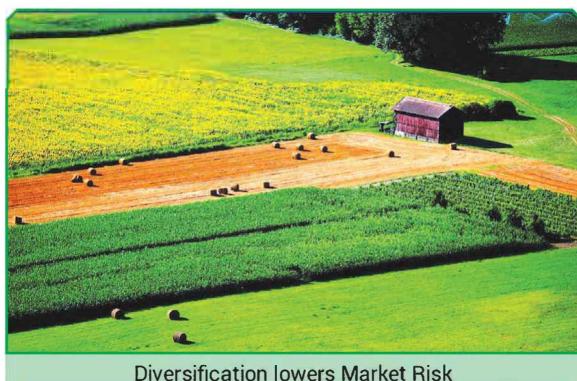
The states of Punjab, Haryana and Rajasthan are launching this channel through '*Apni Mandi*', '*Big Bazaar*', the state of Andhra Pradesh is launching it through '*Rythu Bazaars*', and the state of Tamil Nadu is launching it through '*Uzhavar Sandies*'.

Direct sales contract with the farmers by the national and multinational companies (like Reliance Retails) is another alternative channel of agricultural marketing.

In fact, these companies are offering advance payments to the farmers to supply farm products at the pre-determined rates.

It is hoped that, these systems of marketing grow in tandem with the growth of national and multinational retails.

This would not only help in expansion of market for the farm products, but also reduce 'price-risk' for the small and marginal holders.



Diversification lowers Market Risk

## Agricultural Diversification and Market Risk

Agricultural diversification refers to the re-allocation of some of farm's productive resources into new activities or crops reducing market risk. Because price of all the crops may not drop at the same time. If one crop fetches low revenue, the other may fetch high. Thus, diversification helps stabilisation of farm income by lowering the market risk. Diversification has two aspects:

- (i) Diversification of Crop Production, and
  - (ii) Diversification of Production Activity/Employment.
- (i) **Diversification of Crop Production** implies production of a diverse variety of crops rather than one specialised crop.  
It implies a shift from single-cropping system to multi-cropping system.

In India, where agriculture is still dominated by subsistence farming, diversification would mean a shift from subsistence farming to commercial farming.

It would mean choice of cropping pattern in accordance with the price structure in the market.

It would minimise the market risk arising due to price fluctuations.

Also, it would minimise risk occurring due to failure of monsoon.

- Diversification of crop production minimises the market risk arising due to price fluctuations. It also minimises risk occurring due to monsoon failure.
- In areas where subsistence farming still predominates, diversification of crop production would mean a shift from subsistence farming to commercial farming.

(ii) **Diversification of Production Activity/Employment** implies a shift from crop farming to other areas of production activity/employment. It raises income as well as stabilises it. Finding sustainable livelihood away from crop farming becomes all the more significant in view of the fact that crop farming sector is overburdened.

Following section discusses some important non-farm areas of production activity/employment for the rural population.

### 3. THE EMERGING CHALLENGES OF RURAL DEVELOPMENT

#### (A) Employment Outside Agriculture

Finding options of sustainable livelihood (implying employment outside agriculture) is an important emerging challenge of rural development in India. Following are some notable options of employment (outside agriculture).

##### (1) Animal Husbandry

Animal husbandry is an important area of employment in India different from crop farming. It is also called **livestock farming**.

Poultry, cattle, and goats/sheep are important components of livestock in India. Poultry accounts for 42 per cent, cattle 25 per cent and goats/sheep nearly 20 per cent share in total livestock in India.

In most areas, livestock farming is combined with crop farming by the rural families with a view to supplementing their income.

##### Operation Flood

- It is a system of Milk Cooperatives, launched in 1966.
- The system requires the member farmers to pool their produce of milk for collective sale in the market.
- Pooling increases quantum of sale, and thereby increases bargaining power of the farmers.
- Pooling also makes grading and processing of the product as economically viable propositions. This raises market value of the product.
- Milk cooperatives in India have their epicentre in the state of Gujarat.
- Over the last 30 years or so, these cooperatives have recorded a wonderful progress, significantly contributing to the four-fold rise in the production of milk.
- It has proved to be an important non-farm area of income generation in the rural areas.



Animal Husbandry: Employment Outside Agriculture

A notable feature of crop-livestock mix is that as we move from irrigated areas to semi-arid and arid areas, the significance of livestock farming tends to increase while that of crop farming tends to decrease. Obviously because, lesser the irrigation (or more arid the area) lesser is the scope for crop farming.

Livestock farming in India is an important source of employment for the women. Presently, animal husbandry is a source of alternative employment to nearly 7 lakh small and marginal farmers in the countryside.

However, livestock sector is not free from problems. In terms of its size, our livestock population is perhaps the largest in the world. But in terms of its quality we are far behind from most developed countries in the world. Two principal problems related to livestock sector are:

- (i) Low productivity owing to backward know-how, and
- (ii) Deficient veterinary care.

These need to be urgently addressed.

## (2) Fisheries

Kerala, Maharashtra, Gujarat and Tamil Nadu are the principal states in India where fisheries is an important source of livelihood in the rural areas.



Fisheries: A Source of Livelihood Outside Agriculture

The fishing community in India depends almost equally on inland sources and marine sources of fishing.

Inland sources include rivers, lakes, ponds and streams, while marine sources include seas and oceans.

Together these sources (inland and marine sources) are called '[water-bodies](#)' which are regarded as 'provider' (of subsistence) by the fishing communities.

But fishing community continues to be as one of the most backward communities in the country.

Widespread indebtedness of the fishing communities makes fishing a vulnerable occupation. It is suggested that:

- (i) Credit facilities be provided to the fishing communities that breaks their vicious circle of indebtedness.
- (ii) Micro-financing through SHGs (Self Help Groups) may go a long way in redressing credit needs of the marginal fishing families in rural areas.
- (iii) Fishery technology be upgraded and made available to the fishing community.

### (3) Horticulture

Horticulture is another alternative source of employment in the rural areas. It is more like diversification of crop production rather than a source of employment different from crop farming.

Horticultural crops include fruits, vegetables and flowers besides several others. Over time, there has been a substantial increase in area under horticulture.

Presently, India is second largest producer of fruits and vegetables in the world. We are emerging as a leading producer of mangoes, bananas, coconuts, cashew nuts and a variety of spices.

High crop productivity led to Golden Revolution in horticultural farming, during the years 1991-2012. Doubtless, **horticulture is emerging as an important means of sustainable living in the rural areas.**

There has been a significant rise in income levels of the farming families engaged in horticultural production.

Shifting to horticultural farming has reduced economic vulnerability of the small and marginal farmers. This has opened up new avenues of employment for the women folk in the rural areas. Significant it is to note that nearly 20 per cent of the total rural employment is generated by horticulture and related production activity.

However, an alarming fact is that the bulk of acreage under horticulture has expanded at the cost of acreage under pulses. Causing a severe shortfall in supplies of pulses and a cut in their consumption owing to high prices which are an important source of protein for the bulk of households in India relying on vegetarian diet.



Horticulture: Alternative Source of Employment

#### Golden Revolution

It refers to a series of research, development and technology transfer initiatives that increased production of horticultural crops (vegetables and fruits) and honey.

### (4) Cottage and Household Industry

Cottage and household industry has been a traditional source of non-farm production activity in rural areas.

Traditionally, this industry has been dominated by activities like spinning, weaving, dyeing and bleaching.

However, with the growth of urban textile industry, these activities have been hit hard in the rural areas.



Cottage and Household Industry: Non-farm Production Activity in Rural Areas

### TANWA

Tamil Nadu Women in Agriculture (TANWA) is a project launched in Tamil Nadu with a view to training women in diverse techniques of farming. This is expected to raise employment of women as well as their income through higher levels of productivity. Having acquired specialised skills through training, women are forming Farm Women's Groups. These groups function like SHGs and promote cottage and household production activity using their own pool of funds.

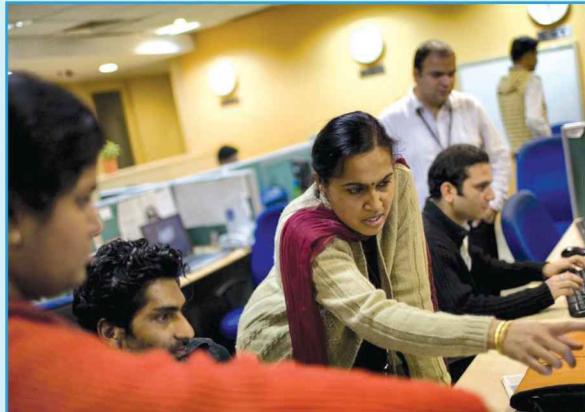


During the recent past, some new household activities (like soap manufacturing, doll-making, mushroom cultivation and bee-keeping) have emerged as alternative sources of income generation.

In many rural areas, these household activities are being promoted by Farm Women's Groups, focusing on income generation through employment of women in productive activities at the household level.

### INFORMATION TECHNOLOGY (IT) AS AN OPTION OF LIVELIHOOD IN RURAL AREAS

We know, IT revolution is promoting Indian economy as a 'knowledge economy'. It highlights the significance of human capital as an important determinant of growth, beyond the significance of physical and financial capital. Consensus is emerging among the planners and politicians that in the 21st century knowledge economy of India will spread its wings across rural areas of the country. IT is expected to play an important role as an option of livelihood in rural areas. In fact, Action-programme has already been initiated: an academy, called Jamshedji Tata National Virtual Academy for Rural Prosperity has been established. This academy is to impart operational training to nearly 10 lakh rural people to run 'info-kiosks'. These kiosks are to be equipped with computers, scanners, printers and photocopiers. These are to provide services like e-mailing, video-conferencing and transfer of documents to different places. Selling these services, the operators/owners of the kiosks are likely to make a reasonable living. Thus, every village will ultimately be a knowledge center where IT provides a sustainable option of employment and livelihood.



## (B) Organic Farming and Sustainable Development

Organic farming is a system of farming that relies upon the use of organic inputs for cultivation.

Animal manures and composts are the basic organic inputs.

It discards the use of chemical inputs, like chemical fertilizers, insecticides and pesticides.

However, it needs to be noted that simply discarding the use of chemical fertilizers is not organic farming. Rather, it is a system of farming that focuses on maintaining soil health (rather than plant health) so that farming becomes 'a long period sustainable process' along with an eco-friendly environment.



Environment-friendly Organic Farming

### Why Organic Farming?

Following are some notable advantages of organic farming, compared with conventional farming:

**(1) Discards the Use of Non-renewable Resources:** Unlike conventional farming, organic farming does not use synthetic chemicals which are petroleum-based. We all know that petroleum is a non-renewable resource.

**(2) Environment-friendly:** Organic farming is environment-friendly. Chemical fertilizers, on the other hand, pollute the groundwater by raising its nitrate content. Nitrates are a health-hazard and pollute the environment. Organic farming discards the use of chemical fertilizers.



Animal Manure helps sustain Soil Fertility

**(3) Sustains Soil Fertility:** Use of animal manures and composts helps sustain soil fertility. Chemical fertilizers, on the other hand, erode soil fertility. Accordingly, organic farming is conducive to sustainable development of agriculture, while conventional farming is not.

### **Farming, Soil Fertility and Sustainable Development**

- ❑ Conventional farming (using chemical fertilizers) erodes fertility of soil, whereas organic farming (using animal manures and composts) sustains fertility of soil.
- ❑ Organic farming nurtures soil as a resource for future generations. Accordingly, it is not only environment-friendly but also contributes to sustainable development.
- ❑ Sustainable development is a process of development which uses existing resources so optimally that their availability for future generations is not reduced. The process of development is sustained over a long period of time.

**(4) Healthier and Tastier Food:** Organic farming offers healthier and tastier food compared with conventional farming. Recent studies have found that organically grown food is more nutritious than the food from chemical farming. Existing trends indicate that demand for organic food is trending up, even when high price is a constraining factor.

### **India has a Comparative Advantage**

- ❑ India has comparative advantage in organic farming. Because, organic farming involves a labour-intensive process.
- ❑ Abundance of labour places India in a better position to specialise in organic farming.

**(5) Inexpensive Technology for the Small and Marginal Farmers:** Organic farming offers an inexpensive farming-technology to small and marginal farmers who constitute the bulk of farming population in India. Conventional technology is to be adopted as a package including HYV seeds, fertilizers, pesticides, insecticides, besides good irrigation facilities. Small and marginal farmers in India, in their desperate bid to use this package, often slip into indebtedness. No such package of expensive inputs is required for organic farming.

It cannot be denied that organic farming offers lesser yield as compared to conventional farming, and is therefore, not cost efficient. However, considering the fact that organic foods are in high demand, higher product price is expected to compensate for lower yield. Overall advantages of organic farming should certainly make it a more attractive proposition than conventional farming. Indeed, being a sustainable development process and environmental-friendly, organic farming must be given preference over conventional farming.

## Power Points & Revision Window

- **Rural Development:** It means an action-plan for the economic and social growth of the rural areas.
- **Challenges of Rural Development:**
  - **Lingering Challenges of Rural Development:** (i) Challenge of rural credit, and (ii) Challenge of rural marketing.
  - **Emerging Challenges of Rural Development:** (i) Options of sustainable livelihood, other than farming, and (ii) Organic farming.
- **Sources of Rural Credit:**
  - **Non-institutional Credit Sources:** Traders, moneylenders and commission agents, and others.
  - **Institutional Credit Sources:** Cooperative Credit Societies, State Bank of India, Commercial Banks, Regional Rural Banks and Land Development Banks, NABARD.
- **Agricultural Marketing:** It includes gathering the produce after harvesting, processing the produce, grading the produce according to its quality, packaging the produce according to buyers' preferences, storing the produce for future sale, and selling the produce when price is lucrative.
- **Measures Adopted by the Government to Improve Marketing System:** (i) Regulated markets, (ii) Cooperative agricultural marketing societies, (iii) Provision of warehousing facilities, (iv) Subsidised transport, (v) Dissemination of marketing information, (vi) MSP policy.
- **Alternative Marketing Channels:** (i) Direct sale by the farmers to the households, (ii) Contract sale to the MNCs and corporate retails.
- **Options of Livelihood Other than Crop Farming:** It implies a shift from crop farming to non-farming areas of employment. Non-farm areas of employment include: (i) Animal husbandry, (ii) Fisheries, (iii) Horticulture, (iv) Cottage and household industry, (v) Information technology.
- **Organic Farming and Sustainable Development:** Organic farming is basically a system of farming that relies upon the use of organic inputs for cultivation. It discards the use of chemical inputs.
- **Merits of Organic Farming:** (i) Discards the use of non-renewable resources, (ii) Environment-friendly, (iii) Sustains soil fertility, (iv) Healthier and tastier food, (v) Inexpensive technology for the small and marginal farmers.
- **India has Comparative Advantage in Organic Farming:** Because it involves labour-intensive process of production, and India has abundance of labour.
- **'Low Yield and High Cost per Unit of Output'** is the principal constraint in switching over from conventional farming to organic farming.



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

### Choose the correct option:

10. Cooperative credit societies are to ensure:
  - (a) timely and rapid flow of credit to the farmers
  - (b) elimination of moneylenders as credit agencies
  - (c) spread of credit facilities across all regions of the country
  - (d) all of these
11. Which of the following is the correct statement with respect to National Bank for Agricultural and Rural Development (NABARD)?
  - (a) It serves as an apex funding agency for the institutions providing credit in rural areas
  - (b) It takes appropriate measures to improve the credit delivery system
  - (c) Both (a) and (b)
  - (d) None of these
12. Which of the following statements highlight the glaring deficiencies of rural banking system?
  - (a) Institutional credit has invariably been tied to collateral
  - (b) Laxity in recovery of loans, owing to political reasons
  - (c) Both (a) and (b)
  - (d) None of these
13. The need for organic farming arises due to which of the following reasons?
 

(a) It is environment-friendly	(b) It sustains soil fertility
(c) Both (a) and (b)	(d) None of these

### Answers

- |         |         |         |        |        |        |        |        |        |         |
|---------|---------|---------|--------|--------|--------|--------|--------|--------|---------|
| 1. (c)  | 2. (c)  | 3. (d)  | 4. (c) | 5. (d) | 6. (d) | 7. (a) | 8. (c) | 9. (d) | 10. (d) |
| 11. (c) | 12. (c) | 13. (c) |        |        |        |        |        |        |         |

### B. Fill in the Blanks

#### Choose appropriate word and fill in the blank:

1. The gestation lag between sowing and harvesting of crops leads to \_\_\_\_\_ caring cost. \_\_\_\_\_ crop-  
(high/low)
2. Landlords, village traders and moneylenders are some important sources of \_\_\_\_\_ credit. \_\_\_\_\_ (institutional/non-institutional)
3. On the eve of independence, \_\_\_\_\_ sources show notional existence. \_\_\_\_\_ (institutional/non-institutional)
4. Self Help Groups (SHGs) and Micro Credit Programmes are an emerging phenomenon in the context of \_\_\_\_\_ credit. \_\_\_\_\_ (urban/rural)
5. Agricultural marketing \_\_\_\_\_ simply refer to the farmers' act of bringing their produce to the market for sale. \_\_\_\_\_ (does/does not)
6. \_\_\_\_\_ is a significant progressive step in the context of agricultural market system. \_\_\_\_\_ (Cooperative marketing/Provision of warehousing facilities)
7. Diversification of crop production \_\_\_\_\_ market risks. (maximises/minimises)
8. With the nationalisation of commercial banks, the concept of \_\_\_\_\_ was put into practice in India. \_\_\_\_\_ (social banking/cultural banking)

9. High crop productivity led to revolution in horticultural farming in India.  
 (golden/green)
10. \_\_\_\_\_ fertilizers erode soil fertility.  
 (Organic/Chemical)

### Answers

1. high                  2. non-institutional    3. institutional        4. rural    5. does not  
 6. Cooperative marketing      7. minimises        8. social banking    9. golden   10. Chemical

### C. True or False

**State whether the following statements are True or False:**

1. Rural development means an action-plan for the social and economic growth of the rural areas. (True/False)
2. Medium-term credit is required for purchase of additional land. (True/False)
3. Commercial banks, regional rural banks and cooperatives are institutional sources of credit in India. (True/False)
4. The State Bank of India (SBI) was set-up in 1955 with a focus on urban credit. (True/False)
5. Reserve Bank of India (RBI) is the apex institution handling policy, planning and operation in the field of rural credit. (True/False)
6. Institutional sources of credit has gone a long way in liberating the farmers from the debt trap of *mahajans* and moneylenders. (True/False)
7. Agricultural marketing does not include the grading of produce according to its quality. (True/False)
8. Distress sale refers to the situation when the farmers are compelled to sell their produce immediately after the harvest, irrespective of the prevailing market price. (True/False)
9. Cooperative marketing is a significant progressive step in the context of agricultural produce grading system. (True/False)
10. Animal husbandry is an important area of employment in India different from crop farming. (True/False)

### Answers

1. True    2. False    3. True    4. False    5. False    6. True    7. False    8. True    9. False    10. True

### D. Matching/Chronological

**I. From the set of statements given in Column I and Column II, choose the correct pair of statements:**

Column I	Column II
(a) Non-institutional source of rural credit in India	(i) Regional rural banks
(b) Medium-term credit	(ii) For purchase of additional land
(c) Cooperative credit societies	(iii) Adequate credit to the farmers at reasonable rate of interest
(d) Chemical farming	(iv) Tastier and healthier food

### Answer

- (c) Cooperative credit societies— (iii) Adequate credit to the farmers at reasonable rate of interest

**II. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:**

Column I	Column II
(a) Horticultural crops	(i) Sustains soil fertility
(b) Short-term credit	(ii) Shift from single-cropping system to multi-cropping system
(c) Diversification of crop production	(iii) Purchase of inputs
(d) Organic farming	(iv) Fruits, vegetables and flowers

**Answers**

(a)—(iv), (b)—(iii), (c)—(ii), (d)—(i)

**E. 'Very Short Answer' Objective Type Questions**

1. What do you mean by agricultural credit?

Ans. Agricultural credit means credit for the farming activity.

2. Define non-institutional sources of agricultural credit.

Ans. Landlords, village traders and moneylenders are the three important sources of non-institutional agricultural credit in India.

3. Name three institutional sources of agricultural credit.

Ans. Three institutional sources of agricultural credit are:

- (i) Cooperative credit societies,
- (ii) Commercial banks, and
- (iii) Regional rural banks.

4. What is meant by agricultural diversification?

Ans. Agricultural diversification refers to the reallocation of some of farm's productive resources into new activities or crops.

5. Define the concept of micro-credit.

Ans. Micro-credit refers to small loans meant for the impoverished people.

**2. Reason-based Questions (Comprehension of the Subject-matter)**

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**Read the following statements carefully. Write True or False with a reason.**

1. Fertilisers restore crop health, not the soil health.

Ans. True. Reason: Fertilisers are meant to raise crop productivity. In fact, continuous use of fertilisers erodes fertility of the soil.

2. Subsistence farming reduces market risk.

Ans. True. Because: (i) Subsistence farming focuses on the production of those crops which are meant for self-consumption by the farming families. The farmers do not have to buy these crops from the market. Accordingly, the market risk is avoided. (ii) Unlike the production of commercial crops, the production of subsistence crops does not involve market expectations. Accordingly, there are no market risks.

- 3. It is easier to obtain institutional credit rather than non-institutional credit.**
- Ans. False. Because: (i) Institutional credit (like from banks) involves lots of banking formalities, while non-institutional credit does not. (ii) Institutional credit is available only against collateral (tangible security) while non-institutional credit is just a matter of faith between the borrower and the lender.
- 4. Lack of warehousing causes loss of revenue to the farmers.**
- Ans. True. Because, in the absence of warehousing, the farmers are compelled to sell their produce immediately after harvesting it. It causes a glut (excess supplies) in the market, leading to a fall in crop price. Accordingly, there is a loss of revenue to the farmers.
- 5. Cattle farming (rather than crop farming) is more popular in arid and semi-arid areas than in those where rainfall is not deficient.**
- Ans. True. Reason: Arid and semi-arid areas are those where rainfall is highly deficient. Accordingly, crop productivity in these areas becomes highly unpredictable and often remains low. Implying low income from crop farming. With a view to supplementing farm income, the farmers in these areas resort to cattle farming. In areas where rainfall is not deficient, crop yield is high. Accordingly, the farmers need not resort to cattle farming as a supplementary source of income.

### **3. HOTS & Applications**

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- 1. How organic farming promotes sustainable development?**
- Ans. Organic farming focuses on 'soil health' rather than 'crop health'. Fertility of soil is maintained over a long period of time. Accordingly, organic farming promotes sustainable development.
- 2. How is diversification of crop production different from diversification of production activity?**
- Ans. Diversification of crop production implies a shift from mono-cropping to multi-cropping system of crop production.  
Diversification of production activity implies a shift from (say) farming to non-farming areas of employment.
- 3. How grading of output raises revenue of the farmer?**
- Ans. Grading of output refers to division of output in different categories on the basis of 'quality'. The farmer can charge higher price for the high-graded output. This increases his total revenue from the sale of his output.
- 4. India has an edge over other countries in the adoption of organic farming. How?**
- Ans. It is in two ways:
  - (i) Organic farming involves a labour-intensive process of production. India has an edge because it has abundance of labour supply in the rural areas.
  - (ii) Organic farming depends on cattle manure as a significant farm input. India has an edge as it has huge stock of cattle population.
- 5. How is Green Revolution different from Golden Revolution?**
- Ans. 'Green Revolution' refers to a series of research, development, and technology transfer initiatives that increased agriculture production remarkably. On the other hand, 'Golden Revolution' refers to a series of research, development and technology transfer initiatives that increased production of horticulture crops (vegetables and fruits) and honey.

**6. Why does a farmer require credit? Write your observations.**

**Ans.** Credit need of the farmer may be split into three parts:

- (i) Short-term Credit : Needed for the purchase of inputs.
- (ii) Medium-term Credit : Needed for the purchase of equipments/appliances.
- (iii) Long-term Credit : Needed for the purchase of land or improvement of the existing land.

#### **4. Analysis & Evaluation**

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**1. As a minister for rural development, what will be your action-plan for the development of rural India?**

**Ans.** As a minister for rural development, my action-plan would focus on three basic objectives:

- (i) Crop productivity must be increased to increase income from farming. Agriculture should no longer remain merely as a means of subsistence. It must be transformed into a commercial activity that generates profit.
- (ii) Avenues of employment outside agriculture must be explored and developed. This is to ensure that rural development no longer remains farm-centric. It becomes more comprehensive and meaningful.
- (iii) Rural development must be integrated with human development. This can be achieved only when a significant focus is placed on education and health in the rural areas.

Briefly, action-plan for rural development must be holistic. It must focus on the overall rural development. It should not be restricted merely to the development of agriculture.

**2. Write your views on 'information technology' as an option of livelihood in rural areas.**

**Ans.** Information technology is an important element of 'knowledge economy'. It highlights the significance of human capital as an instrument of growth. It is widely believed that the 21st century will see the spread of knowledge economy across rural areas of the country. A plan is already underway to establish 'Info-Kiosks' in rural areas, and to impart operational training to the rural youth. These Kiosks are to be equipped with computers, scanners, copiers and printers. These are to provide services like e-mail, video conferencing and transfer of documents. Thus, every village will acquire a knowledge centre which would serve as a source of employment.

It is important to highlight the fact that the mechanisation of agriculture leads to the emergence of surplus labour. It adds to the problem of rural unemployment. The surplus labour can be absorbed if info-kiosks are established across all parts of the rural economy. Thus, information technology will not only be an option of livelihood, it would also help solve the problem of rural unemployment in rural areas.

**3. Do you think a shift from subsistence farming to commercial farming is a useful proposition for the Indian farmers?**

**Ans.** A shift from subsistence farming to commercial farming is always useful. Provided, that the shift is economically viable.

In India, most farming land is held by a small number of big farmers. A large number of farmers operate small farm-holdings, smaller than even one hectare in size.

Shifting from subsistence farming to commercial farming is economically viable only when holdings are large. So large, that mechanisation is possible on these holdings. Only when mechanisation is adopted that the productivity would rise. Only when productivity rises, that the cost of farming would reduce. Only when the cost of farming reduces that the farming becomes economically viable.

Mechanisation is not economically viable when holdings are small. This deters the small farmers from shifting to commercial farming. Instead, they stick to subsistence farming. It does not generate any surplus or profits. But, it certainly ensures them the necessary supplies of grains for self-consumption. They are not exposed to the uncertainties of the market.

**4. Do you think loans should be written off in case farmers find it difficult to pay off?**

Ans. Reasons behind inability to pay must be assessed before the government arrives at a decision to waive-off the loans. The reason should not be political or a part of the election manifesto of the political parties. Instead, it should be related to economic hardship of the farmers arising out of such factors as crop-failure due to droughts, floods or other natural calamities.

**5. Given the fact that organic farming offers lower yield than conventional farming, should it be promoted in our country where millions of people are not getting enough to eat? Write your observations in brief.**

Ans. It is not denying the fact that organic farming is environment-friendly. But the hard fact cannot be denied that organic farming is less productive compared with conventional farming (using chemical fertilizers, insecticides and pesticides).

We must strike a balance between environment and productivity. The planners and politicians in the country must see to it that environmental degradation is minimised without suffering a substantial loss of productivity. Rejection of conventional farming in favour of organic farming should not push us to a point where food problem becomes an emerging challenge.

## 5. NCERT Questions (With Hints to Answers)

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**1. What do you mean by rural development? Bring out the key issues in rural development.**

[Hint: Rural development means an 'action-plan' for the economic and social growth of the rural areas. The action-plan is to focus on the lingering and emerging challenges in rural areas.

The principal lingering challenges of rural development are:

- (i) challenge of rural credit, and
- (ii) challenge of rural marketing.

Emerging challenges of rural development include basically:

- (i) exploring options of sustainable livelihood, other than farming, and
- (ii) the challenge of organic farming.]

**2. Discuss the importance of credit in rural development.**

[Hint: (i) Most rural people are poor and most farmers are small and marginal holders. As the small and the marginal farmers produce only for their subsistence, they fail to generate sufficient surplus to reinvest on their lands leading to degradation of the land. Thus, credit helps the small and marginal farmers to carrying out permanent improvements on their land and commercialise their farming.

- (ii) Owing to a long gestation lag between sowing and harvesting of the crops, short-term credit is required for the purchase of inputs (seeds, fertilizers, etc.).
- (iii) Rural artisans and farmers require funds for meeting their general and specific needs.
- (iv) Agriculture continues to depend on uncertain monsoon. In order to save them from natural calamities, farm credit becomes essential.]

**3. Explain the role of micro-credit in meeting credit requirements of the poor.**

[Hint: Micro-credit refers to small loans (available through SHGs) and meant for the impoverished people. These loans are offered without any security and at a moderate rate of interest. Presently, more than seven lakh SHGs are operating across different rural areas. Credit provisions by the SHGs is known as Micro-Credit Programme. These programmes are becoming popular among small borrowers owing to their ‘informal credit delivery mechanism’ involving minimum legal formalities.]

**4. Explain the steps taken by the government in developing rural markets.**

[Hint: In order to develop rural markets (or agricultural marketing), the government has initiated a series of steps, as under:

- (i) Regulated markets have been set up.
- (ii) Cooperative agricultural marketing societies have been formed.
- (iii) Provision of warehousing facilities.
- (iv) Subsidised transport for the transportation of farm output.
- (v) Dissemination of marketing information for the benefit of the farming population.
- (vi) MSP policy, focusing on some stable income to the farmers.]

**5. Why is agricultural diversification essential for sustainable livelihoods?**

[Hint: Agricultural diversification refers to the allocation of farm's productive resources to diverse areas of crop output, so as to reduce market risk. Owing to changes in the relative price structure, if one crop fetches low revenue, the other may fetch high. Thus, diversification helps stabilisation of farm income by lowering the market risk.

Diversification also minimises risk occurring due to monsoon failure.]

**6. Critically evaluate the role of the rural banking system in the process of rural development in India.**

[Hint: Rural banking in India has significantly expanded over time. Its advantages are as under:

- (i) Nationalisation of commercial banks marked the beginning of social banking in rural areas, implying provision of institutional credit at moderate rates of interest.
- (ii) Establishment of NABARD has made a substantial difference in the institution of rural credit. Rural financing has become much more organised than ever before.
- (iii) Institutional credit has liberated the farmers from the debt trap of mahajans and moneylenders. Also, institutional credit has promoted commercialisation of agriculture.

But deficiencies of rural banking system are equally glaring. Important ones are:

- (i) Banking credit or institutional credit has often been tied to collateral (security or guarantee of a property for the loans), because of which a large section of small and marginal holders are often left out.
- (ii) Owing to political populism, the government has often shown laxity (lack of strictness) in the recovery of loans. As a result, default rate has tend to swell over time.
- (iii) Apart from commercial banks, most financial institutions have failed to develop a culture of thrift (saving for the future) among the farming families. Mobilisation of deposits has remained rather subdued.]

**7. What do you mean by agricultural marketing?**

[Hint: Agricultural marketing may be defined as the process that involves: gathering the produce after harvesting, processing the produce, grading the produce according to its quality, packaging the produce according to buyers' preferences, storing the produce for future sale, and selling the produce when price is lucrative.]

**8. Mention some obstacles that hinder the mechanism of agricultural marketing.**

[Hint: Major obstacles that hinder the mechanism of agricultural marketing are as follows:

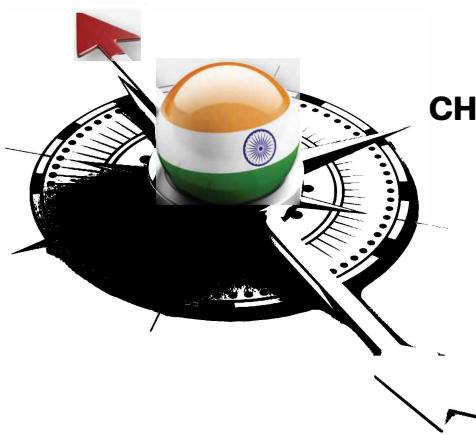
- (i) Lack of transportation facilities.
- (ii) Distress sale by the farmers.
- (iii) Lack of credit facilities.
- (iv) Lack of storage facilities.
- (v) Presence of middlemen.
- (vi) Lack of standard weights and measures.
- (vii) Inadequate market information.]

## **6. Miscellaneous Questions and Reference to the Text for Answers**

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- 1. What objectives should the cooperative credit societies pursue in India? [Page 197, 198]
- 2. Evaluate the role of NABARD in the context of rural development. [Page 198, 199]
- 3. Explain the significance of SHGs in rural areas. [Page 200]
- 4. Bring out the significance of organic farming in India. [Page 209, 210]





## CHAPTER: 10

# EMPLOYMENT AND UNEMPLOYMENT

TO  
DO

- *Some Basic Concepts*
- *Size of Workforce in India*
- *Rate of Participation in India*
- *Self-employed and Hired Workers in India*
- *Occupational Structure or Distribution of Workforce by Industry*
- *Jobless Growth*
- *Casualisation and Informalisation of Workforce*
- *Rural and Urban Unemployment*

## I. SOME BASIC CONCEPTS

### What is Unemployment?

Unemployment refers to a situation when people are willing to work at the existing wage rate, and are able to work, but are not getting work. It should be noted with emphasis that such people who are not willing to work at the existing wage rate are not considered as unemployed.

### Who is a Worker?

A worker is an individual who is engaged in some production activity. A worker, or an individual engaged in production activity, contributes to GDP by rendering his services.



Unemployment: Willing to work but not getting work

## Self-employed and Hired Workers

Workers (or those in employment) may be classified as: (1) self-employed, and (2) hired.

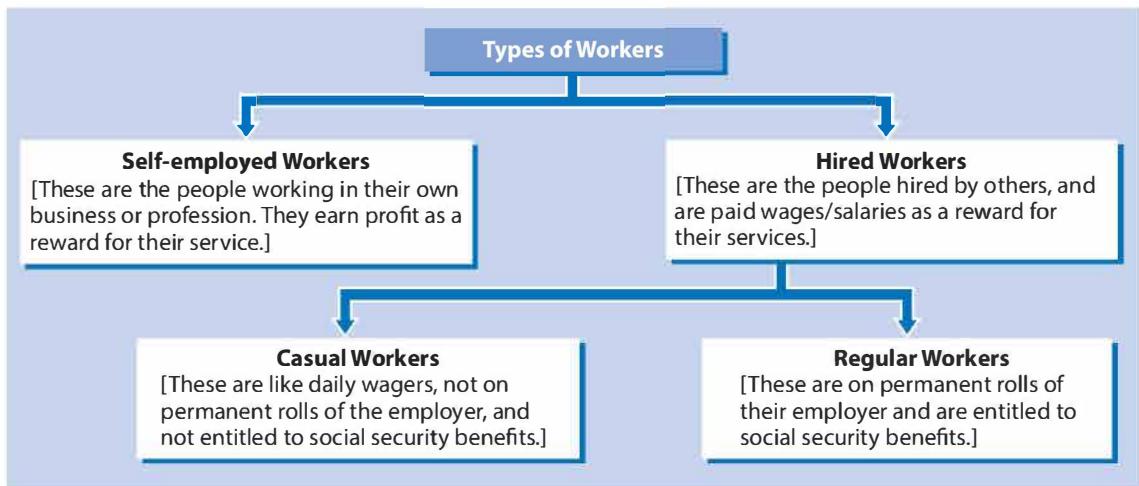
- (1) **Self-employed Workers:** These are those workers who are engaged in their own business or own profession. **Example:** A farmer working on his own farm, or an entrepreneur working in his own factory.
- (2) **Hired Workers:** These are those workers who work for others; they render their services to others and as a reward, get wages/ salaries. Or, may be they are paid in kind. **Example:** A proof-reader working in a publication house, or a teacher working in a school.



## Casual and Regular Workers

Hired workers may further be categorised as: (i) casual workers, and (ii) regular workers.

- (i) **Casual Workers:** These are the daily wagers. They are not hired by their employers on regular basis. They are not given social security benefits, like provident fund, gratuity or pension.
- (ii) **Regular Workers:** These are on permanent pay-roll of their employers. They are entitled to all social security benefits including pension, gratuity and provident fund.
- (iii) It is often found that causal workers are unskilled workers, like a worker working at the construction site. A regular worker, on the other hand, is usually a skilled worker, like an engineer working in a factory.



## Labour Supply, Labour Force and Workforce

Labour supply and labour force are different concepts.

- (i) **Labour supply** refers to the amount of labour that the workers are willing to offer corresponding to a particular wage rate. You may be able to work 10 hours a day, but willing to work only for 6 hours a day at a particular wage.

Labour supply, thus, is measured in terms of man-hours of work (or man-days, considering 8 man hours equal to one man-day). It is always estimated in relation to wage rate.

- (ii) **Labour force**, on the other hand, refers to the number of workers actually working or willing to work. It is not related to wage rate.

Labour Supply	Labour Force
<ul style="list-style-type: none"> <li>(i) It refers to supply of labour corresponding to different wage rates. Supply of labour is measured in terms of man-days of work and is always related to wage rate.</li> <li>(ii) Supply of labour can increase or decrease even when the number of workers remains constant. Because the supply of labour is measured in terms of man-days or person-days: one person-day referring to 8 hours of work.</li> </ul>	<ul style="list-style-type: none"> <li>(i) It refers to the number of persons actually working or willing to work. It is not related to wage rate.</li> <li>(ii) Because it is measured in terms of the number of persons (not in terms of person-days), size of labour force increases or decreases only when the number of persons actually working or willing to work increases or decreases.</li> </ul>

- (iii) **Workforce** refers to the number of persons actually working, and does not account for those who are willing to work (but not working). Thus,

$$\text{Workforce} = \text{Labour force} - \text{Number of persons not working but are willing to work}$$

This brings us to the estimation of unemployment (number of persons unemployed), as under:

$$\text{Number of Persons Unemployed} = \text{Labour force} - \text{Workforce}.$$

Related to this are the concepts of rate of unemployment and participation rate. These are estimated as under:

$$\text{Rate of Unemployment} = \frac{\text{Number of persons unemployed}}{\text{Size of labour force}} \times 100$$

$$\text{Participation Rate} = \frac{\text{Total workforce}}{\text{Total population}} \times 100$$

It refers to the percentage of population actually working.

$$\text{Workforce} = \text{Labour force} - \text{Number of persons not working, but are willing to work}$$

$$\text{Number of Persons Unemployed} = \text{Labour Force} - \text{Workforce}$$

$$\text{Rate of Unemployment} = \frac{\text{Number of persons unemployed}}{\text{Size of labour force}} \times 100$$

$$\text{Participation Rate} = \frac{\text{Total Workforce}}{\text{Total Population}} \times 100$$

## WHY DO PEOPLE WORK AND WHY SHOULD WE STUDY ABOUT WORKING PEOPLE?

Three factors explain why do people work:

- (i) People work to earn a living. It is essential for existence in a system of mutual interdependences.
- (ii) Employment infuses in us a sense of self-esteem, and brings to the fore our sense of self-worth.
- (iii) Employment contributes to GDP of the nation, and contributing to GDP gives us a sense of global pride because growth of GDP implies growth of the nation.

Four factors explain why studying about working people (or studying about employment) is significant:

- (i) Studying about employment offers insights into the quality and quantity of our human resource or human capital, which is an important determinant of economic growth.
- (ii) Employment study helps analyse the significance of different sectors (Primary, Secondary and Tertiary Sectors) in the growth process of the country. We come to know which sector employs how much and contributes how much towards GDP.
- (iii) It helps analyse many social issues such as social security of the workers, work environment, exploitation of workers, etc.
- (iv) It offers inputs for manpower planning. Understanding the nature and extent of existing employment, we can plan for our future requirement of manpower across different sectors of the economy.

## 2. SIZE OF WORKFORCE IN INDIA

Here are some important facts:

- (i) India has a workforce of nearly 40 crore of persons.
- (ii) About 70 per cent of the workforce comprises of male workers; only 30 per cent are female workers.
- (iii) Nearly 70 per cent of the workforce is found in rural areas; urban workforce is only 30 per cent of the total.
- (iv) Female workforce (out of the total) in rural areas is nearly 41.8 per cent, while it is only 35.31 per cent in urban areas.

What do these facts reveal? These facts raise two important questions which need to be addressed. These are:

- (i) Why is the bulk of our workforce rural-based, and
- (ii) Why is the percentage of female workers low, and lower still in urban areas?

### Why is the bulk of our Workforce Rural-based?

This is simply because bulk of the jobs are in rural areas. Does it mean, bulk of our GDP is derived from the rural economy? Paradoxically not. Implying that more people are engaged in farming and allied activities, but contributing less to GDP. This means low productivity of the workers in rural areas. Low productivity implies low earnings, which is why there is widespread poverty in rural areas.

Higher percentage of workforce in rural areas apparently suggests a higher contribution of the rural economy to GDP than that of urban economy. Paradoxically, it is just opposite.

- ❑ Employing nearly 50 per cent of workforce, the rural economy in India is contributing less than 20 per cent to GDP.
- ❑ Implying low productivity and low reward for work, leading to widespread poverty in rural areas.

### Why is the Percentage of Female Workers Low, and Lower Still in Urban Areas?

This is because of the following reasons:

- (i) Female education in India is still a far cry, implying low opportunities for jobs.
- (ii) Among most families in urban areas, job work for women is still governed by family decisions rather than the individual's own decision. Implying that even the available opportunities are not actually utilised.

(iii) Higher employment among women in rural areas is owing to widespread rural poverty. Female workers in rural areas are largely engaged in low paid and less productive jobs just to add to their family income. Many of them are given wages in terms of grains during the harvesting season, the season when they find most jobs.

- Low employment among women is a sign of social and economic backwardness of a nation. Economic backwardness, because the economy fails to generate enough jobs.
- Social backwardness, because job work for the women (outside their homes) is considered as a social taboo.

### 3. RATE OF PARTICIPATION IN INDIA

It refers to participation of people in production activity, and is measured as a ratio of workforce to total population of the country, as noted earlier. Here are some statistical facts relating to rural-urban rate of participation, and the rate of participation for male and female population in the country:

- (i) Rate of participation for the urban areas is about 33.9 per cent in 2017-18.
- (ii) Rate of participation for the rural areas is about 35 per cent in 2017-18.
- (iii) In urban areas, rate of participation is about 53 per cent for men and 14.2 per cent for women.
- (iv) In rural areas, rate of participation is about 51.7 per cent for men and 17.5 per cent for women.
- (v) Overall rate of participation in the country is about 34.7 per cent.

These facts offer the following observations:

(1) **High Dependency Ratio:** Overall rate of participation in the country is not very high, implying not many people are engaged in production activity. It points to a **high dependency ratio in the country**.

(2) **High Rate of Participation, but Low Level of Productivity in Rural Areas:** Rate of participation is higher in rural areas compared with urban areas.

Implying that larger percentage of population is engaged in production activity in rural areas.

But, given the fact that contribution of rural economy to GDP is lower than that of urban economy, higher rate of participation in

rural areas only points to lower productivity, lower level of income and greater poverty in the rural India. We have already substantiated this point in the previous section.

(3) **High Rate of Participation for Women in Rural Areas:** Rate of participation for women is higher in rural areas compared with urban areas. Following observations support this fact:

- ◆ In rural areas, poverty compels women to avoid education and seek employment. Thus, employment (even without education) is a priority.
- ◆ When employment (and not education) is a priority, women tend to seek employment at an early age. This also raises rate of participation in the rural areas.
- ◆ Preference for even less productive jobs (vis-a-vis education) sets in motion, the vicious cycle of low productivity, low wage rate and high rate of participation in rural areas. It works like this:



High Rate of Participation for Women in Rural Areas

Entry into jobs without education → Less productive jobs → Low wage rate → Higher rate of participation to make a sustainable living

In urban areas, on the other hand, high priority for education implies low priority for jobs at an early age. This keeps the rate of participation relatively low.

#### Under-estimation of Women Workers in the Country

There is a significant under-estimation of women workers in the country. This is because:

- (i) Women rendering household services as housewives are not deemed as workers. Because (a) they are not paid for it, and (b) it is difficult to ascertain market value of the services rendered by the housewives.
- (ii) Women rendering services on the family farms in rural areas and in the family business in the urban areas are often not treated as workers, largely because of the convention of not considering unpaid women as workers, even when unpaid men working on family farms or in family business are considered as employed and therefore as workers.

#### 4. SELF-EMPLOYED AND HIRED WORKERS IN INDIA

Distribution of workers as ‘self-employed’ and ‘hired’ for 2017-18 is shown in Fig. 1, separately for the rural and urban areas of the country.

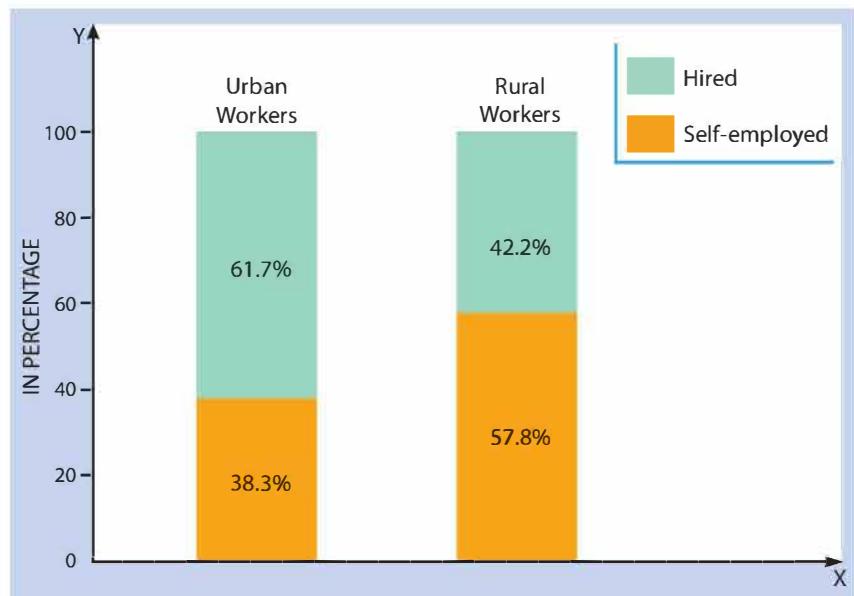


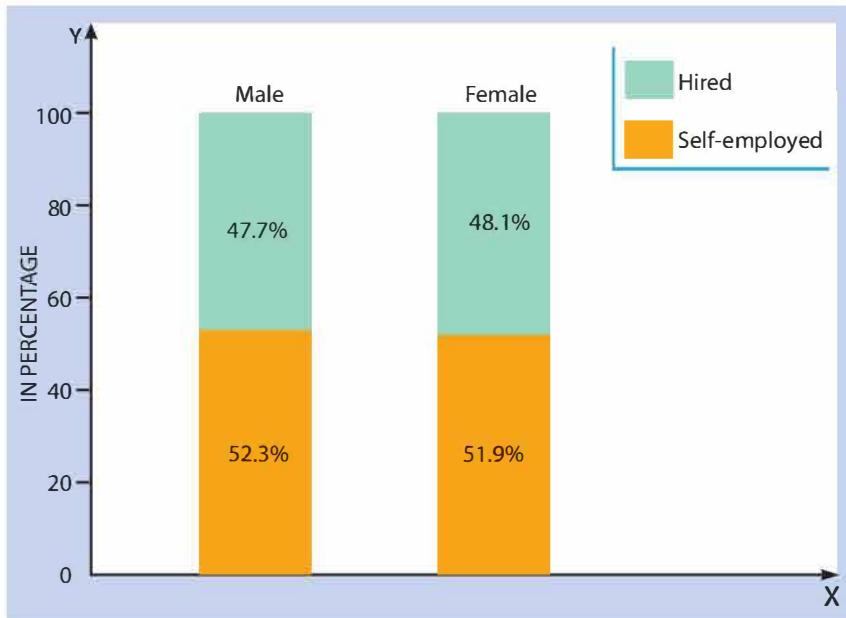
Fig. 1. Percentage Distribution of Workers (as Self-employed and Hired) according to Region

The figure shows that self-employment is higher in rural areas compared to urban areas. Two principal factors support this fact:

- (i) In urban areas, people look for skilled jobs in offices and factories while in rural areas, family farms are the most attractive means of employment.
- (ii) In rural areas, non-farm job opportunities are limited. Accordingly, people generally do not show preference to acquire skill and training for non-farm occupations. They prefer to stay on family farms and fields as self-employed.

Both these factors imply that self-employment is an easy option in rural areas.

Fig. 2 shows percentage distribution of workers as ‘self-employed’ and ‘hired’, separately among men and women.



**Fig. 2. Percentage Distribution of Workers (as Self-employed and Hired) according to Gender**

Here, we find that among men, self-employment has become slightly more important a source of livelihood than wage-employment.

Among women, percentage of wage-employment is a bit higher than that among men. The reason is this:

Owing to their low level of education, but high compulsion for jobs (to make a sustainable living for the family), women (unlike men) are ready to work even at low wage.

**Fig. 2** reveals that self-employment among women is as significant as wage-employment. This is because women in rural areas find ample opportunities of self-employment, engaging themselves in traditional jobs like spinning, weaving, dyeing and bleaching.

- In India, self-employment is a significant source of livelihood. Because:
  - Literacy rate is low, implying low acquisition of skill for wage jobs,
  - Owing to diverse social environment across different regions, mobility of workers is low, and
  - India is an underdeveloped economy, generating less jobs owing to low level of investment.

## 5. OCCUPATIONAL STRUCTURE OR DISTRIBUTION OF WORKFORCE BY INDUSTRY

We now study distribution of our workforce across primary, secondary and tertiary sectors of the economy, briefly called occupational structure of the economy.

- (i) Primary sector includes agriculture, forestry and logging, fishing, mining and quarrying.
- (ii) Secondary sector includes manufacturing, construction, electricity, gas and water supply.
- (iii) Tertiary sector includes trade, transport and storage, and services (like banking, insurance, etc.).

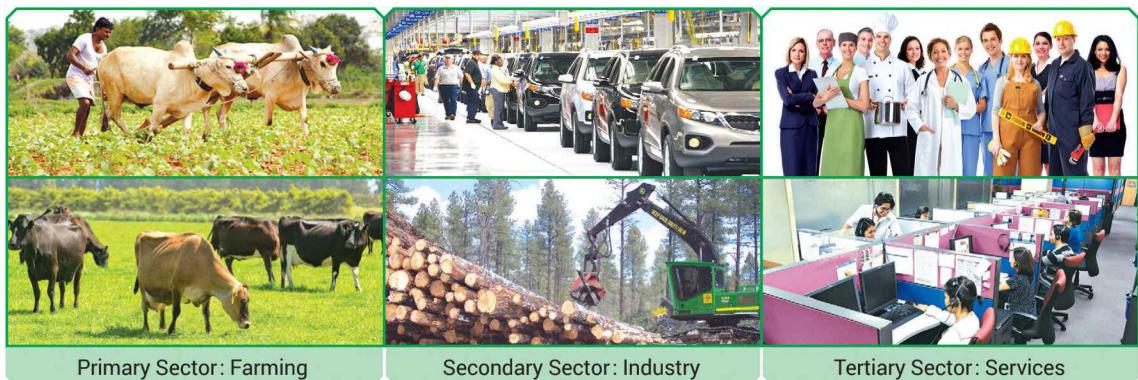


Fig. 3 shows percentage distribution of workforce across primary, secondary and tertiary sectors during the year 2017-18.

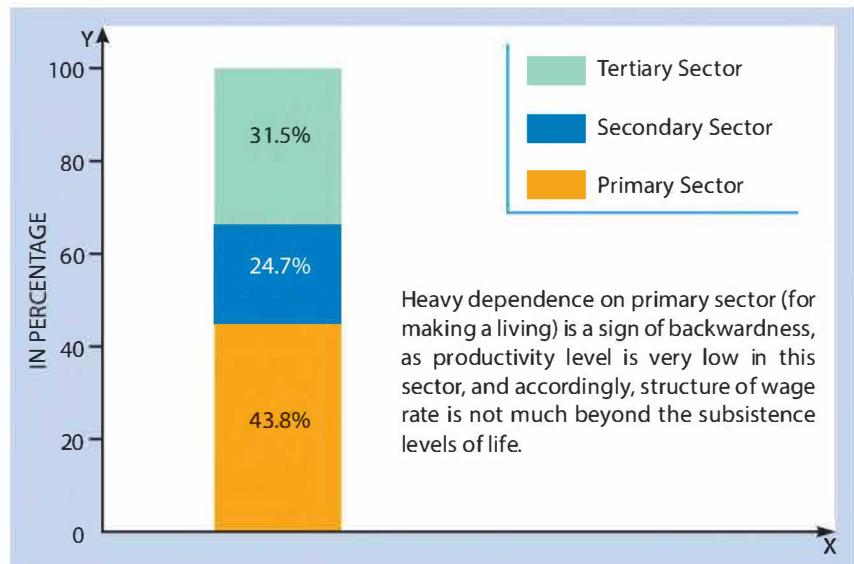


Fig. 3. Percentage Distribution of Workforce by Industry (2017-18)

**Fig. 3** offers two principal observations:

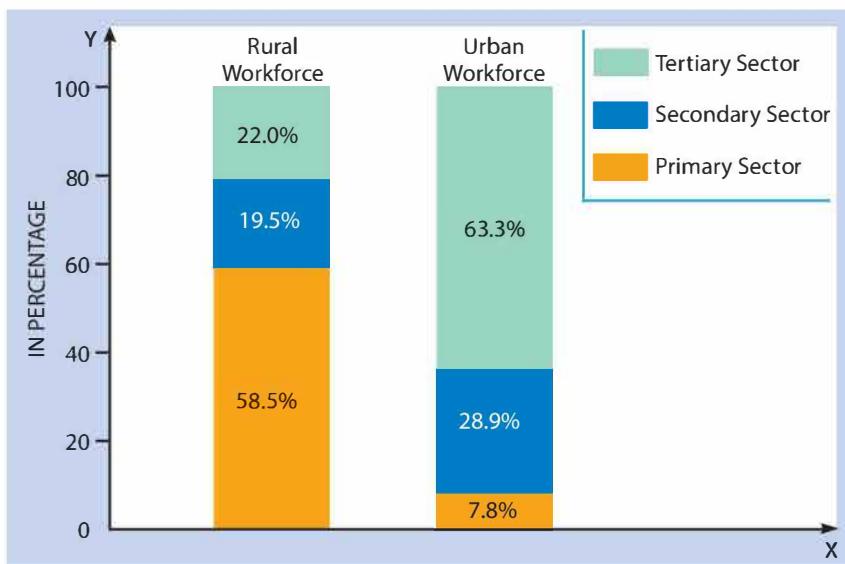
- (i) As high as 43.8 per cent of our workforce is engaged in primary sector, dominated by farming.
- (ii) Tertiary sector accounts for 31.5 per cent of employment, while the secondary sector offers employment to only 24.7 per cent of our workforce.

These observations lead to the following conclusions:

- (i) A large segment of workforce continues to depend on primary activities to make a living. This is despite the fact that the level of productivity and therefore the wage rate is significantly lower in primary sector compared to secondary and tertiary sectors. This points to the backwardness of the Indian economy.
- (ii) Greater employment in primary sector (despite its low productivity) reveals that secondary and tertiary sectors have failed to generate ample job opportunities. This is another pointer to the backwardness of the Indian economy.
- (iii) Secondary sector lagging behind the tertiary sector points to the fact that industrialisation has failed to take-off to become the leading sector of growth. We all know that developed economies are industrial economies.

### Distribution of Rural-Urban Workforce across Different Sectors

**Fig. 4** shows the distribution of rural-urban workforce across different sectors.



**Fig. 4.** Distribution of Rural and Urban Workforce across Different Sectors of the Economy (2017-18)

It offers the following observations:

- (i) While those living in urban areas are engaged largely in secondary and tertiary sectors, those in the rural areas find primary sector as their preferred source of employment.
- (ii) Tertiary sector is taking a lead over secondary sector as a source of employment in urban areas.

These observations lead to the following conclusions:

- (i) In India, trade, commerce, banking, insurance, health, education, tourism and related services are developing faster than manufacturing and allied production activities.

This may largely be explained in terms of globalisation of the economy, besides the fact that people in urban areas are becoming increasingly conscious of their quality of life, spending the bulk of their income on a variety of services (like health, education and tourism).

- (ii) There is significant lack of non-farm job opportunities in the rural areas. Which is why the rural population is engaged more in the primary sector. Lack of mobility (or limited mobility) may be another reason why people in the rural areas are engaged more in the primary sector.

### Distribution of Male-Female Workforce across Different Sectors

Fig. 5 shows male-female workforce across different sectors of employment.

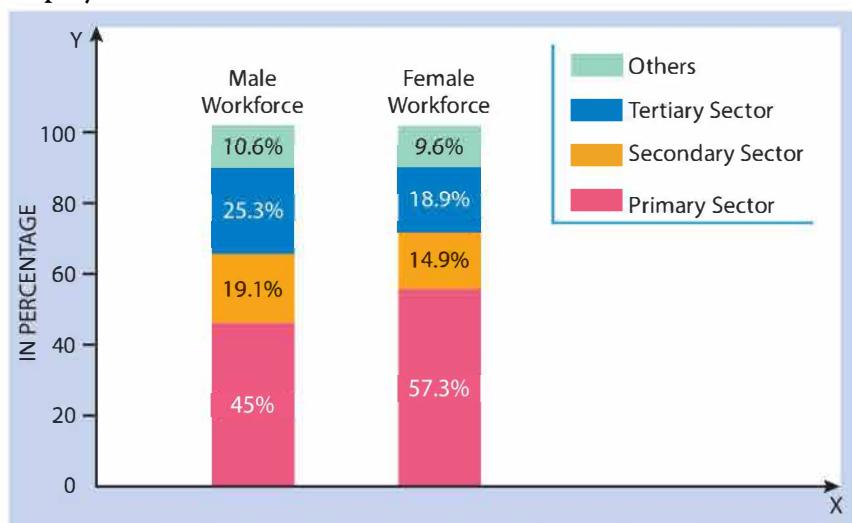


Fig. 5. Distribution of Male-Female Workforce across Different Sectors of the Economy (2009-2010)

The following facts emerge from Fig. 5:

- (i) A huge percentage of female workforce (57.3 per cent) is engaged in primary sector. This is because:
  - (a) Primary activities of production are confined largely to rural areas, and
  - (b) Mobility of women in rural areas is extremely low. They would prefer to do jobs close to their homes, even when wage rate is low.
- (ii) Percentage of men finding employment in primary sector (45 per cent) is only next to that of women. It is also fairly low. It is explained in terms of the lack of jobs outside agriculture in the rural areas.

Why should larger percentage of female in rural areas be engaged in primary sector compared with male workforce? The reason is as under:

Owing to their family as well as social constraints, female workers are unwilling to migrate for jobs outside their villages.

They prefer to work at their place of residence even for a low wage.

- Female workers in the rural areas are unwilling to migrate for outside jobs.
- They prefer to work at their place of residence even for a low wage. However, they must work to supplement their family income for a meaningful subsistence.
- This explains why a very high percentage of female workforce in rural areas is engaged in primary sector.

## Only a Modest Change in Occupational Structure

Overtime, there has been only a modest change in occupational structure of the country as indicated by Table 1.

**Table 1. Change in Occupational Structure  
(1950-51 to 2017-18)**

Sector	Percentage of Workforce	
	1950-51	2017-18
1. Primary	72.72	43.8
2. Secondary	10.02	24.7
3. Tertiary	17.26	31.5
Total	100	100

[Source: Report on Employment and Unemployment Survey (2017-18), Ministry of Labour and Employment]

[Table 1](#) shows that between the period 1950-51 to 2017-18, percentage of workforce engaged in primary sector has declined from 72.72 per cent to 43.8 per cent. The percentage of workforce engaged in secondary sector has risen from 10.02 per cent to 24.7 per cent. And, the percentage of workforce engaged in tertiary sector has risen from 17.26 per cent to 31.5 per cent. Though the shift from primary to secondary sectors is noticeable, it is certainly not significant. The Indian economy continues to be viewed as agricultural economy, rather than an industrial economy.

Historical experience of the developed countries suggests a significant shift of workforce from primary sector to secondary and tertiary sectors of employment. Greater the shift, greater is the pace of growth and development. But the Indian experience presents only a dismal picture. [The supremacy of primary sector as the principal source of employment remains unchallenged.](#)

## 6. JOBLESS GROWTH

Economic growth occurs when GDP rises. It implies increase in the level of output.

Increase in the level of output is achieved in two ways:

- (i) through greater employment, and/or
- (ii) through better technology.

In poor countries like India where there is staggering unemployment, economic growth becomes meaningful only when it is associated with greater opportunities of employment, so that poverty is combated.

Unfortunately, Indian economy is experiencing GDP more through technology than the employment of labour. It is a situation of jobless growth.

- ❑ Jobless growth is a situation when the level of output in the economy tends to rise owing to innovative technology without any perceptible rise in the level of employment.
- ❑ Jobless growth leads to chronic unemployment, even when there is a rise in GDP.

### Why are we relying more on Technology, and less on Employment?

The reason is this:

Our growth process is being increasingly hijacked by MNCs (multinational companies). These companies specialise in achieving

high growth through efficient technology rather than through greater use of manpower.

- Our growth process is being increasingly hijacked by MNCs (Multinational Companies).
- These companies specialise in achieving high growth through efficient use of technology rather than through greater use of manpower.
- The obvious result is that growth is moving faster than the opportunities of employment. By and large, it is a 'jobless growth'.

We may end up this section by stating the fact that (during the period 1951-2000) while growth rate of GDP has risen from 3.6 per cent to 8 per cent per annum, growth rate of employment has tended to slide down from 1.5 per cent to just about 1 per cent.

The growing gulf between the two rates is an alarming sign for a country where jobless labour force has tended to swell over time.

## 7. CASUALISATION AND INFORMALISATION OF WORKFORCE

### Casualisation

An interesting feature of our workforce is that it includes a large percentage of casual workers, and their number is trending up. Note the following facts in this regard:

- (i) Percentage of casually-hired workers in total workforce has risen from 23 per cent in 1972-73 to 33 per cent in 1999-2000 and further to 39.3 per cent in 2009-2010. However, it slightly declined to 30.9 per cent in 2013-14. In 2017-18, it again declined to 24.9 per cent.
- (ii) Percentage of self-employed workers has declined from 62 per cent in 1972-73 to 52 per cent in 1999-2000 and further to 44 per cent in 2009-2010. However, it again increased to 49.5 per cent in 2013-14. In 2017-18, it further increased to 52.2 per cent.
- (iii) Percentage of regularly-hired workers in total workforce continues to hover around 15 per cent during the period 1972-73 to 1999-2000. It was 16.8 per cent in 2009-2010 and 22.8 per cent in 2017-18.
- (iv) 3.7 per cent of employed persons were reported to be hired as contract workers in 2015-16.

- Casualisation of workforce refers to a situation when the percentage of casually-hired workers in the total workforce tends to rise over time.

The figures reveal that, over time, our workforce is suffering an increasing incidence of casualisation. Why should it happen? The logic is simple, and runs like this:

- (i) The bulk of self-employed workforce is found in rural areas.
- (ii) People work on their farms and fields, not because everybody is gainfully employed, not because everybody is contributing to output, but simply because many of them are not getting non-farm jobs even when they wish to migrate.
- (iii) They are employed on their farms only for the name-sake; in fact they are disguisedly unemployed.
- (iv) Taking a chance for opportunities, **these marginal workers tend to migrate to urban areas, and more often than not, they get employment only as casual workers, or as daily-wagers. This is the story of unskilled workers leading to casualisation of employment.**

Even skilled workers in the urban areas are to struggle for regular jobs. This is owing to massive unemployment across all sectors of the economy. Unemployment is so huge that the bargaining power of the workers is significantly reduced. On the other hand, bargaining power of the employers is very high. They follow the principle of 'hire and fire'.

### Informalisation

Employment may broadly be classified as:

- (1) Formal sector employment, and
- (2) Informal sector employment.

- (1) **Formal Sector:** Formal sector refers to organised sector of the economy. It includes all government departments, public enterprises and private establishments which hire 10 or more workers. Those working in the organised sector are called '**formal workers**'.
- (2) **Informal Sector:** Informal sector refers to unorganised sector of the economy. It includes all such private enterprises which hire less than 10 workers, besides farming and self-employment ventures. Those working in the unorganised sector are called '**informal workers**'.

From the viewpoint of employment status, the underlying difference between formal and informal sectors (or between organised and unorganised sectors) is that

- (i) Workers in the formal sector are entitled to social security benefits (such as provident fund, gratuity, pension, etc.) while workers in the informal sector are not.

- (ii) While economic interest of the workers in formal sector is protected through various **labour laws**, there are hardly any protective laws for the informal sector (other than Minimum Wages Act).
- (iii) To protect their economic interest, workers in the formal sector can form **trade unions**; no such unions exist in the informal sector.
- (iv) Informal sector workers are highly vulnerable to uncertainties of the market. They are hired when the market sentiments are good and are fired when there is economic slowdown.

<b>Formal Workers</b>	<b>Informal Workers</b>
<ul style="list-style-type: none"> <li>(i) Work in organised sector of the economy.</li> <li>(ii) Are entitled to social security benefits (like provident fund, gratuity, pension, etc.)</li> <li>(iii) Can form trade unions.</li> <li>(iv) Are protected by various labour laws against uncertainties of the market.</li> </ul>	<ul style="list-style-type: none"> <li>(i) Work in unorganised sector of the economy.</li> <li>(ii) Are not entitled to social security benefits.</li> <li>(iii) Cannot form trade unions.</li> <li>(iv) Remain unprotected by labour laws, and are therefore, highly vulnerable to uncertainties of the market.</li> </ul>

- In essence, formal workers are like regular workers, while informal workers are like daily-wagers.
- Uncertainty of employment is always a lingering threat to the informal workers.
- An informal worker is more likely to be 'casual' as well.
- Informalisation leads to casualisation.

**Informalisation of workforce** is defined as a situation where percentage of workforce in the formal sector tends to decline and that in the informal sector tends to rise.

In accordance with socialistic pattern of society (as a central goal of Development Planning launched in 1951), 'formal sector employment' should have risen and 'informal sector employment' should have declined over time. Alas! just the opposite has happened in the Indian economy. And it has happened not accidentally, but as a consequence of the strategy of development since 1991.

A series of economic reforms were launched in 1991, with '**liberalisation, privatisation and globalisation**' as their key elements. Consequently, there is a significant transformation from 'a controlled economy' to 'market economy'.

And, in this process of transformation there has been a significant drift towards informalisation of workers. **Market economy and informalisation of workers, perhaps, are strongly correlated to each other.** Informalisation is driven by the forces of supply and demand in the labour market.

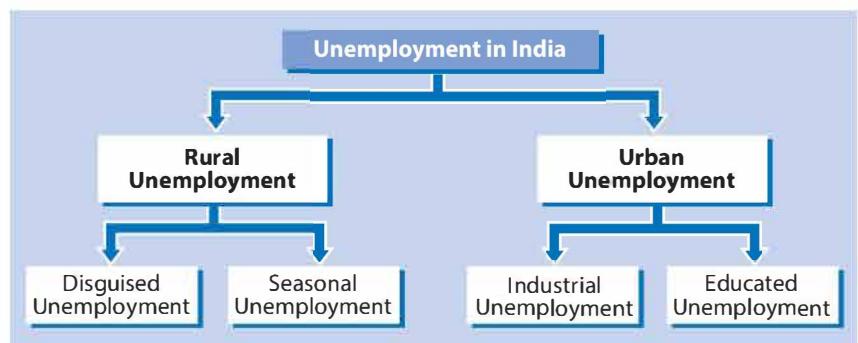
Presently, formal sector employment comes to merely 10 per cent of the total; 90 per cent of the workforce continues to be informal.

This points to growing vulnerability of the workforce to uncertainties of the market economy.

- A staggering number of 40 crore workers working in informal or unorganised sector of the economy points to growing vulnerability of the workforce to uncertainties of the market.
- Little wonder that informalisation leads to poverty, and therefore, to fragmentation of social harmony. Closure of textile mills in Ahmedabad (offering employment to nearly 1,50,000 workers) and the consequent riots are a testimony to this assertion. According to one study, when mill workers were rendered unemployed, their families took to casual jobs and many of them even took to suicides as the ultimate solution to their hardships.

## 8. RURAL AND URBAN UNEMPLOYMENT

Studying rural and urban unemployment, we may focus on the following classification of unemployment in India:



In what follows, we offer a brief description of the various types of rural and urban unemployment.

### Rural Unemployment

Rural unemployment is dominated by disguised and seasonal unemployment. The details are as under:

- (1) **Disguised Unemployment:** Disguised unemployment occurs when the number of workers engaged in a job is much more than actually required to accomplish it. If some of them are withdrawn from that job, total production will not fall. For example,

If just two persons are required to cultivate a farm measuring one hectare but actually five persons are engaged there, then three persons are disguisedly unemployed. Disguised unemployment is rampant in Indian agriculture. The principal causes are as under:

- (i) On account of joint family system, farming families continue to work on family land, no matter the actual number of workers far exceeds the required number.
- (ii) Per person holding size continues to shrink with the expansion of the family size. Implying greater possibility of disguised unemployment.
- (iii) Lack of job opportunities outside agriculture compels the people to work on family farms. It further increases the possibility of disguised unemployment.

**(2) Seasonal Unemployment:** Another kind of rural unemployment is seasonal unemployment. It occurs simply because agriculture is a seasonal occupation.

During off-season, often the farm workers are out of job. They have no work to do.

The volume of seasonal unemployment depends upon the conditions and methods of cultivation in different states.

It is estimated that a farmer who grows one crop in a year usually remains unemployed for 5 to 7 months.

In rural areas, besides agriculture, there are many other seasonal activities like sugarcane crushing, brick kilns, etc. Workers engaged in these activities remain occupied for a few months in a year. Rest of the period, they remain unemployed.



Disguised Unemployment: Apparently employed but actually not

#### Disguised Unemployment is not prevalent in Agriculture alone

- Disguised unemployment is a characteristic feature of the Indian agriculture.
- It is almost rampant there owing to a heavy pressure of population, joint family system and the lack of vocational avenues outside agriculture.
- But it is a phenomenon not confined to agriculture alone.
- Have a deeper look into the functioning of the public sector enterprises.
- It will not be surprising to find lots of persons idling all the time.
- It is a pointer to the fact that more people are employed than actually needed.
- Surely, it is a sign of disguised unemployment.



Employment Exchange: A Centre of Information relating to Job Seekers

## Urban Unemployment

In urban areas, unemployed people are often registered with employment exchanges. Therefore, urban unemployment is more like open unemployment, unlike disguised unemployment in rural areas. Between 1961 and 2016, the number of unemployed

registered in employment exchanges has increased more than thirteen-fold. In 1961, there were 32 lakh registered unemployed, in 2016, their number rose to 435 lakh. Unemployment in urban sector is placed in two broad categories:

- (1) **Industrial Unemployment:** It includes those illiterate persons who are willing to work in industries, mining, transport, trade and construction activities, etc.

The principal causes of industrial unemployment are as under:

- (i) **Rapid rise in population overtime.** Rise in population leads to a rise in the supply of labour.
  - (ii) **Concentration of industry in the urban areas.** Owing to the concentration of industry in the urban areas, there is a growing tendency among rural people to migrate to urban areas in search of jobs. But, the industrial expansion has not been so significant as to offer gainful employment to all the migrants. Consequently, industrial unemployment occurs as a spillover of rural unemployment.
  - (iii) Industries in India are relying more on labour-saving western technology. This limits the labour absorption capacity of the industrial sector, despite its expansion over time. This further compounds the problem of industrial unemployment.
- (2) **Educated Unemployment:** In India the problem of unemployment among the educated people is also quite grave. It is a problem spread across all parts of the country, and poses a serious threat to social peace and harmony. Principal factors accounting for educated unemployment are as these:
- (i) On account of expansion of educational institutions, *viz.*, universities, colleges, schools, the number of educated persons has substantially increased.
  - (ii) Education system in India is not job-oriented; it is largely degree-oriented. Consequently, degree-holders often fail to find jobs.
  - (iii) Increase in employment opportunities has significantly lagged behind the increase in the size of educated labour force. The number of educated unemployed registered with employment exchanges has tended to swell.

## Youth Unemployment and Women Unemployment

*It is a common characteristic of both the rural and the urban areas.*

- **Youth Unemployment:** Youth unemployment implies unemployment among the people in the age group of 15-29 years. This type of unemployment exists both in rural and urban areas, and is more among the educated (than uneducated persons) looking for white-collar job. Unemployment among the youth is a grave problem for the country. Rate of unemployment is the highest in this class of people. It implies that the contribution of the working capacity of the youth to production activities of the country is extremely low. Unemployment among the youth is the root cause of their frustration, which often drives them towards anti-social activities.
- **Women Unemployment:** Hardly 22 per cent of women are employed in the country. Roughly 78 per cent of women are busy with domestic chores. Nevertheless the number of women job-seekers is increasing every year. Several social and economic factors account for unemployment among the women. In India, social conservatism prohibits women from going out for work.

## Common Types of Unemployment across Rural and Urban Areas

In India, following types of unemployment are found both in urban and rural areas:

- (1) **Open Unemployment:** Open unemployment occurs when a worker is willing to work, and has the necessary ability to work, yet he does not get work.

He remains unemployed for full time. He is totally dependent on the other members of the family.

This type of unemployment is usually found among agricultural labourers, educated persons and those who come from villages to urban areas in search of job but fail to get any work.

- (2) **Structural Unemployment:** Structural unemployment occurs due to structural changes in the economy.

Structural changes are broadly of two types:

- (i) Changes in technology as a result of which old technocrats are no longer needed; they are rendered unemployed.
- (ii) Change in the pattern of demand because of which certain industries are closed down and the workers are thrown out.

A less developed country like India encounters significant structural changes in the process of growth. Hence, a high degree of structural unemployment exists both in the rural and the urban areas.

- (3) **Underemployment:** Underemployment is a situation in which a worker does not get a full time job. He remains unemployed for some months in a year or some hours everyday.

According to [National Sample Survey](#), a person is categorised as '[extremely underemployed](#)' if he works only upto 28 hours a week. If a person works between 29 to 42 hours per week, he is placed in the category of '[limited underemployment](#)'.

According to [International Conference of Labour Statistics](#), the condition of underemployment is found:

- (i) when persons engaged in part-time work are prepared to do more work than they are actually doing, and
- (ii) when income of the persons increases after shifting to other occupation from their existing occupation.

Underemployment is of two kinds:

- (i) **Visible Underemployment:** In this case, people work lesser than the standard hours of work in a day. For example, in India a person normally works for 8 hours. If he finds job only for 4 hours a day, he will be deemed as 'visible underemployed'.
  - (ii) **Invisible Underemployment:** In this case, people work full time but their income is not proportionate to their abilities. Thus, if an MA degree-holder has to work as a peon, he will be called an invisible underemployed.
- (4) **Frictional Unemployment:** It occurs due to imperfections in the mobility of labour across different occupations. One wishes to move from one job to the other, but in the process of change may remain (or may even prefer to remain) unemployed for sometime. [Example: Working ladies getting married may decide to remain out of job for a couple of weeks or months.] This is called frictional unemployment.
- (5) **Cyclical Unemployment:** It occurs owing to cyclical fluctuations in the economy. Phases of boom, recession, depression and recovery are typical characteristics of a market economy.
- Boom relates to high level of economic activity and accordingly, a high degree of employment.
- Recession is a phase when there is a liquidity crunch in the economy (funds/loans are not easily available), because of which there is a slowdown in production and a cut in employment opportunities.
- Depression is a phase when aggregate demand declines, triggering a cut in output and employment.
- Recovery is a phase when economic activity starts picking up: output starts responding to increase in aggregate demand (induced

through several fiscal and monetary measures). Employment opportunities begin to rise.

### An Important Observation

- Structural unemployment and frictional unemployment are sometimes treated as the two variants of secular unemployment—the unemployment that tends to persist in the economy even in the state of full employment.
- This is in contrast to the cyclical unemployment—the unemployment that appears and disappears in consonance with the cyclical phases of economic activity.

## Causes of Unemployment in India

Following are the main causes of ever-increasing unemployment in India:

- (1) **Slow Economic Growth:** Indian economy is underdeveloped and its rate of growth is very slow. Slow growth rate fails to generate enough employment opportunities for the rising labour force. Size of labour force is much more than the available employment opportunities.
- (2) **Rapid Growth of Population:** Constantly rising population has been a grave problem in India. It is one of the principal factors contributing to unemployment. Despite the completion of Twelve Five Year Plans, the size of unemployment has continued to scale up.
- (3) **Agriculture—A Seasonal Occupation:** Agriculture is underdeveloped in India and so offers seasonal employment. No doubt it is the primary occupation of our country and a large size of the population depends upon it, but its seasonal character does not provide stable jobs to the farmers throughout the year. Farmers often remain idle for three to four months in a year. The size of disguised unemployed is estimated to be nearly 15 per cent of the total working population in agriculture.
- (4) **Lack of Irrigation Facilities:** Despite decades of planning, irrigation facilities continue to be scant, covering only about 44 per cent of agriculture area. For want of irrigation, mono-cropping (only one crop a year) becomes a compulsion. In the absence of multi-cropping, opportunities of employment remain limited.
- (5) **Joint Family System:** It encourages disguised unemployment. In joint families there is a high tendency to survive on joint income without work. Joint family system is more prevalent in rural areas; hence a high degree of disguised unemployment in these areas.

- (6) **Decay of Cottage and Small Industries:** Decay of cottage and small industries during the British regime has given a big blow to the potential of self-employment in India. Emergence of large industry in place of the small industry after independence has failed to yield employment opportunities to the desired extent.
- (7) **Low Savings and Investment:** There is scarcity of capital and even the scarce capital has not been optimally used to eradicate unemployment. Bulk of the capital has been invested in large-scale industries where there is high capital per unit of labour. Employment of labour per unit of capital remains significantly low.
- (8) **Limited Mobility of Labour:** Mobility of labour in India is very low. Owing to a variety of family as well as social constraints, people are reluctant (unwilling) to move to far-off areas even when jobs are available there. Factors like diversity of language, religion and customs in different states are a major hindrance to the mobility of labour. Lesser the mobility, greater the unemployment.

Briefly, whereas low rate of economic growth is generating only limited employment opportunities, high rate of population growth is causing an exponential rise in the demand for jobs. Consequently, the gulf between the supply of labour and the demand for labour is tending to be very large. In fact, unemployment is assuming monstrous proportions and is an emerging threat to social harmony in the country.

### **Economic and Social Consequences of Unemployment**

High unemployment leads to serious economic and social consequences as described below:

#### **(1) Economic Consequences**

Following are some important economic consequences of unemployment:

- (i) **Non-utilisation of Manpower:** To the extent people are unemployed, manpower resources of the country are not utilised. It amounts to a social wastage.
- (ii) **Loss of Output:** There is a loss of output to the extent manpower resources are not utilised. Unemployed persons make no contribution to output even they have the potential to do so.
- (iii) **Low Capital Formation:** Living only as consumers (and contributing nothing to production), unemployed people only add to consumption. Neither do they earn, nor do they save for investment. Accordingly, rate of capital formation remains low.

- (iv) **Low Productivity:** Owing to disguised unemployment (occurring largely in agricultural sector) there is a low level of productivity (output per worker or output per hectare). Low productivity implies low rate of growth.

Briefly, economic implications of unemployment not only point to low level of present output (because manpower is not fully utilised) but also to the low level of future output because of low productivity.

## (2) Social Consequences

Important social consequences of unemployment are as under:

- (i) **Low Quality of Life:** Unemployment lowers the quality of life, implying a state of perpetual suffering.
- (ii) **Greater Inequality:** Higher the degree of unemployment, greater the extent of inequality in the distribution of income and wealth. In such situations, growth does not occur with social justice.
- (iii) **Social Unrest:** Terrorism may be motivated by several other factors, but the contribution of self-desperation (on account of unemployment) is by no means less significant.
- (iv) **Class Struggle:** Unemployment divides the society into haves and have-nots. Accordingly, there is class conflict that compounds the problem of social unrest.

Briefly, unemployment is a social menace (evil) as it denies social justice and enhances social unrest by increasing the disparity between 'haves' and 'have-nots'.

## Suggestions to Solve the Problem of Unemployment in India

In India during 1999-2000 and 2004-05, labour force has increased at the rate of 2.84 per cent per annum whereas employment has increased at the rate of 2.62 per cent. Employment growth rate has further decelerated to 1.02 per cent in 2009-2010. Consequently, the number of people remaining unemployed has tended to rise over time. In 2018-19, 6.9 per cent of the available labour force is unemployed (Projected Figures).

How can this problem be solved? Following are some important suggestions:

- (1) **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.

**You must understand**

- That creation of employment opportunities depends upon the creation of production capacity.
- Greater production capacity requires greater capital formation. Accordingly, capital formation (or investment) must be significantly scaled up to solve the chronic problem of unemployment in India.

Foreign trade should be encouraged and production of industries, minerals and plantation should be accelerated. Greater the production, greater is the demand for labour.

- (2) **Increase in Productivity:** Demand for labour is directly related to the productivity of labour. Higher productivity generates higher profits and therefore, greater demand for labour. Accordingly, productivity (implying efficiency) of labour must improve.
- (3) **High Rate of Capital Formation:** Rate of capital formation in the country should be increased. Also, investment must be directed to such areas of production where employment potential is high. Notably, capital-output ratio should be kept low. These days it is 4.3. It means, to produce goods worth ₹ 1, capital worth ₹ 4.3 is invested. If capital-output ratio is high, then increase in the rate of capital formation will have very little effect on employment. It is, therefore, essential that along with increase in the rate of capital formation, there should be decrease in the capital-output ratio.
- (4) **Help to Self-employed Persons:** Around 52.2 per cent of people in India are self-employed. Most of them are engaged in agriculture. Besides, they are also engaged in trade, cottage and small industries, building construction, restaurants, transport, etc. Government should provide facilities like irrigation, better seeds, manure, implements, credit, etc., to small and marginal farmers. In addition, self-employed persons in urban areas should be given facilities of credit, marketing, raw material, technical training and the like.
- (5) **Educational Reforms:** There is urgent need for educational reforms in the country. Only such students be admitted to colleges and universities who intend to pursue their studies with some specific objectives. Emphasis should be placed on vocational education. Educated persons must inculcate the spirit of serving in villages in the capacity of teachers, doctors, etc. Qualified engineers be given financial assistance to set up their own business establishments. The number of institutions providing employment information and guidance should be expanded and their activities be coordinated with employment agencies.
- (6) **Technique of Production:** Technique of production should suit the needs and means of the country. It is essential that labour-intensive technology is encouraged in place of the capital-intensive technology. Quick yielding industries be given preference.

- (7) **Cooperative Industries:** Cooperative industries should be encouraged as far as possible. The Government of Kerala setting-up a textile mill (offering employment to 600 persons) on cooperative basis is a laudable (praiseworthy) step. In this venture, every unemployed person contributed ₹ 500 while the rest of the capital was provided by the government. Such initiatives must be encouraged.
- (8) **Importance to Employment Programmes in Plans:** Such programmes should be given greater importance in plans which are likely to raise the level of employment. The programmes that can best serve this end are: irrigation projects, road construction, flood-control, forestry, rural electrification, soil conservation and development of small industries. Crash Employment Programmes should not be encouraged, as these programmes tend to swallow resources without a corresponding rise in employment on permanent basis.

## Government Policy and Programmes

- (i) Problem of unemployment is essentially the problem of poverty.
- (ii) Policy and programmes initiated by the government to eradicate poverty are largely focusing on providing employment to poorer sections of the society.
- (iii) We have already discussed those programmes and policies in chapter 7 of this text. Students are advised to refer to that chapter for a comprehensive understanding of the various steps taken by the government to generate employment opportunities.
- (iv) For the sake of emphasis we would like to repeat the latest step taken by the government. It is National Rural Employment Guarantee Act. It provides guaranteed wage employment of 100 days to all those in the rural areas who are below poverty line, and are able to work and willing to work at the wage rate offered by the government.
- (v) Chapter 7 also offers a critical review of the policies and programmes of the government.
- (vi) However, we would like to add that New Economic Policy (NEP) pursued in 1991 has considerably curtailed direct role of the government in generating employment opportunities.
- (vii) NEP involves a massive drive towards privatisation. Obviously, when the size and scope of public sector tends to contract, role of government as a generator of employment opportunities is bound to shrink.

## Skill India, Make in India, Start-ups

- (i) These are some recently launched campaigns by the Government of India to generate opportunities of employment.
- (ii) These campaigns are yet to actualise into the models of growth and development.
- (iii) However, one can hope that once these schemes become operational, the Indian economy would generate abundant of opportunities of employment, particularly those through 'self-employment'.



## Power Points & Revision Window

- **Unemployment:** It is a situation when people are willing to work at the existing wage rate, and are able to work, but are not getting work.
- **Worker:** A worker is an individual who is in some employment to earn a living.
- **Self-employed and Hired Workers:**
  - Self-employed workers are those who are engaged in their own business/profession.
  - Hired workers are those who work for a wage/salary.
- **Self-employed and Hired Workers in India:**
  - **Urban Areas:** Self-employed 38.3 per cent, hired 61.7 per cent.
  - **Rural Areas:** Self-employed 57.8 per cent, hired 42.2 per cent.
- **Casual and Regular Workers:**
  - Casual workers are like daily-wagers; not hired on regular basis.
  - Regular workers are hired on regular basis; are on permanent rolls of the employers.
- **Labour Supply:** It refers to amount of labour (hours of work) that the people are willing to supply/offer corresponding to a given wage rate. Labour supply changes in response to change in wage rate.
- **Labour Force:** It refers to the number of people who are able to work and willing to work at the existing wage rate.
- **Workforce:** It refers to number of people actually in employment.
- **Size of Workforce in India:** Approx. 40 crore persons; 70 per cent male; 30 per cent female.
- **Participation Rate:**  $\frac{\text{Total Workforce}}{\text{Total Population}} \times 100$

- **Rate of Participation in India:** Approx. 34.7 per cent, rural 35 per cent, urban 33.9 per cent.
- **Occupational Structure:** Primary sector 43.8 per cent, secondary sector 24.7 per cent, tertiary sector 31.5 per cent.
  - High percentage of employment in primary sector points to economic backwardness.
  - Occupational structure in India shows only a modest change over time.
- **Jobless Growth:** It refers to a situation when GDP grows faster than the opportunities of employment, resulting in unemployment.
- **Casualisation and Informalisation of Employment:**
  - Casualisation refers to a situation when the percentage of casually-hired workers in the total workforce tends to rise over time.
  - Informalisation refers to a situation when people tend to find employment more in unorganised (or informal) sector of the economy, and less in organised (or formal) sector of the economy.
- **Important Types of Rural Unemployment in India:** (i) Disguised unemployment, (ii) Seasonal unemployment.
  - Disguised unemployment is a situation when more people are engaged in a production activity than actually required.
  - Seasonal unemployment occurs because of seasonal nature of crop production.
- **Important Types of Urban Unemployment in India:** (i) Industrial unemployment, (ii) Educated unemployment.
- **Common Types of Unemployment:** (i) Open unemployment, (ii) Structural unemployment (that occurs owing to structural changes in the economy), (iii) Underemployment, (iv) Frictional unemployment (occurring due to constraints of mobility of labour), (v) Cyclical unemployment (occurring due to business fluctuations).
- **Causes of Unemployment in India:** (i) Slow economic growth, (ii) Rapid growth of population, (iii) Agriculture—a seasonal occupation, (iv) Lack of irrigation facilities, (v) Joint family system, (vi) Decay of cottage and small industries, (vii) Low savings and investment, (viii) Limited mobility of labour.
- **Economic and Social Consequences of Unemployment:**
  - **Economic Consequences:** (i) Non-utilisation of manpower, (ii) Loss of output, (iii) Low capital formation, (iv) Low productivity.
  - **Social Consequences:** (i) Low quality of life, (ii) Greater inequality, (iii) Social unrest, (iii) Class struggle.
- **Suggestions to Solve the Problem of Unemployment in India:** (i) Increase in production, (ii) Increase in productivity, (iii) High rate of capital formation, (iv) Help to self-employed persons, (v) Educational reforms, (vi) Technique of production, (vii) Cooperative industries, (viii) Importance to employment programmes in plans.
- **Government Policy and Programmes:** Government seeks to solve the problem of unemployment through its poverty eradication programmes, generating employment opportunities for poorer sections of the society. National Rural Employment Guarantee Act is a significant recent attempt of the government, offering guaranteed employment to those in the rural areas who are below poverty line.



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

## Choose the correct option:

11. The percentage of female workforce is lower in urban areas because:
  - (a) female education in India is still a far cry
  - (b) females in urban areas does not prefer to take jobs
  - (c) job work for women is governed by family decisions
  - (d) both (a) and (c)
12. High rate of participation of women in rural areas compared with urban areas happens because:
  - (a) poverty compels women to avoid education and seek employment
  - (b) need to support the family, owing to low family income in rural areas
  - (c) high productivity requirements in the available jobs in rural areas
  - (d) both (a) and (b)
13. Increase in the level of output of the economy is achieved through:
  - (a) greater employment opportunities in the economy
  - (b) employing better technology
  - (c) both (a) and (b)
  - (d) none of these

### Answers

1. (b)      2. (c)      3. (d)      4. (a)      5. (c)      6. (a)      7. (d)      8. (b)      9. (c)      10. (a)  
 11. (d)     12. (d)     13. (c)

## B. Fill in the Blanks

### Choose appropriate word and fill in the blank:

1. Supply of labour corresponding to different wage rates is called .  
 (labour supply/labour force)
2. workers are on the permanent pay-roll of their employers.  
 (Casual/Regular)
3. refers to the number of workers who are actually working or willing to work.  
 (Workforce/Labour force)
4. The bulk of our workforce is .  
 (rural-based/urban-based)
5. Rate of participation of people is higher in areas.  
 (urban/rural)
6. There is between workforce and labour force. (no difference/difference)
7. of workforce refers to a situation where people tend to find employment more in unorganised sector of the economy.  
 (Casualisation/Informalisation)
8. Marginal productivity of the workers is zero in case of .  
 (underemployment/disguised unemployment)
9. sector is the main source of employment for majority of workers in India.  
 (Primary/Tertiary)

10. unemployment occurs due to imperfections in the mobility of factors across different occupations. (Cyclical/Frictional)

### Answers

- |                  |                    |                           |                |            |
|------------------|--------------------|---------------------------|----------------|------------|
| 1. labour supply | 2. Regular         | 3. Labour force           | 4. rural-based | 5. rural   |
| 6. difference    | 7. Informalisation | 8. disguised unemployment |                | 9. Primary |
| 10. Frictional   |                    |                           |                |            |

### C. True or False

**State whether the following statements are True or False:**

- |   |              |
|---|--------------|
| 1. Hired workers are those who work for others and are not self-employed.   | (True/False) |
| 2. Workforce refers to that part of the labour force which is actually employed.  | (True/False) |
| 3. Number of Unemployed Persons = Workforce – Labour force.   | (True/False) |
| 4. The percentage of female workforce is lower in rural areas.  | (True/False) |
| 5. Low level of education along with poverty is the principal reason why women look for sustainable jobs at early age in rural areas. | (True/False) |
| 6. Secondary sector is taking a lead over tertiary sector as a source of employment in urban areas.                                   | (True/False) |
| 7. High priority for education implies low priority for jobs at an early age.   | (True/False) |
| 8. Formal sector workers are highly vulnerable to uncertainties of the market.  | (True/False) |
| 9. Education system in India is not job-oriented.   | (True/False) |
| 10. According to National Sample Survey, a person is categorised as 'extremely underemployed' if he works only upto 28 hours a week.  | (True/False) |

### Answers

1. True    2. True    3. False    4. False    5. True    6. False    7. True    8. False    9. True    10. True

### D. Matching/Chronological

**I. From the set of statements given in Column I and Column II, choose the correct pair of statements:**

Column I	Column II
(a) Regular workers	(i) Daily wagers
(b) Low capital formation	(ii) Cause of unemployment in India
(c) Formal workers	(iii) Can form trade unions
(d) Structural unemployment	(iv) Only found in urban areas

### Answer

- (c) Formal workers — (iii) Can form trade unions

**II. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:**

Column I	Column II
(a) Hired worker	(i) Social consequence of unemployment
(b) Participation rate	(ii) Leads to chronic unemployment
(c) Class struggle	(iii) Teacher working in a school
(d) Jobless growth	(iv) $\frac{\text{Total Workforce}}{\text{Total Population}} \times 100$

**Answers**

(a)—(iii), (b)—(iv), (c)—(i), (d)—(ii)

**E. 'Very Short Answer' Objective Type Questions**

**1. What is production activity?**

Ans. Production activity refers to the process of producing goods and services.

**2. Define disguised unemployment.**

Ans. Disguised unemployment is a situation wherein the number of workers engaged in a job is much more than actually required to accomplish it.

**3. What is meant by underemployment?**

Ans. Underemployment is a situation in which a worker does not get a full time job.

**4. How is rural unemployment classified in India?**

Ans. Rural unemployment in India is classified as:

(i) Disguised, and

(ii) Seasonal.

**5. What do you mean by structural unemployment?**

Ans. Structural unemployment is that unemployment which occurs due to structural changes in the economy.

**6. What do you mean by seasonal unemployment?**

Ans. Seasonal unemployment is a periodic unemployment created by seasonal variations in a particular sector, particularly agriculture.

**7. Define occupational structure.**

Ans. Distribution of workforce across primary, secondary and tertiary sectors is called occupational distribution.

**8. What is casualisation of workforce?**

Ans. Casualisation of workforce refers to a situation when the percentage of casually-hired workers in the total workforce tends to rise over time.

**9. What is informalisation of workforce?**

Ans. Informalisation of workforce refers to a situation where percentage of workforce in the formal sector tends to decline and that in the informal sector tends to rise.

**10. What is jobless growth?**

Ans. Jobless growth is a situation when the level of output in the economy tends to rise owing to innovative technology without any meaningful rise in the level of employment. So that unemployment stays as a serious problem, even when there is a rise in GDP.

## **2. Reason-based Questions (Comprehension of the Subject-matter)**

---

**Read the following statements carefully. Write True or False with a reason.**

**1. Urban unemployment is a spillover of rural unemployment.**

Ans. True. **Reason:** Owing to the lack of opportunities of employment, people in the rural areas are compelled to migrate to the urban areas in search of livelihood. This compounds the problem of urban unemployment.

**2. Poverty leads to low wages.**

Ans. True. **Reason:** Poverty (particularly in rural areas) compels the people (particularly the female workers) to accept 'low-wage jobs'. The compulsion arises on account of these facts: (i) the female workers (owing to their illiteracy and social constraints) are averse to migrate to the urban areas for better jobs, and (ii) poverty is a compelling force for the woman in rural areas to supplement their family income even when they are to accept low-wage jobs.

**3. Disguised unemployment lowers efficiency/productivity.**

Ans. True. This is absolutely true that disguised unemployment lowers efficiency/productivity. As a matter of fact, disguised unemployment is defined as a situation when marginal productivity of labour is zero or negative.

**4. Unemployment is a loss of potential output.**

Ans. True. Because, unemployment implies inability to use the existing manpower. GDP level would definitely be much higher if all those who are able to work and willing to work are actually engaged in work.

**5. Primary sector is an important source of labour supply to the secondary and tertiary sectors of the economy.**

Ans. It is true that the primary sector is an important source of labour supply to the secondary and tertiary sectors of the economy. **Reason:** When productivity rises in agriculture (owing to the use of innovative technology), less labour is needed to produce a given level of output. Thus, labour is displaced in the primary sector. It is this labour which migrates to the urban areas, finding jobs in the secondary and tertiary sectors.

**6. Unemployment and poverty are reflections of each other.**

Ans. True. Because, unemployed people do not earn wages or salaries. Thus, poverty is the obvious consequence of unemployment.

**7. Economic activity means production activity.**

Ans. False. There is a difference between production activity and economic activity. It is like this: economic activity relates to the use of scarce resources. It includes: (i) production activity, (ii) consumption activity, (iii) activity of investment, and (iv) activity of exchange.

Thus, production activity is only an element of economic activity. In other words, while all production activities are economic activities, all economic activities are not production activities.

### **3. HOTS & Applications**

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#### **1. Women in rural areas are ready to work even at low wages. Why?**

**Ans.** This is because of two reasons:

- (i) There is widespread poverty in rural areas. Poverty compels the women in rural areas to accept low-wage occupations.
- (ii) Women in rural areas are averse to migration. They are reluctant/unwilling to migrate to urban areas for jobs. Owing to the lack of education, they are not even capable of finding jobs outside rural areas. Accordingly, they prefer to be engaged in farm and non-farm activities, but in the rural areas only.

#### **2. Unemployment in India is stubborn (almost permanent in nature) while in developed countries (like USA) it is cyclical. Why?**

**Ans.** Unemployment in India is stubborn, because it is related to the lack of production capacity in the economy. Production capacity is lacking because of the lack of capital. The problem of lack of capital is a long period problem, and therefore, stubborn in nature.

In developed countries like USA, unemployment is largely related to the lack of demand. Lack of demand is not stubborn, but cyclical in nature. Which is why the problem of unemployment in these countries is cyclical in nature.

#### **3. A modest transformation in occupational structure of India only points to its modest achievement in the area of growth and development. Do you agree?**

**Ans.** Between the years 1950-51 to 2017-18, percentage of workforce engaged in primary sector has declined from 72.7 per cent to 43.8 per cent. This is notable, but not a significant shift. Indeed, from the view point of growth and development, this can be termed as a modest shift. In no way, does it demolish the supremacy of agricultural sector in the Indian economy. This also points to the fact that the secondary and tertiary sectors have failed to generate ample opportunities of employment, because of their deficient growth and development. Indian economy is yet to take-off as an industrial economy, absorbing the bulk of labour force.

#### **4. There are several examples in the rural areas of India where there are more workers in the family but gross income of the family is low. How do you explain this paradox?**

**Ans.** Such situations are often found among poor families in the rural areas. Most working members of these families are unskilled casual workers, working on the fields and farms of others. Owing to the lack of skill (along with the fact that there are limited job opportunities), these workers are often paid low wages. It is low wage (or subsistence wage) that compels most members of the family (including women and children) to engage themselves in some kind of work so that they can cope with their subsistence needs. Working at the subsistence wage rate leads to low gross income of the family.

### **4. Analysis & Evaluation**

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#### **1. How do you evaluate 'Start-ups' in India as a solution to the problem of unemployment? Write two observations.**

**Ans.** (i) 'Start-ups' are expected to generate opportunities of self-employment, and are therefore, solution to the problem of unemployment.

(ii) 'Start-ups' are to be aided with technical and financial support by the government. Accordingly, these are expected to encourage the use of latent resources (particularly entrepreneurial skill and small savings). When latent resources are used, employment opportunities are bound to arise.

**2. Empowerment of women is related to employment of women. Comment.**

**Ans.** It is since ages that the women have suffered gender-discrimination. Men have been getting priority in matters relating to education, health, inheritance, marriage and policies. Empowerment of women aims at achieving gender equality. Of all the measures related to empowerment of women, employment of women is of central significance. Employment makes the women economically independent. This enhances their ability as decision-makers in all walks of life. Once the women are independent decision-makers, they can always strive for gender equality. It is, therefore, required that the participation of women (as a workforce) is raised, particularly in secondary and tertiary sectors of the economy.

**3. There is a mismatch between 'GDP growth' and 'employment growth' in India. How do you justify this statement?**

**Ans.** GDP growth in India happens to be faster than employment growth. In other words, even when production activity is expanding, job opportunities continue to be low. This is a situation of 'jobless growth'. This occurs when we rely more and more on labour-saving western technology. Such a technology (using more of capital and less of labour) does not suit the needs and means of a country where unemployment is an alarming social challenge. But, given the fact that the country lacks investment capital, we are forced to depend more and more on FDI (foreign direct investment). Foreign investment in India is linked with foreign technology which is efficient but the one which uses less and less of labour.

Reliance on FDI cannot be minimised. Implying that the reliance on labour-saving western technology cannot be minimised. Accordingly, a mismatch between 'GDP growth' and 'employment growth' cannot be so easily corrected.

**4. GDP in India is growing but unemployment stays to be a serious issue. How do you reconcile these facts?**

**Ans.** Despite a rise in GDP, unemployment continues to stay as a serious issue owing to the following reasons:

- (i) Owing to rising population, labour force continues to rise at an alarming rate.
- (ii) Education and employment of women in India is no longer a social taboo. This has led to a significant rise in the labour force.
- (iii) Strategy of growth is such that we are relying more on the western technology which is labour-saving.

Briefly, a significant rise in the supply of labour on the one hand and a significant reliance on the western technology, on the other hand, has led to GDP growth without a significant conversion of labour force into workforce. Hence, unemployment stays to be a serious issue.

## 5. NCERT Questions (With Hints to Answers)

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1. Who is a worker?

[Hint: A worker is an individual who is in some employment to earn a living.]

2. Define worker-population ratio.

[Hint: Worker-population ratio is defined as the number of persons employed per thousand persons.

$$WPR = \frac{\text{Number of employed person}}{\text{Total population}} \times 1,000.]$$

3. Are the following workers—a beggar, a thief, a smuggler, a gambler? Why?

[Hint: Beggars, thieves, smugglers or gamblers are not workers because they are not in any employment to earn a living and are not generating any kind of factor income.]

4. The newly emerging jobs are found mostly in the

sector.

(service/manufacturing)

[Hint: Service.]

5. An establishment with four hired workers is known as  
sector establishment.

(formal/informal)

[Hint: Informal (informal sector includes those establishments which hire less than 10 workers).]

6. Compared to urban women, more rural women are found working. Why?

[Hint: Compared to urban women, more rural women are found working. This is because in rural areas, poverty compels women workforce to seek employment. Thus, employment (even without education) is a priority. In urban areas, on the other hand, high priority for education implies low priority for jobs at an early age.]

7. Meena is a housewife. Besides taking care of household chores, she works in the cloth shop which is owned and operated by her husband. Can she be considered as a worker? Why?

[Hint: Being a housewife, Meena is merely a helping hand to her husband in his cloth shop. She is not to be considered as a worker.]

8. Find the odd man out (who is not a worker):

- (i) rickshaw puller who works under a rickshaw owner,
- (ii) mason,
- (iii) mechanic shop worker,
- (iv) shoeshine boy.

[Hint: Shoeshine boy because he is self-employed, all others come under the category of worker.]

## 6. Miscellaneous Questions and Reference to the Text for Answers

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1. How is unemployment different from underemployment?

[Page 221, 241, 242]

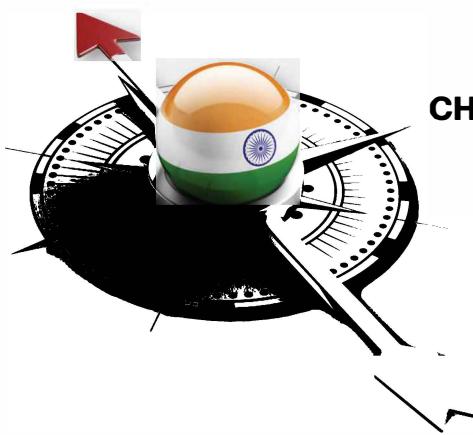
2. Explain the concept of technical unemployment.

[Unemployment related to change in technology.]

[Page 241]

3. Distinguish between open and disguised unemployment. Explain it by example.  
[Page 238, 239, 241]
4. Unemployment in India is a chronic problem. Do you agree?  
[Yes. Because in India, it is related to the problem of capital formation or the lack of production capacity. This is not a cyclical problem, but chronic.]
5. How is labour supply different from labour force? Also, differentiate between labour force and workforce.  
[Page 223, 224]
6. Write your observations on the cyclical and structural unemployment in India. [Page 241–243]
7. Give four suggestions to solve the problem of unemployment in India.  
[Page 245–247]
8. Write your observations on the social and economic consequences of unemployment.  
[Page 244, 245]





## CHAPTER: 11

# INFRASTRUCTURE

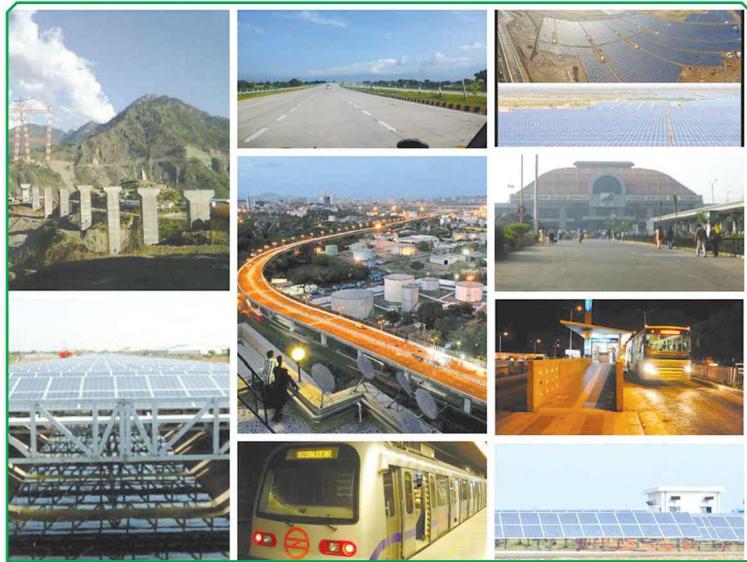
TO  
DO

- *What is Infrastructure?*
- *Infrastructure and Development*
- *The State of Infrastructure in India*

### I. WHAT IS INFRASTRUCTURE?

Infrastructure refers to support system of economic and social development of a country.

Imagine life in the absence of the means of transport and communication; imagine life in the absence of educational institutes, hospitals and nursing homes; imagine life in the absence of electricity or oil & diesel! Absence of these things would only drive us to the primitive age when production was just for subsistence. Production activity did not yield surplus for growth and development.



Infrastructure: Support System of Development

Infrastructure refers to support system of economic and social development of a country without which economic growth and social development would only remain to be primitive.

### Economic and Social Infrastructure

Infrastructure is broadly categorised as:

- (1) economic infrastructure, and
- (2) social infrastructure.

Following is a brief description of these concepts:



Economic Infrastructure: Transport and Communication

**(1) Economic Infrastructure:** Economic infrastructure refers to such elements of support system (like power, transport and communication) which serve as a driving force for production activity in the economy.

Abundant availability of power supply would accelerate the pace of production activity; abundant means of transport would facilitate the movement of goods from producers to the consumers, abundant means of communication would facilitate exchange, and so on and so forth. In the absence of economic infrastructure, it is virtually not possible to develop an efficient system of growth and development.

**(2) Social Infrastructure:** Social infrastructure refers to such elements of support system (like schools, colleges, hospitals and nursing homes) which serve as a driving force for social development of a country. Social development refers to human resource development. It occurs when there is healthy and efficient workforce in the country.

*While economic infrastructure accelerates the process of growth, social infrastructure accelerates the process of human development.*

Indeed, economic growth is incomplete without human development. Accordingly, economic and social infrastructure are complementary to each other; one reinforces the other.



Social Infrastructure: Hospitals and Schools

## ECONOMIC AND SOCIAL INFRASTRUCTURE ARE COMPLEMENTARY TO EACH OTHER

- Economic and social infrastructure are complementary to each other.
- Economic infrastructure includes sources of energy, better means of transport and communication, besides efficient system of banking and finance.
- All these elements of economic change are an essential prerequisite of economic growth. However, these elements (of economic infrastructure) would not be of any use if the bulk of population of a country continues to be illiterate and suffers from disease and sickness. This points to the significance of social infrastructure.
- Economic infrastructure must be complemented with social infrastructure for growth and development of a country.

## 2. INFRASTRUCTURE AND DEVELOPMENT

Following observations highlight how exactly infrastructure contributes to the process of growth and development:

### (1) Infrastructure Promotes Productivity:

- (i) **Productivity in Primary Sector:** Think of agricultural production without permanent means of irrigation. Agricultural production would then depend entirely on rainfall. Farmers would sow the seed only if it rains. If the rainfall is deficient, sowing would also be deficient. It means that, in the absence of permanent means of irrigation (an important component of economic infrastructure), actual output in agriculture would remain lower than the attainable output (or the potential output).
- (ii) **Productivity in Secondary Sector:** Think of industrial production without such sources of energy as coal, petroleum and electricity. Perhaps, industrial production would then depend upon wind energy or solar energy. However, these are still underdeveloped sources of energy. Implying, low level of productivity.
- (iii) **Productivity in Tertiary Sector:** Come to the tertiary sector. Let us consider tourism as a production activity. Can tourism be a productive activity in the absence of rapid means of transport and communication? Certainly not. In the absence of rapid means of transport and communication, tourism would perhaps exist only as a hobby of the explorers like Columbus and Vasco da Gama.

Thus, across all sectors of economy (primary, secondary and tertiary sectors), high productivity is possible only when we have good infrastructural facilities.

- (2) **Infrastructure Induces Investment:** Infrastructure induces investment. **Example:** A developed network of highways would definitely induce investment across all sectors of the economy. Because, it facilitates efficient movement of goods and services across different regions of the country. Infact, infrastructure is the backbone of business investment.
- (3) **Infrastructure Generates Linkages in Production:** Developed means of transport & communication, ample sources of energy along with good facilities of banking and insurance would generate inter-industrial linkages. It is a situation when expansion of one industry facilitates the expansion of the other. Accordingly, growth becomes a self-propelling activity of change.

*Linkages in production refers to a situation when expansion of one industry facilitates the expansion of the other. Economic growth becomes a self-propelling activity of change. But, this is possible only when we have ample infrastructural facilities.*

- (4) **Infrastructure Enhances Size of the Market:** We know, large-scale production is possible only when size of the market is large. Infrastructure enhances size of the market. It was with a view to expanding size of the market for the British products in India that a network of railways was developed under the British Raj.

*Means of transport are an important component of economic infrastructure. These means are central to the growth of the market, and growth of the market is central to growth of the economy.*

- (5) **Infrastructure Enhances Ability to Work:** Here, we are referring to social infrastructure. It includes educational and medical institutions. These institutions promote education, skill formation and healthcare. These are essential parameters to enhance the ability to work. Implying a rise in efficiency and therefore, a rise in productivity. Accordingly, growth process is accelerated.
- (6) **Infrastructure Facilitates Outsourcing:** A country having a good infrastructure, emerges as a destination for outsourcing. India is emerging to be global destination for call centres, study centres and medical tourism. It is owing largely to its sound system of social infrastructure.

(7) **Infrastructure Induces FDI:** FDI (Foreign Direct Investment) is instrumental in the growth process in less developed countries like India where domestic investment is very low. Since 1991 (when economic reforms were initiated), FDI inflow in the India economy has substantially increased, thanks to the expanding infrastructure.

Briefly, we can say that infrastructure is an important determinant of growth and development of a country. It raises productivity of the factors of production, and induces investment in diverse areas of economic activity. It enhances size of the market and develops an economy as a global destination for outsourcing.

### 3. THE STATE OF INFRASTRUCTURE IN INDIA

The state of infrastructure in India is examined with reference to two vital components of infrastructure *viz.*, Energy (as a key component of economic infrastructure) and Health (as a key component of social infrastructure).

#### A. Energy [Key Component of Economic Infrastructure]

Energy is the most important component of economic infrastructure. It is the lifeline of production activity across all sectors of the economy. In the primary sector, energy is a critical input to operate tubewells and tractors. In the secondary sector, energy is a critical input to operate machines (the hub of production activity). In the tertiary sector, energy is crucial input to operate computers (the hub of service sector).



Energy—Key Component of Economic Infrastructure

#### Commercial and Non-Commercial Sources of Energy

Sources of energy are broadly classified as commercial and non-commercial.

- ◆ Coal, petroleum products, natural gas and electricity are the important sources of commercial energy, as these goods are largely used for commercial purposes in the factories and farms. They have an established market of sale and purchase.
- ◆ Firewood, agricultural waste (straw, etc.) and animal waste (cow dung) are the important sources of non-commercial energy, as these goods are generally used in the rural households as consumer goods.

Generally, commercial sources of energy command price while non-commercials do not. Also, commercial sources of energy are exhaustible, while the sources of non-commercial energy are renewable.

### Commercial vs. Non-commercial Energy

	Commercial Energy	Non-commercial Energy
(i) Components (or Sources)	Coal, petroleum products, natural gas, electricity.	Firewood, animal waste, agricultural waste.
(ii) Use	Largely industrial, and for commercial purposes.	Largely domestic, and for consumption purposes.
(iii) Nature of Goods	Goods of commercial energy are traded through the market. These goods command price. There is domestic as well as international market for these goods.	Goods of non-commercial energy are generally procured by the villagers as free goods. Often, these goods do not command price. At best there is a local market for these goods.

#### Growth of Coal use and its changing use-profile

- During the period between 1951 and end of the century, consumption of coal has risen nearly ten times.
- However, its use pattern has undergone a drastic change.
- Non-commercial use of coal (or direct final consumption of coal) has significantly reduced in favour of its commercial use.
- Presently, coal is the principal source of commercial energy in India.

#### Two main Producers of Coal are

- (i) Coal India Limited, and
- (ii) Singareni Collieries Company Limited.

### Conventional and Non-Conventional Sources of Energy

- ◆ Conventional sources of energy are those which have a long history of their knowledge and use. **Example:** Coal, petroleum, natural gas and electricity.
- ◆ Non-conventional sources of energy are those sources which have been discovered or explored only in the recent past and which are yet to gain popularity for their use. **Example:** Solar energy, wind energy, biomass, etc.

#### Conventional Sources

Following are the conventional sources of energy:

- (1) **Coal:** Among the conventional sources of energy in India, the most important is coal. Following are some important facts related to coal as the conventional source of energy in India:
  - ◆ India is rich in coal production.
  - ◆ In 1950-51, production of coal in India was 328 lakh tonnes which increased to 6,764 lakh tonnes in 2017-18.
  - ◆ Of the total energy produced in India, 67 per cent consists of coal.
  - ◆ It is estimated that India has total reserves of 319 billion tonnes of coal (as on 31, March 2018).

The principal consumers of coal are: (i) Thermal power stations using coal to generate electricity, (ii) Steel plants, (iii) Cement factories, (iv) Railways, (v) Fertiliser factories, and (vi) Brick kilns.

However, Indian coal contains large quantity of ash and generates less heat. It hampers efficiency of thermal power stations.

Therefore, some good quality coal (with less ash and more heat) is imported from other countries.

**(2) Petroleum:** It is another conventional source of energy in India.

But production of petroleum in India is far less than its demand. This causes large-scale imports from rest of the world.

Domestic annual production of crude oil has been stagnant at around 36-38 million tonnes in last eight years (from 2010-11 to 2017-18).

The gap between domestic consumption and domestic production has tended to rise over time, causing a significant rise in the volume of imports.



**(3) Natural Gas:** It is equally significant as a conventional source of energy. This is used as a raw material in fertiliser and petroleum products and as cooking gas (LPG) in households.

Main reserves of natural gas are found in Mumbai, Gujarat, Tripura, Andhra Pradesh, Tamil Nadu and Rajasthan.

It may be noted that LPG is also produced as a by-product of crude oil.

**How important is Gas as a New Source of Energy?**

- Here, we are referring to natural gas which earlier used to be flared up (burnt) owing to the lack of technology to harness it.
- This gas is liquified and used largely as fuel in the households (LPG is a well-known household name).
- Commercial use of gas by the steel fabricators and other producers is also picking up fast.
- Of late, use of LPG as a fuel for cars and other light vehicles is also being encouraged.
- Production of gas has scaled up from 1.5 billion cubic meters in 1970-71 to nearly 31.90 billion cubic meters in 2016-17.
- However, at the current rate of its production, stocks of natural gas may not last long. Hence, we must conserve the use of LPG as a non-polluting fuel.

**Did You Know?**

- Lignite is quite similar to coal and is also used as a source of energy.
- It is mainly used by those thermal power stations which are close to lignite fields.
- Found largely in Tamil Nadu and Gujarat, India produces nearly 20 million tonnes of lignite in a year.

### Alarming Facts

- Exploitation of coal reserves and the use of coal for production (as well as consumption) purpose is rising to alarming proportions.
- It is feared that, if demand for coal continues to rise at the existing rate, the coal supplies of the country may not last longer than 125 years.
- Continuing with the current rate of production and consumption of crude oil and natural gas, it is not beyond 25 years that we shall exhaust all our stocks.
- Keeping in mind this fact, we are considering a freeze on the domestic production of crude oil, relying largely on the imports.

**(4) Electricity:** Electricity is the most useful conventional source of energy in India.



Thermal Power: A Principal Source of Energy

Three main sources of electricity in India are:

- (i) Thermal Power Stations.
- (ii) Hydro-electricity Stations.
- (iii) Atomic Power Stations.

After independence, we started relying more on hydro-electricity generation. But over time, we have increasingly switched over to thermal power as a source of electricity.

This is despite the fact that the use of coal in thermal stations causes environmental pollution. Why?

The shift from hydro to thermal has occurred, because:

- (i) we have large reserves of coal, and
- (ii) installation of hydroelectric stations involves huge initial investment, besides a long gestation lag.



Wind Energy—Non-conventional Source of Energy

### Non-Conventional Sources

Following are the non-conventional sources of energy:

- (i) Solar energy (energy from the sun),
- (ii) Wind energy,
- (iii) Biomass energy, including energy in the form of gobar gas,
- (iv) Geothermal energy, and
- (v) Energy through tides and waves as well as temperature gradient overseas.

Solar energy and wind energy have been in use in the past (though not on a large-scale) as a source of commercial energy. Other sources of non-conventional energy as stated above are still in their experimentation stage of commercial use.

### Conventional and Non-conventional Sources of Energy

Conventional Sources of Energy	Non-conventional Sources of Energy
(i) These include coal, petroleum and electricity.	(i) These include solar energy, wind energy, biomass energy, etc.
(ii) These are being used as diverse sources of commercial energy over a long period of time.	(ii) Most of these are only in the experimentation stage and are being used as diverse sources of commercial energy only to a little extent.
(iii) In India, conventional sources (coal and petroleum in particular) are being used in total disregard to the environment.	(iii) These are being developed as sources of commercial energy with a view to checking environmental pollution.

**Note:** The principal factor differentiating between conventional and non-conventional sources of energy is that while conventional sources (coal and petroleum in particular) are not environment-friendly, non-conventional sources of energy are environment-friendly.

### BIO ENERGY

This type of energy is obtained from organism or organic matter. It is of two kinds:

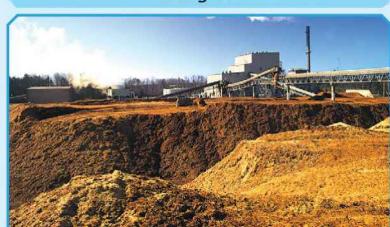
- (i) **Biogas:** It is that source of energy which is obtained from Gobar Gas Plant by putting cow dung (gobar) into the plant. Besides producing gas, this plant converts gobar into manure.

Biogas can also be used for cooking, lighting, heating and generation of electricity. Under the national programme of biogas, till 2014, as many as 47.5 lakh biogas plants had already been established. They produce biogas equivalent to 39 lakh tonnes of fuel wood every year. Institutional biogas plants have also been set-up in the country. These plants provide facilities like cooking of food collectively for the entire community or for lighting the houses, etc.



Biogas

- (ii) **Biomass:** Biomass is an organic material that comes from plants and animals. It is a source of producing energy through plants and trees. The objective of biomass programme is to encourage afforestation for energy, so that fuel for the generation of energy based on gas technique could be obtained. So far, 643 MW capacity for the generation of biomass energy has been installed. It is proposed to achieve a target for the production of 19,500 MW of energy under biomass programme.



Biomass

Bio-energy

## Primary and Final Sources of Energy

A distinction is often drawn between the primary and final sources of energy which is as under:

### Primary and Final Sources of Energy

Primary Sources	Final Sources
<p>(i) Primary sources of energy are available as free gifts of nature. Example: Coal, Lignite, Petroleum and Gas.</p> <p>(ii) These are directly used as energy inputs for the production of goods and services. Example: Coal is directly used to run steam engines. It needs no transformation before use.</p> <p>(iii) These sources can be converted into other forms of energy, like coal can be converted into electricity.</p>	<p>(i) Final sources of energy are non-available as free gifts of nature. These are obtained by converting input into output. Example: Electricity. It is obtained by using coal as an input.</p> <p>(ii) These sources are to pass through a process of transformation before they are used as energy inputs. Electricity is used as an energy input only after coal is transformed into electricity.</p> <p>(iii) These sources are used only as final sources of energy input. These cannot be converted into other forms of energy. Thus, electricity cannot be converted into coal.</p>

## Pattern of Energy Consumption in India

We may note the following points in this regard:

- (i) Pattern of energy consumption refers to the percentage use of different sources of energy.
- (ii) Percentage use of different sources of energy can be studied only when different energy sources are converted into some common unit.  
In India, different sources of energy are converted into a common unit known as MTOE (million tonne of oil equivalent).
- (iii) Use pattern of energy has undergone a considerable change over time.

Primary sources of energy including coal, lignite, petroleum and natural gas have witnessed a significant reversal in their use pattern. Non-commercial use of these resources which was more than one-third (36 per cent) in 1953-54, increased to nearly three-fourth in 2017-18. Obviously, it implies that between this period (1953-54 to 2017-18), the non-commercial use of the primary sources of energy jumped from one-third to three-fourth.

- (iv) Direct final consumption of coal (referring to non-commercial use of coal) has drastically reduced as a percentage of the total, even when total consumption of coal has risen nearly by a factor of ten. Presently, coal is the principal source of primary energy in India, its consumption amounting to 963.91 million tonnes in 2018-19 compared to just 95 million tonnes in 1980-81.
- (v) Our consumption of oil has considerably increased over time for which we are largely dependent upon the oil-rich gulf countries.
- (vi) Consumption of electricity in agricultural sector has substantially increased over time (500 times in a span of 68 years of the plan-period). However, compared to other sectors, it still continues to be very low.
- (vii) Consumption of electricity in the industrial sector continues to be the highest compared to other sectors (agricultural, commercial, domestic, etc.).

### Sectoral Share of Energy Consumption in India

Following are some notable points with regard to the sectoral share of energy consumption in India:

- (i) Industrial sector has maintained its supremacy in energy consumption, compared to other sectors (transport, agriculture and households). Its consumption is estimated to be nearly 37.8 per cent of the total consumption of commercial energy, compared with 22 per cent consumption of the transport sector, 21.9 per cent consumption of the agricultural sector and 24.3 per cent consumption of the household sector.
- (ii) Consumption of commercial energy is very low in agricultural sector. This suggests the dependence of this sector on manual labour and the use of hand-operated tools and implements. This has led to a low level of productivity in the Indian agricultural sector. Consequently, poverty prevails and the quality of life is miserably low.

*Low use of commercial energy in agricultural sector points to a high degree of dependence on manual labour and a low degree of mechanisation. This has led to a lower level of productivity and prevalence of poverty in the Indian agricultural sector.*

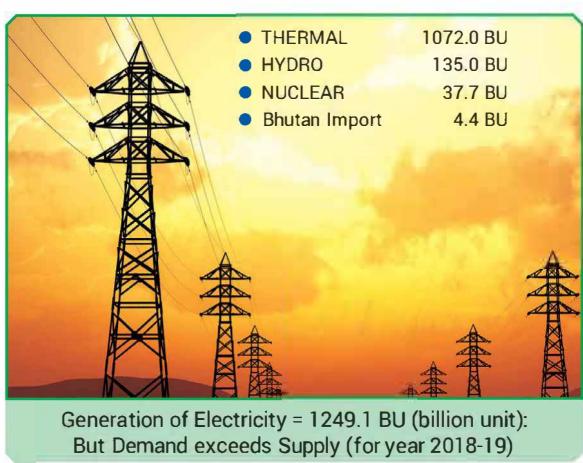
- (iii) Overtime, there has been a fall in percentage consumption of energy of the transport sector, while share of industrial sector has tended to rise. It suggests massive expansion of the industrial sector in India, and a shift from household industry to a factory system of production.

## Emerging Challenges in Power Generation

Power is the most important form of energy. It is commonly called electricity. It is of critical significance in the context of growth and development. Scholars often relate growth rate of power generation to growth rate of GDP. It is believed that power generation ought to be faster than GDP growth. Unfortunately, in India, generation of electricity is emerging to be a serious challenge and a bottleneck in the process of growth and development.

This is borne out by the following points:

- (1) **Inadequate Generation of Electricity:** In spite of a total installed power generation capacity of about 3,64,960.14 MW (as of November, 2019), India is still struggling to meet the surging demand for power.



India's Central Electricity Authority anticipated, for 2017-18 fiscal year, power deficit to be 0.6 per cent.

In the last financial year, the energy shortage was 0.7 per cent.

Excess of demand over supply has given rise to many problems. These are the problems of (i) excessive load on distribution, (ii) low voltage, (iii) voltage fluctuation, (iv) power cuts, etc.

It is imperative to increase supply to meet with the rising demand.

- (2) **Less Capacity Utilisation:** In India, there is an under-utilisation of production capacity of thermal power stations.

Capacity utilisation is indicated by Plant Load Factor (PLF). [PLF = electricity generated ÷ production capacity]

In 2018-19, PLF in India was nearly 61.07 per cent. It means just 60 per cent of electricity is available, the rest goes waste.

- (3) **Transmission and Distribution (T&D) Losses:** In Delhi, transmission and distribution losses of electricity are close to the tune of 50 per cent of electricity production.

In most states of the country, it is more than 20 per cent.

It may partly be due to our backward technology but largely due to pilferage involving the official staff.

It is owing to the mounting T&D losses that most states are now going in for privatisation of the distribution network.

- (4) **Losses of Electricity Boards:** Production and distribution of electricity in India is the near monopoly of the government.

Electricity is distributed by State Electricity Boards (SEBs).

At present, almost all the electricity boards are running into huge losses.

They do not have funds to make payment for the electricity purchased by them.

In 2016-17, these boards suffered overall commercial loss of ₹ 40,295 crore. This is explained in terms of the following factors:

(i) theft of electricity, (ii) loss of electricity during the course of transmission, and (iii) free supply of electricity.

### Coping with the Challenge of Power Generation

The challenge of power generation can be met through the following measures:

- (1) **Increase Production Capacity:** Production capacity or installed capacity needs to be raised to improve the supply of electricity across all sectors of the economy.
- (2) **Improve Plant Load Factor:** Plant Load Factor (PLF) needs to be improved so that the existing capacity is fully utilised.
- (3) **Minimise the Transmission and Distribution Losses:** Transmission and distribution losses must be minimised so that the actual availability of electricity improves. However, this requires huge investment on the maintenance and upgradation of the existing plants. Indeed, it is a difficult task.
- (4) **Improve Supply of Inputs to Power Plants:** Thermal power plants in India (often suffering the shortage of inputs) need regular supplies of coal. This would ensure fuller utilisation of the existing plant capacity.
- (5) **Encourage Privatisation and FDI in Power Generation:** Private sector is yet to play a significant role in the generation of power in India. The government must encourage their participation. Also, FDI (Foreign Direct Investment) in power generation should be encouraged.

### Let us be Conservative in the use of Electricity

- ❑ While the urgency of increased electricity generation is not denied, it is equally important that the users (including households and the producers) should learn to minimise the use of electricity as much as possible.
- ❑ We can focus on the use of energy-efficient electric appliances, as well as energy-saving lighting-devices.

## B. Health [Key Component of Social Infrastructure]



Health: Key Component of Social Infrastructure

Health means a sound physical and mental state of the individual. It does not simply mean absence of disease.

Good health implies the following:

- (i) increase in overall efficiency to handle difficult tasks,
- (ii) increase in productivity of labour, and
- (iii) increase in mental abilities.

### Development of Health Services after Independence

There has been a substantial improvement of health facilities after independence. Following observations prove this point:

#### Essential Indicators of Good Health

- (i) Low Death Rate
- (ii) Low Infant Mortality Rate
- (iii) High Expectancy of Life
- (iv) Low Incidence of Deadly Diseases
- (v) High Nutrition Levels

#### Female Life Expectancy is greater than Male Life Expectancy

- It is 70 years for females compared to 66.9 years for male.
- It is a pointer towards a significant improvement in healthcare in India.

- (1) Decline in Death Rate:** Death rate has come down from as high as 27 per thousand in 1951 to 6.3 per thousand in 2017.
- (2) Reduction in Infant Mortality Rate:** Infant mortality rate (referring to death of the infants up to 1 year of age) has significantly reduced from 146 per thousand in 1951 to 32 per thousand in 2017.
- (3) Rise in Expectancy of Life:** Expectancy of life has risen from 32 years in 1951 to 69.4 years in 2018.
- (4) Control over Deadly Diseases:** Deadly diseases like malaria, tuberculosis (TB), cholera and smallpox have been brought under control.
- (5) Decline in Under-five Mortality Rate:** Under-five mortality rate has declined significantly from 248 per thousand in 1960 to 39 per thousand in 2017.

Following table indicates expansion of health services in India between the period 1951-2017.

**Table 1. Expansion of Health Services**

Item	1951	2017
1. Medical Colleges	28	460
2. Dispensaries and Hospitals (All)	9,209	55,223
3. Community Health Centres (CHCs), Primary Health Centres and Sub-Centres	725	1,87,505
4. Number of Beds in Hospitals (Private and Public)	3.2	13,76,013 (2013)
5. Doctors	61,840	18,15,063
6. Nurses	18,054	28,21,815
7. Number of Doctors per 10,000 population	1.7	13.96

[Source: National Health Profile, 2018]

- (i) Significant it is to note that the number of dispensaries and hospitals has increased from a little over 9,200 to approximately 55,223.
- (ii) Also, there has been a substantial rise in the number of doctors from nearly 62,000 to more than 18,15,063.
- (iii) Expansion of healthcare facilities has been so significant that there is a complete eradication of smallpox from India which at one time used to be a deadly disease in the country.

To improve health facilities to its citizens, government announced National Health Policy, 2017. Government has launched Ayushman Bharat (National Health Protection Mission) to provide health insurance of ₹5 lakh per family per year to poor households in the country.

### Healthcare System in India

India has a three-tier healthcare system, as under:

**Tier-1** includes PHC (Primary Health Centres), CHC (Community Health Centres), and Sub-centres

- (i) These are small hospitals (or healthcare centres) set-up mostly in small towns and rural areas, and managed by the single doctor and ANM (Auxiliary Nursing Midwife).
- (ii) These centres focus on educating people on issues relating to healthcare, and provide immunisation facilities against infectious diseases.
- (iii) Preliminary treatment is offered to patients within the manageable limits.

It may be noted that community health centres often work as referral centres for the primary health centres.



Primary Health Centres: Small Hospitals in Small Towns

### Medical Tourism

- Medical tourism is choosing to travel outside your local area for medical services. It is also known as medical travel or health tourism.
- Medical tourism is a growing sector in India. India's medical tourism is expected to grow at the rate of 30 per cent.
- Medical tourism is attractive for the patients from developed countries due to cost advantage and for the patients from poor countries due to better quality.
- Cost of major surgeries in India is just 10 per cent of that in developed countries.



### GBD (Global Burden of Disease)

- GBD is an indicator used to assess (i) the number of premature deaths due to a particular disease, and (ii) the duration of disability of the persons suffering from that disease.
- We can be proud of inhabiting 1/7th of the world population, but we also have the dubious distinction of carrying 20 per cent of GBD.

### Tier-2 includes Secondary Healthcare Institutions

These institutions are upgraded (compared to PHC) and have facilities for surgery, ECG and X-rays. They are located in big towns and district headquarters.

### Tier-3 includes Tertiary Healthcare Centres

- (i) These are high-end and fully equipped medical centres, offering specialised medical facilities.
- (ii) The tertiary sector also includes educational and research centres such as AIIMS (All India Institute of Medical Sciences, New Delhi), PGI (Post Graduate Institute, Chandigarh), and NIMHNS (National Institute of Mental Health and Neuro Sciences, Bengaluru).

### Private Sector Health Infrastructure

Here, following are some notable observations:

- (i) The private sector accounts for more than 80 per cent of total healthcare spending in India.
- (ii) Of those seeking treatment, 78 per cent rural and 81 per cent urban patients are availing private non-institutional (out-patient) facilities and 58 per cent rural and 62 per cent urban are going to private hospitals.
- (iii) Private sector in healthcare has gained a dominant presence in all the sub-markets—medical education and training, medical technology and diagnostics, manufacture and sale of pharmaceuticals, hospital construction and finally, the provision of medical services.
- (iv) At the time of independence, the private sector in India accounted for only 8 per cent of healthcare facilities. But today, 93 per cent of hospitals, 64 per cent of beds and 80-85 per cent of doctors belong to private sector health infrastructure.

Thus, private sector has emerged as the dominant source of healthcare services in India.

### Health as an Emerging Challenge

Consistent efforts since independence have produced good results in the area of health, a key component of social infrastructure. As already noted, it is significant that: (i) death rate has substantially reduced, (ii) birth rate has significantly declined, (iii) infant mortality has come down, (iv) expectancy of life has risen, and (v) epidemic deaths have substantially reduced. Yet, healthcare in India continues to be a challenge.

Following observations highlight how healthcare is an emerging challenge.

- (1) **Unequal Distribution of Healthcare Services:** Distribution of healthcare services is extremely unequal across rural and urban sectors of the country. Most of the healthcare facilities have been confined to the urban areas.
- (2) **Communicable Diseases:** Communicable diseases like AIDS (Acquired Immune Deficiency Syndrome), HIV (Human Immunodeficiency Virus) and SARS (Severe Acute Respiratory Syndrome) are raising their ugly heads and are posing a serious threat to the society.
- (3) **Poor Management:** There is a substantial mismatch between the number of patients and the number of healthcare centres. Health personnel are grossly inadequate particularly in the rural areas, and often the rural folk have to rush to the urban healthcare centres or be the victims of local quacks (un-authorised doctors).
- (4) **Privatisation:** The government is gradually moving towards privatisation of healthcare services. The number of private hospitals is surging in place of government hospitals. Consequently, healthcare is becoming increasingly expensive and beyond the reach of the millions in India.
- (5) **Poor Upkeep and Maintenance:** Upkeep and maintenance of the government healthcare centres is very poor. The quality difference between private and public hospitals is so huge that the people are often compelled to depend on private treatment, even when not affordable.
- (6) **Poor Sanitation Level:** Sanitation level is extremely poor both in the rural and urban areas in India. Sanitation infrastructure has two functions:
  - ◆ to make clean surroundings where we live and work,
  - ◆ to arouse awareness of sanitation among the masses and encourage their participation in awareness programmes.

In both these areas, we are way behind the international standards. It has been found that nearly 30 per cent of the houses have no toilet facilities in the urban areas. In the urban slums, sanitation is absolutely miserable: slum dwellers are highly prone to disease and disasters. Rural sanitation is still worse. In a recent survey of 150 districts in India, kachcha latrines are found to be a luxury. Rural population does not have even 20 per cent of the required sanitary facilities. However, it is noteworthy to acknowledge the efforts of the government towards achieving universal sanitation coverage through 'Swachh Bharat Mission', a flagship scheme of the government, which aims to achieve a Swachh Bharat by 2019.

Briefly, we can state that healthcare in India, though it has significantly improved over time, is still way behind the developed countries of the world. To illustrate the above fact, while health expenditure is nearly 15 per cent of GDP in USA, in India, it is merely 5 per cent. In India, government share in total expenditure on healthcare is about 20 per cent, contrasting with 50 per cent in USA. The government is still to go a long way in expanding healthcare facilities in India.

### Indian Systems of Medicine (ISM)



Ayurveda: Indian Systems of Medicine

Indian systems of medicine are the systems of medicine which are considered to be Indian in origin or which have come to India from outside and got assimilated into Indian culture. India has six recognised systems of medicine in this category. These are: Ayurveda, Yoga, Unani, Sidha, Naturopathy and Homeopathy (AYUSH). As on April 1, 2015, there are 3,632 ISM hospitals, 26,325 dispensaries, 58,020 beds, 7,44,563 registered practitioners, 544 under-graduate colleges and 170 post-graduate colleges in India.

### RURAL-URBAN AND RICH-POOR DIVIDE

Health infrastructure is significantly biased in favour of the rich and in favour of the urban areas. While about 70 per cent of the country's population lives in rural areas, 80 per cent of the hospitals are located in urban areas. Percentage of population having access to proper medical care is just about 25 per cent and access to specialised medical care is insignificant, if not listless.

Another bitter truth: while the rich are to spend only 2 per cent of their income on healthcare, the poor are to spend as much as 12 per cent of their income on healthcare. Implying a debt-trap for the poor as and when expenditure on healthcare becomes essential.

### WOMEN'S HEALTH

Women in India suffer from a serious neglect not only in the area of education, but in the area of healthcare as well. More than 50 per cent of women in India in the age group of 15-49 years suffer from nutritional deficiency. Female foeticide is a common practice, causing a decline in sex ratio (from 946 in 1951 to 940 in 2011) and suggesting a social bias of healthcare against women in the country.

### RURAL-URBAN AND RICH-POOR DIVIDE



URBAN HEALTHCARE

RURAL HEALTHCARE

## Power Points & Revision Window

- **Infrastructure:** It refers to support system of economic and social development of a country, without which economic growth and social development is not possible.
- **Economic Infrastructure:** It refers to such elements of support system (like power, transport and communication) which serve as a driving force for production activity in the economy.
- **Social Infrastructure:** It refers to such elements of support system (like schools, colleges and hospitals) which serve as a driving force for social development of the country.
- **Infrastructure Contributes to Development** in a variety of ways: (i) Infrastructure promotes productivity, (ii) Infrastructure induces investment, (iii) Infrastructure generates linkages in production, (iv) Infrastructure enhances size of the market, (v) Infrastructure enhances ability to work, (vi) Infrastructure facilitates outsourcing, (vii) Infrastructure induces FDI.
- **Energy:** An important component of economic infrastructure.
  - **Forms and Sources:**
    - (i) Commercial and non-commercial energy.
    - (ii) Conventional and non-conventional sources of energy.
    - (iii) Primary and final sources of energy.
- **Pattern of Energy Consumption in India:** Direct final consumption of coal has reduced over time, though its total consumption (including coal as an input for other forms of energy) has substantially risen.
  - **Consumption of oil** has substantially risen over time, and so has our dependence on other countries for oil.
  - **Consumption of electricity** in agricultural sector has substantially risen over time, but still continues to be dismally low compared with other sectors of the economy. Industrial sector continues to be the biggest user of electricity in India.
- **Electricity as an Emerging Challenge:** Because: (i) Inadequate generation of electricity, (ii) Less capacity utilisation, (iii) Transmission and distribution losses, (iv) Losses of electricity boards.
  - **Coping with this challenge,** we should: (i) Increase production capacity, (ii) Improve plant load factor, (iii) Minimise the T&D losses, (iv) Improve the supply of inputs to power plants, (v) Encourage privatisation and FDI in power generation.
- **Health:** An important component of social infrastructure.
- **Development of Health Services after Independence:** (i) Decline in death rate, (ii) Reduction in infant mortality rate, (iii) Rise in expectancy of life, (iv) Control over deadly diseases, (v) Decline in under-five mortality rate.
- **Health as an Emerging Challenge:** Because: (i) Unequal distribution of healthcare services, (ii) Communicable diseases (like AIDS, HIV) are rising, (iii) Poor management of healthcare services, (iv) Increasing privatisation, (v) Poor upkeep and maintenance, (vi) Poor sanitation level.



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

## Choose the correct option:

10. With respect to coal as the conventional source of energy, choose the correct statement.
- India is deficient in coal production
  - Of the total energy produced in India, 67 per cent consists of coal
  - The principle consumers of coal are thermal power stations, steel plants among others
  - Both (b) and (c)
11. With respect to sectoral share of energy consumption in India, choose the correct statement.
- Industrial sector has maintained its supremacy in energy consumption
  - Consumption of commercial energy is high in rural areas
  - Overtime, there is a fall in energy consumption of transport sector
  - Both (a) and (c)
12. Which of the following are the emerging challenges in power generation in India?
- Inadequate generation of electricity
  - Less capacity utilisation
  - Transmission and distribution losses
  - All of these
13. Which of the following facts illustrate the development of health services after independence in India?
- |                                  |                             |
|----------------------------------|-----------------------------|
| (a) Decline in death rate        | (b) Rise in life expectancy |
| (c) Control over deadly diseases | (d) All of these            |

#### Answers

1. (b)      2. (a)      3. (d)      4. (d)      5. (d)      6. (b)      7. (c)      8. (a)      9. (d)      10. (d)  
11. (d)      12. (d)      13. (d)

## B. Fill in the Blanks

#### Choose appropriate word and fill in the blank:

- \_\_\_\_\_ infrastructure accelerates the process of economic growth.  
(Economic/Social)
- Economic and social infrastructure are \_\_\_\_\_ to each other.  
(complementary/competitive)
- \_\_\_\_\_ is the most important component of economic infrastructure.  
(Energy/Hospital)
- Wind energy is a \_\_\_\_\_ source of energy.  
(conventional/non-conventional)
- \_\_\_\_\_ is a source of energy obtained from global gas plants by putting cow dung into the plant.  
(Biomass/Biogas)
- India has \_\_\_\_\_ healthcare system.  
(two-tier/three-tier)
- \_\_\_\_\_ health centres focus on educating people on issues relating to healthcare.  
(Community/Primary)
- \_\_\_\_\_ sector accounts for more than 80 per cent of the total healthcare spending in India.  
(Private/Public)
- Infrastructure \_\_\_\_\_ size of the market.  
(reduces/enhances)

10. healthcare centres are high-end and fully equipped medical centres.  
 (Secondary/Tertiary)

### Answers

- |             |                  |            |                     |
|-------------|------------------|------------|---------------------|
| 1. Economic | 2. complementary | 3. Energy  | 4. non-conventional |
| 5. Biogas   | 6. three-tier    | 7. Primary | 8. Private          |
| 9. enhances | 10. Tertiary     |            |                     |

### C. True or False

**State whether the following statements are True or False:**

1. Social infrastructure accelerates the process of human development. (True/False)
2. Schools, colleges, hospitals are elements of economic infrastructure. (True/False)
3. Infrastructure generates linkages in production. (True/False)
4. Goods of non-commercial energy are generally procured by the villagers as free goods. (True/False)
5. The shift from hydro-electricity stations to thermal power stations has occurred because it is very cheap to import coal. (True/False)
6. Biogas is a source of energy produced from plants and trees. (True/False)
7. There is a need to encourage privatisation and FDI in power generation to cope with the challenge of power generation in India. (True/False)
8. Community health centres often work as referral centres for primary health centres. (True/False)
9. Private sector has emerged as the dominant source of healthcare services in India. (True/False)
10. Indian systems of medicine are the systems of medicine which are considered to be Indian in origin or which have come to India from outside and got assimilated into Indian culture. (True/False)

### Answers

1. True    2. False    3. True    4. True    5. False    6. False    7. True    8. True    9. True    10. True

### D. Matching/Chronological

**I. From the set of statements given in Column I and Column II, choose the correct pair of statements:**

Column I	Column II
(a) Economic infrastructure	(i) Accelerates the process of human development
(b) Natural gas	(ii) Non-conventional source of energy
(c) Power generation in India	(iii) Optimum capacity utilisation
(d) AIIMS	(iv) Tertiary healthcare centre

### Answer

- (d) AIIMS— (iv) Tertiary healthcare centre

**II. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:**

Column I	Column II
(a) Economic infrastructure	(i) A conventional source of energy
(b) Petroleum	(ii) Available as free gifts of nature
(c) Primary sources of energy	(iii) Have facilities for surgery and ECG
(d) Secondary healthcare institutions	(iv) Means of transport

**Answers**

(a)—(iv), (b)—(i), (c)—(ii), (d)—(iii)

**E. 'Very Short Answer' Objective Type Questions**

**1. Define infrastructure.**

Ans. Infrastructure refers to support system of economic and social development of a country.

**2. Define economic infrastructure.**

Ans. Economic Infrastructure refers to such elements of support system (like power, transport and communication) which serve as a driving force for production activity in the economy.

**3. Define social infrastructure.**

Ans. Social infrastructure refers to such elements of support system (like schools, colleges, hospitals and nursing homes) which serve as a driving force for the process of social development of a country.

**4. Why is energy a component of infrastructure?**

Ans. Energy is the lifeline of entire production activity. We cannot think of a day when we can do without electricity power, oil or diesel.

**5. Why is healthcare a component of infrastructure?**

Ans. Healthcare service is a component of social infrastructure as it is a key element in the production of healthy and efficient manpower in the country.

**6. What is medical tourism?**

Ans. Medical tourism is choosing to travel outside your local area for medical services.

**7. What are primary healthcare centres in India?**

Ans. Primary healthcare centres are small hospitals set-up mostly in small towns and rural areas and managed by a single doctor.

**8. What are secondary healthcare centres in India?**

Ans. Secondary healthcare centres are upgraded healthcare centres (compared to PHC) and have facilities for surgery, ECG and X-rays. They are located in big towns and district headquarters.

**9. What are tertiary healthcare institutions in India?**

Ans. Tertiary healthcare institutions are high-end and fully equipped medical centres, offering specialised medical facilities.

## **2. Reason-based Questions (Comprehension of the Subject-matter)**

---

**Read the following statements carefully. Write True or False with a reason.**

- 1. Infrastructure generates linkages in production.**

Ans. True. **Reason:** Provision of infrastructural facilities at one place (like SEZ—special economic zone) induces investment across several areas of production which are linked to each other. A car manufacturing unit at one place (owing to infrastructural facilities like of transport, communication and banking) would certainly attract investment in inter-linked areas of production activities (like manufacturing of nuts and bolts and other inputs needed for the production of cars).

- 2. Infrastructural facilities raises productivity in tertiary sector of the economy.**

Ans. True. **Reason:** Infrastructural facilities include rapid and efficient means of transport and communication. Such facilities are essential ingredients in the provision of such services as of education, health, banking and insurance (the core components of tertiary sector).

- 3. Non-conventional sources of energy are more environment-friendly than the conventional sources.**

Ans. True. Non-conventional sources of energy include solar energy, wind energy and biomass. All of these sources are non-polluting, and are therefore, environment-friendly. Conventional sources, on the other hand, include coal and petroleum, the use of which leads to air pollution. These are not environment-friendly.

- 4. GDP growth is related to the generation of electricity in the economy.**

Ans. True. Because, electricity is the core element of energy used across all sectors of the economy. Higher the generation of electricity, higher would be the GDP growth. Thus, generation of electricity is much higher in developed countries compared to the less developed countries.

- 5. Decline in death rate is a pointer to the growth of social infrastructure in the economy.**

Ans. True. Because, growth of social infrastructure leads to improved healthcare facilities. In turn, improved healthcare facilities lead to a fall in death rate.

- 6. Privatisation of healthcare is a hurdle in the provision of healthcare facilities across rural areas of the country.**

Ans. True. **Reason:** Private sector provides healthcare for profit. People in the rural areas are relatively poor and cannot afford expensive medical care. Accordingly, most medicare facilities (in the private sector) are confined to the urban areas.

- 7. Use of non-commercial energy leads to environmental degradation.**

Ans. True. **Reason:** Firewood is the key component of non-commercial energy. People in the rural areas obtain firewood largely by way of tree-felling. It leads to environmental degradation.

## **3. HOTS & Applications**

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- 1. Poverty is the cause as well as the consequence of poor health. Do you agree with this statement?**

Ans. It is a fact that poverty is the cause as well as the consequence of poor health. Poverty leads to poor health simply because poor people cannot afford expensive medical treatment of their ailments/diseases. On the other hand, poor health causes loss of physical and mental abilities to work. Accordingly, efficiency suffers which leads to poverty.

**2. Why should the government insist on the use of LPG rather firewood for purpose of domestic cooking. Write two observations.**

**Ans.** (i) Often people indulge in tree felling to get firewood. This leads to deforestation, and therefore, environmental degradation.

(ii) LPG is a cleaner fuel than firewood. It is environmental-friendly, minimising environmental pollution.

**3. Do you think demand-related multi-layered fare structure would improve efficiency of railways?**

**Ans.** Demand-related multi-layered fare structure (as prevalent in airways) would certainly increase revenue of the railways. Using the additional revenue, the railways can focus on more efficient system of transportation, like high-speed bullet trains. Accordingly, efficiency of the Indian railways is expected to rise.

**4. How are economic and social infrastructure complementary to each other? Write two observations.**

**Ans.** (i) Social infrastructure helps produce skilled manpower. Availability of skilled manpower is a necessary prerequisite to build highways, dams and bridges which are the key components of economic infrastructure. Thus, social infrastructure contributes to economic infrastructure.

(ii) Economic infrastructure gives us rapid means of transport and communication. These are prerequisites of social infrastructure, like schools and hospitals. Thus, economic infrastructure promotes social infrastructure.

#### **4. Analysis & Evaluation**

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**1. What is the rational behind our significant reliance on thermal power rather than the hydro-power as a source of electricity, despite the fact that thermal power contributes to environmental pollution?**

**Ans.** It is not denying the fact that the generation of electricity through thermal power stations leads to environmental pollution. Yet, in India, we continue to depend on this source of energy generation to a significant extent. The reasons are:

(i) That we have huge reserves of coal, available to us as free gifts of nature.

(ii) Electricity generation through hydro-projects is almost pollution free. But the cost of establishing hydro-stations is very high. It involves huge investment, besides a long gestation lag.

**2. Do you agree with a view that tourism in India is less developed owing to the lack of essential infrastructure?**

**Ans.** It is true that tourism in India is less developed owing to the lack of essential infrastructure. Transport and communication are the two important elements of infrastructure related to tourism industry. While communication has shown a big breakthrough over the last two decades, transport facilities continue to be highly deficient. Of course, the transport facilities have grown over time. But the supply-demand gap continues to be as alarming as ever in the past. Indian railways continue to grapple with deficiency as well as inefficiency. Airways are expanding, but the expansion is slow, besides lacking in quality. Likewise, road transport is expanding but poor quality continues to be a hurdle. Domestic water transport is yet to emerge as of any notable significance.

India must improve its transport infrastructure to promote its tourism industry. Foreign tourism can be a rich source of foreign exchange, but only when we have developed means of domestic transportation.

3. Delhi Government has lowered the electricity tariff nearly by 50% for the small and medium household users. How would you justify this decision as a student of economics?

Ans. Lowering tariff for the small and medium household users of electricity is a significant step related to social welfare. It is expected to raise real purchasing power of these households. The quality of life is expected to improve.

But, what is socially justified is not always economically rational. Lowering the tariff would have become economically rational if the cost of electricity production was reduced. Unfortunately, the cost of production is tending to rise. The cut in tariff, therefore, is loss of revenue, while the cost is rising. The government is funding this loss through subsidies. It amounts to extra burden on the exchequer. If subsidies pile up, the government has to resort to borrowing. But these are the borrowings not for purpose of production. These are for the purpose of consumption. Therefore, such measures by the government are economically counter-productive. These would definitely be a roadblock in the process of economic growth.

4. Do you think, increase in the price of electricity will be the best course to strike a balance between supply and demand of electricity in India? Write your observations in brief.

Ans. Electricity is the lifeline of production activity in the economy. Increase in the price of electricity will cause a rise in the production cost which may discourage production activity in the economy. The best course of striking a balance between supply and demand would, therefore, be to increase the supply of electricity. However, demand for electricity by the high-end household users may be managed through high price structure.

## 5. NCERT Questions (With Hints to Answers)

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1. Explain the term 'infrastructure'.

[**Hint:** Infrastructure refers to support system of economic and social development of a country, without which economic growth and social development is not possible. Infrastructure is broadly categorised as: (i) economic infrastructure, and (ii) social infrastructure.]

2. Explain the two categories into which infrastructure is divided. How are they both interdependent?

[**Hint:** Infrastructure is divided into two categories:

(i) **Economic Infrastructure:** It refers to such elements of support system (like power, transport and communication) which serve as a driving force for production activity in the economy.

(ii) **Social Infrastructure:** It refers to such elements of support system (like schools, colleges and hospitals) which serve as a driving force for social development of the country.

While economic infrastructure directly accelerates the process of growth, social infrastructure accelerates it indirectly through human development.

Indeed, economic growth is incomplete without human development. Accordingly, economic and social infrastructure are complementary to each other; one reinforces the other.]

### **3. How do infrastructure facilities boost production?**

[Hint: Infrastructure provides support services (like roads, railways, ports, airports, telecommunication facilities, etc.) in the areas of industrial and agricultural production. Some of these facilities have a direct impact on production of goods and services while others give indirect support by building the social sector of the economy. Across all sectors of economy (primary, secondary and tertiary sectors), high productivity is possible only when we have good infrastructural facilities.]

### **4. Infrastructure contributes to the economic development of a country. Do you agree? Explain.**

[Hint: Yes, infrastructure contributes to the economic development of a country. Following observations highlight how exactly infrastructure contributes to the process of growth and development:

Following observations highlight how infrastructure impacts economic growth:

- (i) Infrastructure impacts productivity in primary sector, secondary sector and tertiary sector of the economy.
- (ii) Infrastructure induces investment. In fact, infrastructure is the backbone of business investment.
- (iii) Infrastructure generates linkages in production. It is a situation when expansion of one industry facilitates the expansion of the other. Accordingly, growth becomes a self-propelling activity of change.
- (iv) Infrastructure enhances size of the market. It was with a view to expanding size of the market for the British products in India that a network of railways was developed under the British Raj.
- (v) Infrastructure enhances ability to work. Implying a rise in efficiency and therefore, a rise in productivity. Accordingly, growth process is accelerated.
- (vi) Infrastructure facilitates outsourcing. India is emerging to be global destination for call centres, study centres and medical tourism. It is owing largely to its sound system of social infrastructure.]

### **5. What is the state of rural infrastructure in India?**

[Hint: According to the census 2001, only 56 per cent of rural households have an electricity connection and 43 per cent still use kerosene. For cooking, about 90 per cent household of rural India use bio-fuels. Supply of tap water is available to only 24 per cent households in rural areas. About 76 per cent of the population drinks water from open sources such as wells, tanks, ponds, lakes, rivers, canals, etc. Access to improved sanitation in rural areas is only 20 per cent.]

### **6. Differentiate between commercial and non-commercial sources of energy.**

[Hint: The difference between commercial and non-commercial sources of energy are as under:

- (i) Goods of commercial energy are largely used for commercial purposes in the factories and farms. **Example:** Coal, petroleum products, natural gas and electricity. Whereas, goods of non-commercial energy are generally used in the rural households as consumer goods. **Example:** Firewood, agricultural waste (straw, etc.) and animal waste (cow dung).

- (ii) Goods of commercial energy command price while goods of non-commercial energy do not.
- (iii) Also, commercial sources of energy are exhaustible, while the sources of non-commercial energy are renewable.]

**7. What are the three basic sources of generating power?**

- [Hint: (i) Thermal Power Stations,  
(ii) Hydro-electricity Stations, and  
(iii) Atomic Power Stations.]

**8. What do you mean by transmission and distribution losses? How can they be reduced?**

[Hint: Transmission losses of electricity refer to losses between the source of supply and the points of distribution.

Distribution losses refer to losses of electricity while it is being finally distributed to the consumers. Pilferage is an important component of distribution losses.

These losses can be reduced by checking pilferage and by better maintenance of the plants and equipment.]

**9. What are the various non-commercial sources of energy?**

[Hint: Firewood, agricultural waste and dried dung.]

**10. Justify that energy crisis can be overcome with the use of renewable sources of energy.**

[Hint: We face an energy crisis, since gas and oil resources are diminishing. The oil reserves are drying up and a world energy crisis is in the offing. This can be averted only with the use of renewable sources of energy.]

**11. How has the consumption pattern of energy changed over the years?**

[Hint: Following observations highlight the pattern of energy consumption in India:

- (i) Pattern of energy consumption means the percentage use of different sources of energy.
- (ii) Use pattern of energy has undergone a considerable change over time.
- (iii) Consumption of electricity in agricultural sector has substantially increased over time.
- (iv) Consumption of electricity in the industrial sectors continue to be the highest compared to other sectors.]

**12. How are the rates of consumption of energy and economic growth connected?**

[Hint: Various studies suggest that in order to have 8 per cent GDP growth per annum, power supply needs to grow around 12 per cent annually.]

**13. What problems are being faced by the power sector in India?**

[Hint: The major problems faced by the power sector in India are as under:

- (i) Inadequate generation of electricity.
- (ii) Less capacity utilisation.
- (iii) Transmission and Distribution (T&D) Losses.
- (iv) Losses of electricity boards.]

**14. Discuss the reforms which have been initiated recently to meet the energy crisis in India.**

[Hint: Privatisation of the power sector, particularly with regard to:

- (i) the distribution of power

- (ii) minimising the transmission and distribution losses, and
- (iii) improving the supply of inputs to power plants.]

**15. What is a ‘global burden of disease’?**

[**Hint:** Global burden of disease is an indicator used to assess (i) the number of premature deaths due to a particular disease, and (ii) the duration of disability of the persons suffering from that disease.]

**16. Discuss the main drawbacks of our healthcare system.**

[**Hint:** The main drawbacks of our healthcare system are as these:

- (i) Unequal distribution of healthcare services across rural and urban areas are not given their due priority.
- (ii) Communicable diseases (like AIDS, HIV and SARS).
- (iii) Poor management of the health infrastructure.
- (iv) Privatisation of healthcare, leading to unbearable cost-burden.
- (v) Poor upkeep and maintenance of the government hospitals.
- (vi) Poor sanitation level.]

**17. How has women’s health become a matter of great concern?**

[**Hint:** Women’s health in India become a matter of great concern. Because, more than 50 per cent of women in India in the age group of 15-49 years suffer from nutritional deficiency. Female foeticide is a common practice, causing a decline in sex ratio (from 946 in 1951 to 940 in 2011) and suggesting a social bias of healthcare against women in the country.]

**18. Name the six systems of Indian medicine.**

[**Hint:** (i) Ayurveda, (ii) Yoga, (iii) Unani, (iv) Sidha, (v) Naturopathy, and (vi) Homeopathy (AYUSH).]

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## **6. Miscellaneous Questions and Reference to the Text for Answers**

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1. How would you distinguish between economic and social infrastructure? [Page 259, 260]
2. What are the principal sources of energy in India? [Page 263–268]
3. Give a brief description of the conventional and non-conventional sources of energy in India. [Page 264–267]
4. How are primary sources of energy different from the final sources? [Page 268]
5. What are the principal indicators of healthcare? [Page 272, 273]

- **Possibility of Developing Non-conventional Energy**

Most forms of non-conventional energy, solar energy in particular, involves its conversion into electric energy. Unfortunately, while electricity generation itself is a serious challenge, the technology or the techniques of conversion of one form of energy into the other are still not so developed in our country. Natural gas, till the very recent past, was flared up because of the lack of technology. Biogas technology is yet to become popular even when animal waste (gobar) is available in India in plenty. Likewise the production of solar energy is yet to take-off, not because the sun is less visible in India, but because we do not have the know-how to tap its energy.

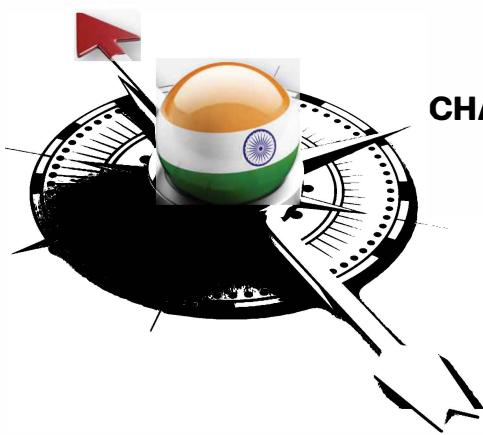
- **Expansion of Nutrition Programme**

According to one estimate in India, from 70 to 80 per cent people do not get nourishing food. There is utter lack of nutritive elements like protein, minerals, vitamin, etc., in the food intake of weaker sections of the country. In different states, Nutrition Expansion Blocks have been set-up to provide nutritive food to students, industrial workers, women, etc. Their main functions are: (i) To find out the nutritive deficiency among different sections of the population, (ii) Expansion and publicity of programmes concerning nutrition, (iii) Monitoring of nutrition programme.

In many states of India, free nutritive food is given to the children under Mid-day Meal Programme. In 1996, a sum of ₹ 1,400 crore was provided for nutrition programme. Many nutrition schemes were functioning during the period of this plan; viz.,

- (i) **Special Nutritive Programme:** Under this scheme nutritive food is given to about 229 lakh children, pregnant and breast-feeding women.
- (ii) **Mid-Day Meal:** Under this programme, 211 lakh children of the age group of 6 to 11 years are being given milk and nourishing diet at the time of mid-day meal.
- (iii) **Nutrition Education:** Arrangements are being made to impart education regarding nutritive diet, etc., to the people.





## CHAPTER: 12

# ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

TO  
DO

- *Concept of Environment*
- *Significance/Functions of Environment*
- *Two Basic Problems Related to Environment:*
  - *Problem of pollution and*
  - *Problem of excessive exploitation of natural resources*
- *Causes of Environmental Degradation*
- *State of Environment in India*
- *Sustainable Development*
- *Strategies for Sustainable Development*

## I. CONCEPT OF ENVIRONMENT

Environment is defined as all those conditions and their effects which influence human life. It is the sum total of surroundings and the totality of resources that affect our existence and the quality of our life. According to the **Environment (Protection) Act 1986**, “*Environment includes water, air and land and the interrelationship which exists among and between water, air, land and human beings and other creatures, plants, micro-organisms and property.*”

The above definition suggests that:

- (i) There are physical (or abiotic) as well as living (or biotic) elements of environment.
- (ii) Physical elements include land, water, air, soil, climate, mountains, minerals and all other resources which nature has provided to us as a free gift.



Environment influences Human Life

- (iii) Living elements include all kinds of living creatures like plants and animals which impact human life.

Environment includes living elements or biotic elements (plants and animals) as well as non-living elements or abiotic elements (air, water, land, soil, minerals and other natural resources) which make up our surroundings and impact our existence and the quality of our life.

## 2. SIGNIFICANCE/FUNCTIONS OF ENVIRONMENT

Following observations highlight the significance (of functions) of environment:

- (1) Environment Offers Resources for Production:** Environment includes physical resources (minerals, wood, water, soil and others) which are available to us as a free gift of nature. These resources are used as inputs for production. In fact, production is simply the process of conversion of natural resources into useful things.

### Renewable and Non-renewable Resources

Resources are often classified as: (i) renewable, and (ii) non-renewable.

- Renewable resources are those which can be replenished and are not likely to be exhausted or depleted on use. *Example: Wood, sea animals.*
- Non-renewable resources are those which are likely to be exhausted or depleted on use. The rate at which these resources re-emerge is far short of the rate at which these resources are being exploited for use. *Example: Fossil fuels.*

- (2) Environment Sustains Life:** Environment includes sun, soil, water and air which are essential ingredients for the sustenance of human life. Absence of these elements of environment implies the end of life.
- (3) Environment Assimilates Waste:** Production and consumption activities generate wastes. This occurs mostly in the form of garbage. Where does it go? Environment absorbs it.
- (4) Environment Enhances Quality of Life:** Surroundings include rivers, oceans, mountains and deserts. Man enjoys these surroundings, adding to the quality of his life.

### Carrying Capacity of Environment and Environmental Crises

- Carrying capacity of environment refers to the situation when:
  - (i) exploitation of resources does not exceed the regeneration of resources, so that the resource endowment is not exhausted or depleted, and
  - (ii) generation of wastes does not exceed the absorption capacity of environment, so that environment is not polluted.
- Environmental crises occur when carrying capacity of the environment is challenged (or exceeded) through excessive exploitation of natural resources and/or through excessive generation of wastes.

### 3. TWO BASIC PROBLEMS RELATED TO ENVIRONMENT

Two basic problems related to environment are:

- (1) Problem of pollution, and
- (2) Problem of excessive exploitation of natural resources, or degradation of natural resources.

Following sections offer a brief description of these problems:

#### (I) Pollution

Pollution refers to those activities of production and consumption which challenge purity of air and water and thereby pollute the environment. It is a serious emerging challenge related to the process of growth, particularly related to the process of industrialisation. Pollution has three forms:

- (i) Air pollution,
- (ii) Water pollution, and
- (iii) Noise pollution.

Details are as under:

##### (i) Air Pollution

Air carries oxygen which is an essential element of life. Pollution of air implies pollution of an essential element of life. Accordingly, quality of life is impaired.

##### What causes Pollution of Air?

Air pollution occurs owing to the presence of pollutants in the air. These pollutants may be poisonous gases such as carbon dioxide, carbon monoxide or these may be suspended particles such as dust, pollen and smoke. Following factors contribute to air pollution:

- (a) Smoke emitted by the industries, particularly those using coal as an energy.
- (b) Poisonous gases emitted (particularly by the plastic and leather industries) in the process of chemical treatment of the materials.
- (c) Emission of gases by the motor vehicles which has risen to a threatening level owing to exponential rise in the number of vehicles.

##### Overuse of Resources and Misuse of Resources

■ Overuse of resources refers to excessive exploitation of natural resources to achieve higher rate of growth.

##### Examples:

- (i) Excessive exploitation of fossil fuels,
- (ii) Excessive tree-felling.

■ Misuse of resources refers to the situation when resources are diverted to wrong use causing environmental degradation. **Examples:**

- (i) Use of wood as a household fuel,
- (ii) Use of rivers to absorb industrial effluents.



Air Pollution: Poisonous Gases in the Air

### Did You Know?

- Air pollution causes hypertension, asthma, respiratory and cardio-vascular problems. These are very deadly diseases.
- Let us contribute our bit and keep air pollution under check by not smoking and by not violating the emission norms as prescribed for the vehicles we use.

### (ii) Water Pollution

Like air, water is also an essential element of human life and its pollution is equally serious. Pollution of water relates to contamination of water. Use of polluted/contaminated water leads to the diseases like diarrhoea and hepatitis.

Following are the principal factors contributing to water pollution in India:



Water Pollution: A Threat to Human Life

- (a) Industrial waste (particularly of those using chemicals as inputs) streaming into the rivers.
- (b) Domestic sewerage that flows into streams and rivers.
- (c) Agricultural run-off (mixed with pesticides and insecticides) that runs into streams and rivers.
- (d) Thermal power houses discharging ash mixed with water.

### A Bitter Truth

Farmers often wash vegetables in the 'nullas' full of the untreated sewerage water. If eaten raw, such vegetables are a sure source of deadly diseases.

### (iii) Noise Pollution

Mechanisation has raised the levels of efficiency, but it has equally raised the level of noise pollution. Noise pollution has recorded an exponential growth, because millions of vehicles fitted with loud horns and noise-generating engines are plying on the roads.



Noise Pollution—A Social Evil

Excessive noise causes irritation and unnecessarily fatigues the body and the mind. Accordingly, quality of life deteriorates and efficiency is reduced. You may note the following sources of noise pollution:

- (a) Sound produced by machines used in industries.
- (b) Sound produced by cars, trucks and other means of transport.
- (c) Sound produced by machines in construction works.

#### Be Sure About it

- Sound itself is not bad. Who is offended when the birds chirp or when the clouds thunder?
- But unwarranted and unwanted sounds (like when you play your music system full blown) generate noise pollution which must be stopped as a social evil.

## (2) Excessive Exploitation of Natural Resources

Second aspect of environmental problem relates to excessive exploitation of natural resources or degradation of resources. Natural resources refer to forests, minerals, soil, etc. Natural resources are also called natural capital. Following observations may be noted in this regard:

- (i) In order to achieve economic growth, man needs natural capital along with physical capital.
- (ii) As a result of increase in production, there is depreciation of both physical capital and natural capital.
- (iii) Often, we make provision for the replacement of physical capital. But the depreciation or degradation of natural capital (in terms of deforestation or degradation of land) is often ignored or poorly addressed.

Let us attempt a brief description of the problems of Deforestation and Degradation of land.

### Deforestation

Industrialisation is a boon as it offers a variety of things to consume, enhancing the quality of life. But it is a bane when it causes deforestation. This is how it happens:

- (i) Trees are felled to meet the growing demand for wood and other forest products by the industries.

#### Yes! Environmental Degradation is an Avoidable Opportunity Cost of Development

- Opportunity cost is the cost in terms of foregone opportunities of doing a thing.
- **Example:** Using land for the production of pulses implies foregoing the opportunity of using it for the production of (say) rice.
- Thus, loss of production of rice is the opportunity cost of producing pulses on a given land.
- However, this is an unavoidable opportunity cost.
- But environmental degradation, occurring due to growth and development is not unavoidable. It is an avoidable opportunity cost.



Deforestation—Depreciation of Natural Capital

### Three Factors Contributing to Deforestation

- (i) Growing industrial demand for wood and other forest products.
- (ii) Growing demand for wood owing to explosive rise in population.
- (iii) River valley projects.

- (ii) Industrialisation leads to urbanisation and urbanisation induces deforestation. More and more forests are cleared for the development of townships.  
Industrialisation apart, requirement of wood by the households (used as fuel) also leads to deforestation.  
In India, explosive population size has contributed to explosive demand for firewood; consequently tree-felling has happened at a rapid pace.
- (iii) Multi-purpose River Projects (like Bhakra Dam or Damodar Valley Project) are another factor contributing to deforestation.

### Yes, it is Alarming!

According to India State of Forest Report, 2017, area of 'very dense forest' in India is merely  $98,158 \text{ km}^2$  (= 2.99 per cent of total land area), and area of 'moderately dense forest' is about  $3,08,318 \text{ km}^2$  (= 9.38 per cent of total land area).

Read it in the backdrop of the fact that the recommended forest cover for country is 1,000 lakh hectares (= 33 per cent of the total land area).

### WHAT SOCIAL FORESTRY AIMS AT?

Social forestry aims at:

- (i) Restoring or rehabilitating the forestry. It amounts to reversing the process of deforestation.
- (ii) Spreading the vegetation cover on land, to further enhance the area under forests.
- (iii) Encouraging commercial production of raw material for the paper industry as well as the match industry, so that the existing forests are not invaded.
- (iv) Encouraging the growth of fast growing trees meeting the emerging requirement of timber as well as firewood.
- (v) Generating employment opportunities through afforestation.



Social Forestry—An Attempt to restore Forest Cover in the Country



Degradation of Land leads to Loss of Fertility

### Degradation of Land

Degradation of land means loss of fertility (or loss of productivity) of land which occurs due to the following factors:

- ◆ **Soil erosion** caused by strong winds or floods. When we talk of soil erosion, we are referring to loss of upper-layer of the soil (also called top soil) which contains major nutrients (such as nitrogen, phosphorous and potassium) for growth of the plants.

- ◆ Alkalinity and salinity of soil caused by water logging.
- ◆ Excessive water logged on the top soil. It tends to suck up the nutrients of the soil and reduces its fertility.

In India, nearly 50 per cent of the total landed area is exposed to degradation of one type or the other. Some urgent steps relating to soil conservation is the need of the hour.

#### You must understand it

- That soil erosion occurring due to strong winds or floods is further enhanced through deforestation.
- Forests act as a built-in check on soil erosion by resisting the fury of floods and strong winds.

## 4. CAUSES OF ENVIRONMENTAL DEGRADATION

Principal causes of environmental degradation are as under:

- (1) **Population Explosion:** One of the main causes of environmental degradation is population explosion. Pressure of population on land has tremendously increased and consequently land has been ruthlessly exploited. Population explosion has caused substantial conversion of forest land into industrial and residential buildings.
- (2) **Widespread Poverty:** A large section of the Indian population is absolutely poor. These people cut trees for fuel wood which they sell to earn their livelihood. This causes a massive erosion of natural capital.
- (3) **Increasing Urbanisation:** Increasing urbanisation has caused pressure on housing and other civic amenities. It has resulted in increasing demand for land and excessive exploitation of other natural resources.
- (4) **Increasing Use of Insecticides, Pesticides and Chemical Fertilizers:** Increasing use of chemical fertilizers, pesticides and insecticides has also added to environmental pollution.
- (5) **Rapid Industrialisation:** Rapid industrialisation has also contributed to air, water and noise pollution. Industrial smoke is a serious pollutant.
- (6) **Multiplicity of Transport Vehicles:** Multiplicity of transport vehicles has substantially increased noise and air pollution.
- (7) **Disregard for the Civic Norms:** The general public in India tends to disregard the civic norms. Often, the roads are littered, and horns and loudspeakers are indiscriminately used.

Briefly, environmental pollution is the consequence of rapid urbanisation and industrialisation, besides man's disregard to the civil norms. It is culminating into global crises, and needs urgent redressal at the national and international levels.

#### Supply-Demand Reversal

- Environmental degradation owes a great deal to supply-demand reversal of resources over a period of time.
- Prior to industrialisation, when the pace of life was slow, demand for natural resources did not exceed their supply.
- Man lived as a component of nature, never as its commander or its exploiter.
- As industrialisation progressed, there was a surge in human wants.
- Accordingly, there has been an exponential growth in demand for natural resources, leading to their overuse as well as misuse.
- Supply of resources has suffered a reversal from abundance to paucity. Demand, on the other hand, has reversed from manageable to unmanageable limits.

## GLOBAL WARMING

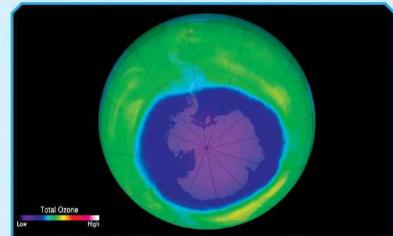
It is a situation referring to a gradual but consistent increase in global temperature, thanks to environmental pollution and deforestation. Owing to emission of **Green House Gases** (carbon dioxide in particular), the earth's surface is becoming increasingly warmer, showing a rise of 0.6°C during the past century. Warming temperature is escalating the melt of polar ice, in turn, implying a rise in sea level. Consequently, ecological balance is impaired, inflicting greater incidence of natural calamities. Ultimately, it implies a threat to human life, though poor countries are to be the first and worst sufferers.



Global Warming: A Gradual Rise in Global Temperature

## OZONE DEPLETION

This refers to reduction in ozone (a protective layer) in the atmosphere. This occurs owing to the excessive use of cooling substances in air conditioners and refrigerators. As ozone depletes, there is greater ultraviolet radiation reaching the earth which is a danger to living organisms. In the recent past, nearly 5 per cent depletion in ozone layer has been recorded which is an issue of global concern.



Ozone Depletion: A Reduction in Protective Layer in the Atmosphere

## 5. STATE OF ENVIRONMENT IN INDIA

India is the habitat of nearly 18 per cent of the world's population, occupying just 2.5 per cent of the world's geographical area.

This along with the fact that 21.9 per cent of the country's population is below poverty line (struggling for food, clothing and shelter) points to certain obvious environmental issues, as these:

- Natural endowment is getting excessively exploited, exceeding the rate of its regeneration,
- Production and consumption wastes are being generated beyond the absorption capacity of the environment, and
- Air pollution, water pollution and sound pollution are peaking up to the alarming limits.

India certainly is in the midst of environmental crises.

### The Dichotomy of Environmental Degradation in India

The environmental degradation in India points to a paradoxical situation in the country. It is occurring and expanding owing to its staggering poverty as well as rapid growth of production activity. The hard facts that:

- Poverty is the principal cause of environmental degradation in rural areas. It is owing to poverty that tree-felling becomes almost an economic compulsion for the millions of poor in rural areas. But, it leads to deforestation.
- Expanding production activity is the principal cause of environmental degradation in the urban areas.  
Industrial smoke is polluting the air and industrial waste is polluting the water.  
Expansion of vehicular traffic (in the wake of expanding production activity) is generating noise pollution, besides contributing to air pollution and global warming.

Degradation of land in terms of soil erosion is a serious concern in the context of environmental issues in India. According to one estimate, India is suffering soil erosion to the tune of nearly 5 billions tonnes a year. Implying a colossal loss of nitrogen, phosphorus and potassium, which are the essential ingredients of soil fertility and essential inputs of crop production.

#### **Principal Factors Contributing to Land Degradation in India**

- (i) Loss of vegetation due to desertification and deforestation (Desertification refers to spread of deserts in arid and semi-arid areas. It occurs due to excessive grazing).
- (ii) Multiple cropping along with subsistence farming by the small and marginal holders who fail to replenish fertility of the soil.
- (iii) Excessive use of chemical fertilizers, insecticides and pesticides which raise productivity but are a challenge to soil fertility.
- (iv) Low water-table, owing to excessive use of groundwater.
- (v) Soil erosion occurring due to floods and strong winds, and soil alkalinity/salinity occurring due to water logging.

## **How to Save Environment?**

Following measures need to be taken to protect environment:

- (1) **Social Awareness:** There is an urgent need to spread social awareness about (i) the dangers of pollution, and (ii) the way each individual can combat it.
- (2) **Population Control:** It is absolutely essential to check rising population if environment is to be protected.
- (3) **Enforcement of Environment Conservation Act:** The Environment (Protection) Act was passed in 1986 in India. Its objective is to check deterioration in the quality of environment. This legislative measure should be strictly enforced.
- (4) **Afforestation Campaign:** Extensive afforestation campaign should be launched to protect environment.

- (5) **Control over Industrial and Agricultural Pollution:** It is essential for environmental protection that air and water pollution caused by industrial development are managed and controlled. To avoid agricultural pollution, use of pesticides and chemical fertilizers should be restricted.
- (6) **Water Management:** River waters should be kept clean and provision be made to supply clean drinking water to the rural people.
- (7) **Management of Solid Waste:** Planned management of solid waste is very essential. It should be treated chemically. Rural garbage should be converted into compost.
- (8) **Improvement in Housing:** Houses should be neat and clean. Slums should be replaced by airy and well-lighted dwelling houses. Let us not offer others the opportunity of calling us 'Slum-dogs'.

In short, economic development and environment protection should be made complementary to each other. Clean environment is an essential prerequisite of healthy living.

#### Pollution Control Boards

- Central Pollution Control Board was set-up in 1974, followed by similar boards at the state level to address the major environmental concerns in India.
- These boards specify benchmarks of the tolerable range of effluent and emissions.
- Besides, they are spreading awareness among the people about the extent and possible dangers of environmental pollution.
- Also these boards offer technical assistance relating to improvement of environment.

## 6. SUSTAINABLE DEVELOPMENT

Sustainable Development is that process of economic development which aims at raising the quality of life of both present and future generations, without threatening natural endowment and environment. The most widely recognised definition of sustainable development, as phrased by the Brundtland Commission in 1987 is, "*Sustainable development is development that meets the needs of the present generation without impairing/reducing the ability of future generations to meet their own needs.*"

In the recent past, the process of economic growth was viewed in complete disregard to the resource endowment and environment. Notably:

- (i) Diverse crops grown on land have led to a fall in soil fertility.

- (ii) Excessive mining of iron, coal, gold, silver and extraction of crude oil has led to the depletion of their stock.
- (iii) Smoke and other injurious emissions from factories and transport vehicles has led to pollution of environment.

Briefly, the competitive process of growth and development has led to environmental degradation and environmental pollution to an alarming extent.

It is only recently that environmental degradation and environmental pollution have been recognised as an emerging challenge to the quality of life (of the present and future generations). The concept of sustainable development is now being understood and widely propagated. What the planners and the politicians are now seeking is not merely growth, but the growth that sustains the quality of life over a much longer period of time. This requires rational utilisation of the resources, rather than fuller utilisation of the resources.

*Sustainable development is that process which fulfils the needs of present generation without challenging the ability of the future generations to fulfil their needs. Implying that the resources are not fully exploited, but rationally utilised.*

## Features of Sustainable Development

Main features of sustainable development are as under:

- (1) **Sustained Rise in Real Per Capita Income and Economic Welfare:** There should be a sustained rise in real per capita income and economic welfare over time.
- (2) **Rational Use of Natural Resources:** Sustainable development does not mean that natural resources should not be used at all. It simply means that natural resources be rationally used in a manner such that they are not excessively exploited.
- (3) **Ability of Future Generations to Fulfil their Needs not to be Impaired:** Sustainable development stresses the point that the ability of the future generations to fulfil their needs is not impaired in the wake of competitive growth process. For example, if non-renewable sources of energy (like oil) are irrationally used to increase present production, it would only be at the cost of lesser resource endowment for the future generations. Such a development process is not sustainable over a long period of time.

### Features of Sustainable Development

- (i) Sustained rise in real per capita income and economic welfare.
- (ii) Rational use of natural resources.
- (iii) No reduction in the ability of future generations to meet their own needs.
- (iv) No increase in pollution.

**(4) Check on Pollution:** Sustainable development discards (or does not approve of) those activities (related to growth) which induce environmental pollution. Environmental pollution is to be viewed as an element of social cost.

## 7. STRATEGIES FOR SUSTAINABLE DEVELOPMENT

The concept of sustainable development does not suggest delimiting the process of growth and development. Sustainable development only suggests a judicious or optimum utilisation of resources and in a manner such that the pace of economic growth is sustained without challenging the ability of the future generations to grow and prosper.

- Sustainable development does not mean a check on the existing pace of economic growth.
- It only means a judicious or optimum utilisation of resources and in a manner such that the pace of growth is sustained without challenging the ability of the future generations to grow and prosper.

How can it be achieved? What are the possible strategies for achieving sustainable development? Following observations may be noted in this context:

**(1) Input-Efficient Technology:** We are to devise such production technologies which are input-efficient. It means output is maximised. This will moderate the stress on resource endowment per unit of input.

**(2) Use of Environment-Friendly Sources of Energy:** LPG and CNG are cleaner fuels and environment-friendly.

The use of these fuels must be encouraged in place of petrol and diesel which emit huge amount of carbon dioxide adding to the stock of Green House Gases.

People in rural areas should be discouraged from using wood as a fuel. It causes deforestation and unwarranted degradation of resources. Instead, gobar gas plants may be developed as a source of domestic fuel.

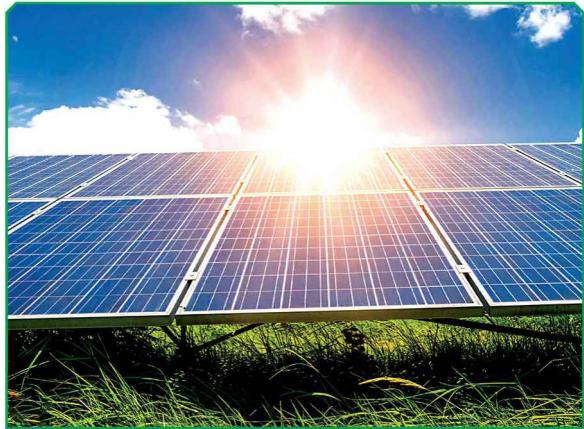
**(3) Integrated Rural Development:** Integrated rural development must be given a high priority in the programmes of state planning. This will generate employment opportunities in rural areas, restricting migration to urban areas.

If rural-urban migration is checked, transportation needs will automatically be reduced.

Also, this will reduce the stress on social infrastructure in urban areas. Accordingly, one can expect a check on environmental pollution.

**(4) Convert Sunlight into Solar Energy and Solar Energy into Electricity:** Here, following observations may be noted:

- ◆ India is endowed with abundant sunlight which is a rich source of energy.
- ◆ Sunlight is both environment-friendly as well as a non-exhaustible source of energy.
- ◆ Conversion of solar energy into electricity is no longer a distant dream, though the technology is yet to become widely innovative.
- ◆ Solar energy (and its conversion into electricity) is an effective answer, not only to the problem of economic growth, but also to the problem of sustainable development.



Solar Power: Sunlight into Electricity

**(5) Shift to Organic Farming:** Use of chemical fertilizers, insecticides and pesticides has raised crop yield. But, it has damaged/lowered soil fertility. Implying loss of production capacity for the future generations. It is high time that we switch over to organic farming which focuses on soil-health rather than the plant-health.



Organic Farming: Avoiding Chemical Fertilizers, Insecticides and Pesticides

**(6) Manage the Wastes:** Rather than allowing the industrial waste and household garbage to litter around or flow into the streams and rivers, we must systematically manage them. Household waste can be recycled into compost and used as a manure for organic farming.

**(7) Stringent Laws on the Disposal of Chemical Effluents:** India is a land where laws lack enforcement. Chemical effluents from the industrial units are invariably driven into the streams and rivers, polluting water and endangering aquatic life. Such a serious violation of the laws must be checked in case growth and environment are to go together.

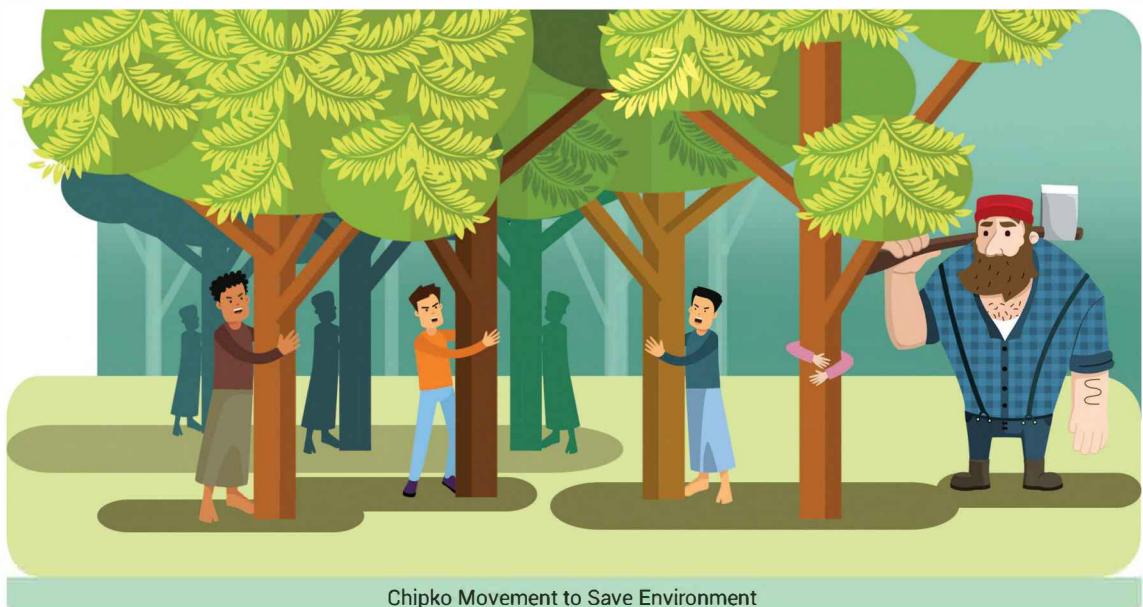
**(8) Awareness to Conserve Natural Assets for Inter-Generational**

**Equity:** Inter-generational equity means equal opportunities (to grow and prosper) for the present and future generations.

Indians are highly conscious of inter-generational equity at the micro level. At the family level, we do our best to preserve our assets for the benefit of our future generations.

But this awareness is absolutely negligible at the macro level (the national level). Seldom we think of conserving our natural wealth for the future generations.

Of course, there are examples like of '[Chipko](#)' movement in the north and '[Appiko](#)' movement in the south as attempts to stop tree-felling. But such examples are yet to culminate into a national awareness to save environment and natural assets for the future generations.



**(9) Public Means of Transport:** Public means of transport are to be

rapid, comfortable and economical. **Example:** Metro in Delhi. Such means of transport must be extended to the sub-urban areas as well. This will cut the private vehicular traffic in and around the metro cities. Accordingly, environmental pollution (air and noise pollution in particular) will be curbed/reduced.



Public Transport curbs Environmental Pollution

Briefly, sustainable development is a process to be adopted as a daily-life activity. It is not simply a specially designed programme or process of production to be pursued by the government.

It is more about our awareness of the implications of what we are doing as producers and consumers.

It is more about our concerns for future generations and our social responsibilities.

More than monetary costs, it involves real costs in terms of our efforts for the betterment of society as a whole.

**Note that:**

- ◆ As producers, we are to be conscious of using environment-friendly techniques of production and environment-friendly techniques of disposal of the wastes.
- ◆ As consumers, we are to be conscious of using environment-friendly goods and services, and environment-friendly means of garbage disposal.

The government should contribute its bit through enforcement of the laws relating to the protection of environment.

Stretching our environment to serve us beyond its capacity would only mean reducing its capacity to serve us in the future. This is where the process of development fails to be sustainable.

## **Power Points & Revision Window**

- **Environment:** It is defined as all those conditions and their effects which influence human life. It includes: biotic components, *viz.*, plants and animals, and abiotic components, *viz.*, water and air.
  - **Significance/Functions of Environment:** (i) It offers resources for production, (ii) It sustains life, (iii) It assimilates wastes, (iv) It enhances quality of life.
  - **Two Basic Elements of Environmental Degradation:** (i) Problem of pollution, (ii) Problem of excessive exploitation of natural resources.
  - **Environment Pollution** includes: (i) Air pollution, (ii) Water pollution, (iii) Noise pollution.
  - **Excessive Exploitation of Natural Resources** implies: (i) Degradation of land, (ii) Deforestation, (iii) Excessive use of non-renewable resources.
  - **Causes of Environmental Degradation:** (i) Population explosion, (ii) Widespread poverty, (iii) Increasing urbanisation, (iv) Increasing use of insecticides, pesticides and chemical fertilisers, (v) Rapid industrialisation, (vi) Multiplicity of transport vehicles, (vii) Disregard to the civic norms.
  - **Global Warming** refers to a gradual, but consistent rise in atmospheric temperature.
  - **India's Environment:** A typical situation of dichotomy of environmental degradation—a situation where both poverty and prosperity contribute to environmental degradation.
  - **How to Save Environment?:** (i) Social awareness, (ii) Population control, (iii) Enforcement of Environment Conservation Act, (iv) Afforestation campaign, (v) Control over industrial and agricultural pollution, (vi) Water management, (vii) Management of solid waste, (viii) Improvement in housing.
  - **Sustainable Development:** A process of development that does not cause environment degradation and therefore, does not reduce production capacity of future generations.
  - **Strategies for Sustainable Development:** (i) Input-efficient technology, (ii) Use of environment-friendly sources of energy, (iii) Integrated rural development, (iv) Convert sunlight into solar energy and solar energy into electricity, (v) Shift to organic farming, (vi) Manage the wastes, (vii) Stringent laws on the disposal of chemical effluents, (viii) Awareness to conserve natural assets for inter-generational equity, (ix) Public means of transport.



## 1. Objective Type Questions (Remembering & Understanding based Questions)

## A. Multiple Choice Questions

## Choose the correct option:



13. Which of the following is the strategy for sustainable development?

  - (a) Integrated rural development
  - (b) Shift to organic farming
  - (c) Output-efficient technology
  - (d) Both (a) and (b)

## Answers

1. (c)      2. (d)      3. (c)      4. (d)      5. (c)      6. (d)      7. (b)      8. (d)      9. (d)      10. (d)  
11. (b)      12. (d)      13. (d)

## B. Fill in the Blanks

**Choose appropriate word and fill in the blank:**

- resources are those which can be replenished.  
(Renewable/Non-renewable)
  - Carrying capacity of environment refers to the situation when generation of waste exceed the absorption capacity of environment. (does/does not)
  - pollution causes hypertension, asthma, respiratory problems. (Air/Water)
  - Thermal power houses discharging ash mixed with water is an example of pollution.  
(water/soil)
  - forestry aims at reversing the process of deforestation. (Social/Ecological)
  - Alkalinity and salinity of soil is caused by . (water logging/water pollution)
  - is the strategy of sustainable development.  
(Shift to organic farming/Output efficient technology)
  - is a situation referring to a gradual but consistent increase in global temperature.  
(Global warming/Ozone depletion)
  - Population control go a long way in combating environmental degradation.  
(can/cannot)
  - Sustainable development requires the use of .  
(output-efficient technology/input-efficient technology)

## Answers

1. Renewable      2. does not      3. Air      4. Water      5. Social  
6. water logging      7. Shift to organic farming      8. Global warming      9. can  
10. input-efficient technology

### C. True or False

**State whether the following statements are True or False:**

1. Environment Protection Act was passed in the year 1986. (True/False)
  2. Mechanisation has raised the level of efficiency, but it has equally raised the level of noise pollution. (True/False)
  3. Industrialisation is a bane as it offers a variety of things to consume. (True/False)

4. Sustainable development requires the use of environment-friendly sources of energy. (True/False)
5. Civilisation rises with urbanisation, but environment suffers degradation. (True/False)
6. Social forestry discourages the growth of commercial production of raw material for the paper industry. (True/False)
7. Ozone depletion occurs owing to the excessive use of cooling substances in air conditioners and refrigerators. (True/False)
8. Owing to emission of Green House Gases, the earth's surface is becoming increasingly warmer. (True/False)
9. Expanding consumption activity is the principal cause of environmental degradation in India. (True/False)
10. It is essential to check rising population if environment is to be protected. (True/False)

### Answers

1. True    2. True    3. False    4. True    5. True    6. False    7. True    8. True    9. False    10. True

### D. Matching/Chronological

#### I. From the set of statements given in Column I and Column II, choose the correct pair of statements:

Column I	Column II
(a) Physical elements	(i) Plants and animals
(b) Renewable resources	(ii) Fossil fuels
(c) Degradation of land	(iii) Loss of fertility of land
(d) Excessive tree-felling	(iv) An example of misuse of resources

### Answer

(c) Degradation of land— (iii) Loss of fertility of land

#### II. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:

Column I	Column II
(a) Social forestry	(i) Aimed at raising the quality of life for both present and future generations
(b) Poverty	(ii) Stringent laws on the disposal of chemical effluents
(c) Sustainable development	(iii) Generating employment opportunities through afforestation
(d) Strategy for sustainable development	(iv) Principal cause of environmental degradation

### Answers

(a)—(iii), (b)—(iv), (c)—(i), (d)—(ii)

## E. 'Very Short Answer' Objective Type Questions

1. Define economic growth.

Ans. Economic growth refers to long-term increase in real per capita income.

2. Define economic development.

Ans. Economic development refers to long-term increase in real per capita income, along with equitable distribution.

3. What is the main difference between economic development and sustainable development?

Ans. Economic development refers to long-term increase in real per capita income, along with equitable distribution for the present generation.

Sustainable development refers to increase in real per capita income, along with equitable distribution both for the present and future generations.

4. Give two examples of biotic components of environment.

Ans. Plants and animals.

5. Give two examples of abiotic components of environment.

Ans. Water and air.

6. Define carrying capacity of environment.

Ans. Carrying capacity of environment refers to the situation when:

(i) exploitation of resources does not exceed the regeneration of resources, so that the resource endowment is not depleted, and

(ii) generation of wastes does not exceed the absorption capacity of environment, so that environment is not polluted.

## 2. Reason-based Questions (Comprehension of the Subject-matter)

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**Read the following statements carefully. Write True or False with a reason.**

1. Poverty leads to compulsive deforestation.

Ans. True. **Reason:** Owing to poverty, people are compelled to use wood as a domestic fuel. Need for wood leads to tree-felling. Hence, deforestation.

2. Private transport is less environment-friendly than the public transport.

Ans. True. **Reason:** Use of private transport implies that there is a larger number of vehicles on the road than when the public transport is used.

3. Larger the number of red-light signals on the roads, greater is the environmental pollution.

Ans. True. **Reason:** Because, it is more frequently that the vehicles are to stop at the red-light signals, which leads to unwanted emission of smoke.

4. Check on population growth in India will lead to a check on environmental pollution.

Ans. True. **Reason:** Because, India is sustaining excessive population, much in excess of what our resources permit us. It leads to excessive exploitation of resources as well as excessive environmental pollution.

5. Environment offers production resources.

Ans. True. **Reason:** Because, environment includes air, water, soil, minerals and other natural resources. All these are used as production resources.

- 6. Environmental pollution leads to loss of national wealth.**
- Ans. True. **Reason:** Environmental pollution in the form of industrial waste driven to the waterbodies leads to the loss of aquatic life. It is definitely a loss of national wealth.
- 7. Input-efficient technology is environmental-friendly.**
- Ans. True. **Reason:** Input-efficient technology saves inputs per unit of output. Accordingly, it reduces stress on the country's resource endowment, and is therefore, environmental-friendly.

### **3. HOTS & Applications**

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- 1. Do you agree with the view that the use of public transport in place of personal transport reduces environmental degradation?**
- Ans. It is absolutely correct that the use of public transport in place of personal transport reduces environmental degradation. First, it reduces environmental pollution. Because, when we switch over from personal transport to public transport, the number of vehicles on the road is significantly reduced. This reduces air pollution as well as sound pollution. Second, we economise the use of non-renewable energy (petrol and diesel) which avoids environmental degradation.
- 2. Write two observations on how carrying capacity of environment is being challenged in India.**
- Ans. (i) There is unabated/unchecked flow of industrial waste into the rivers and other waterbodies in the country.  
(ii) There is a massive unauthorised construction (unmindful of the rules and regulations), leading to air pollution that impairs the quality of life.
- 3. How is sustainable development different from non-sustainable development?**
- Ans. Non-sustainable development is that process of growth which focuses on the pace of growth without accounting for environmental degradation.  
Sustainable development is that process of growth which focuses on the pace of growth but always accounts for the environmental degradation.
- 4. How migration from rural to urban areas leads to environmental degradation? Write one significant observation.**
- Ans. Migration from rural to urban areas leads to a stress on civic amenities, housing in particular. Often forests are invaded for the construction of houses. It implies deforestation and deforestation implies environmental degradation.

### **4. Analysis & Evaluation**

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- 1. Do you agree with a view that environmental degradation is an avoidable opportunity cost of development? Write your observations as a student of economics.**
- Ans. Opportunity cost is the sacrifice made for enjoying an opportunity. This may be categorised as: (i) avoidable, and (ii) unavoidable. It is unavoidable when, for example, wheat is grown on a piece of land in place of rice. Loss of output of rice is an unavoidable opportunity cost of producing wheat. Opportunity cost is avoidable when, for example excessive smoke is emitted (than the permissible-limit), because of the poor maintenance of the vehicles. Other examples of avoidable opportunity cost are: (i) Deforestation occurring due to illegal tree-felling, (ii) Water pollution

and loss of aquatic life due to drainage of industrial waste into the rivers, (iii) Illegal construction of residential houses, causing excessive exploitation of water resources of a particular region, (iv) Illegal mining leading to extinction of waterbodies, and so on.

Briefly, avoidable opportunity cost occurs in terms of environmental pollution and environmental degradation. This is avoidable opportunity cost of development. Development process becomes sustainable only when this avoidable opportunity cost is actually avoided.

**2. Challenge of poverty must be addressed prior to the challenge of environmental degradation. State your views.**

**Ans.** It is true that the challenge of poverty must be addressed prior to the challenge of environmental degradation. This is because poverty itself is a significant source of environmental degradation. Here are some examples:

- (i) It is because of poverty that the rural and tribal population resorts to tree-felling to obtain wood for domestic fuel. It causes environmental degradation in terms of deforestation.
- (ii) It is because of poverty that the slums are mushrooming across all parts of the country. This also contributes to environmental degradation, by way of excessive exploitation of underground water and by way of excessive release of domestic waste into the waterbodies.
- (iii) It is because of poverty that population growth is enormously high in India. The poor consider additional child more as an earning hand and less as a liability. Therefore, they have large families. But, the rapidly expanding population adds to environmental pollution as well as environmental degradation (excessive exploitation of natural resources).

The above observations offer an ample of support to the hypothesis that poverty must be addressed as a serious challenge in case we want to address the problem of environmental degradation.

**3. Sustainable development is a process to be adopted as a daily life activity. Write your observations.**

**Ans.** It is an undisputed fact that sustainable development is a process to be practised as a daily life activity.

Sustainable development is achieved when:

- (i) environmental pollution is combated, and
- (ii) environmental degradation is stopped.

In our daily life activity, we can contribute to tackling environmental pollution when:

- (i) we stop littering the roads and public places,
- (ii) we maintain our vehicles according to the specified standards, so that emission of smoke is minimised, and
- (iii) we start relying more on public transport, so that vehicular traffic is reduced and pollution is minimised.

Likewise, we can contribute to minimising environmental degradation when:

- (i) we recycle the waste, particularly of water and paper,
- (ii) we refrain from tree-felling to obtain fire wood,
- (iii) we do not build our residential houses in unauthorised areas, and

- (iv) as producers we use only the environment-friendly techniques relating to production, and disposal of the industrial waste.

Briefly, we should not stretch our environment to serve us beyond its capacity. If we do, sustainable development would remain a far cry.

4. HYV is a familiar concept to you. It caused a revolutionary change in agricultural productivity. But, at the same time, it has silently been contributing to the degradation of soil, implying environmental degradation. Give a thought to this paradox and write your suggestion to address it.

Ans. HYV technology induces environmental pollution as it is based on the extensive application of chemical fertilizers, insecticides and pesticides. This technology is crop-friendly, but not soil-friendly. It erodes fertility of the soil and pollutes ground water. Organic farming is recommended as an alternative which is soil-friendly. But this technology is not crop-friendly. Crop productivity is significantly reduced when we shift from HYV-based conventional farming to organic farming. Accordingly, we have to strike a balance between the two technologies. We should shift to organic farming, keeping in mind the fact that the loss of productivity does not lead to food scarcity in the country.

## 5. NCERT Questions (With Hints to Answers)

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1. What is meant by environment?

[Hint: Environment is defined as all those conditions and their effects which influence human life. It is the sum total of surroundings and the totality of resources that affect our existence and the quality of our life.]

2. What happens when the rate of resource extraction exceeds the rate of their regeneration?

[Hint: It leads to environmental crises.]

3. Two major environmental issues facing the world today are \_\_\_\_\_ and \_\_\_\_\_.

[Hint: Environmental pollution and degradation of natural resources.]

4. What are the functions of the environment?

[Hint: The main functions of environment are as these:

(i) **Environment Offers Resources for Production:** Environment includes physical resources (minerals, wood, water, soil and others) which are available to us as a free gift of nature. These resources are used as inputs for production. In fact, production is simply the process of conversion of natural resources into useful things.

(ii) **Environment Sustains Life:** Environment includes sun, soil, water and air which are essential ingredients for the sustenance of human life. Absence of these elements of environment implies the end of life.

(iii) **Environment Assimilates Waste:** Production and consumption activities generate wastes. This occurs mostly in the form of garbage. Environment absorbs it.

(iv) **Environment Enhances Quality of Life:** Surroundings include rivers, oceans, mountains and deserts. Man enjoys these surroundings, adding to the quality of his life.]

**5. Identify six factors contributing to land degradation in India.**

[Hint: Following factors contributing to land degradation in India:

- (i) Deforestation.
- (ii) Unsustainable fuel wood and fodder extraction.
- (iii) Shifting cultivation.
- (iv) Encroachment of forest lands.
- (v) Forest fires and over grazing.
- (vi) Lack of soil-conservation measures.]

**6. Explain how the opportunity costs of negative environmental impact are high.**

[Hint: Opportunity costs of negative environmental impact include two principal elements:

- (i) loss of production capacity of future generations (owing to excessive exploitation of natural resources by the present generation), and
- (ii) environmental pollution (in terms of air pollution, water pollution and sound pollution).

Both these elements of opportunity cost tend to assume exponential growth in the pursuit of rapid GDP growth. Consequently, the growth process itself becomes un-sustainable, besides causing a massive set-back to the quality of life (in the wake of environmental pollution). The opportunity cost of negative environmental impact is so high that it is being considered as an emerging challenge of the growth process.]

**7. Outline the steps involved in attaining sustainable development in India.**

[Hint: Following steps have been taken for attaining sustainable development in India:

- (i) Use of input-efficient technology.
- (ii) Use of environment-friendly sources of energy.
- (iii) Integrated rural development so that migration of rural population to urban areas is curtailed.
- (iv) Conversion of sunlight into solar energy and solar energy into electricity.
- (v) A focus on organic farming.
- (vi) Efficient management of the wastes.
- (vii) Stringent laws on the disposal of chemical effluents.
- (viii) Spread of awareness to conserve natural assets for inter-generational equity.
- (ix) Use of public means of transport.]

**8. Give two instances of:**

**(a) Overuse of environmental resources.**

**(b) Misuse of environmental resources.**

[Hint: (a) Examples of Overuse of Environmental Resources:

- (i) Excessive exploitation of fossil fuels.
- (ii) Excessive tree-felling to cope with the rising need of housing in urban areas.

(b) Examples of Misuse of Environmental Resources:

- (i) Use of wood as a household fuel.
- (ii) Use of rivers to absorb industrial effluents.]

**9. Explain the supply-demand reversal of environmental resources.**

[Hint: Environmental degradation owes a great deal to supply-demand reversal of resources over a period of time. Prior to industrialisation, when the pace of life was slow, demand for natural resources did not exceed their supply. As industrialisation progressed, there was a surge in human wants. Accordingly, there has been an exponential growth in demand for natural resources, leading to their overuse as well as misuse. Supply of resources has suffered a reversal from abundance to paucity. Demand, on the other hand, has reversed from manageable to unmanageable limits.]

**10. What is sustainable development?**

[Hint: Sustainable development is that process of economic development which aims at raising the quality of life of both present and future generations, without threatening natural endowment and environment.]

## **6. Miscellaneous Questions and Reference to the Text for Answers**

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1. How would you explain the concept of environmental crises to an individual who has never studied economics? [Page 291–295]
2. How does poverty induce environmental degradation in India? [Page 295]
3. Explain the concept of sustainable development in relation to exploitation of the natural resources. [Page 298, 299]
4. Industrialisation leads to environmental degradation. Do you agree? [Page 295]
5. Write a note on global warming. [Page 296]
6. What in your opinion should be the principal strategy of sustainable development? [Page 300–303]
7. How is environment crises an avoidable opportunity cost of development? [Page 293]
8. Explain the concepts of misuse of resources and overuse of resources, citing suitable examples. [Page 291]

## APPENDIX

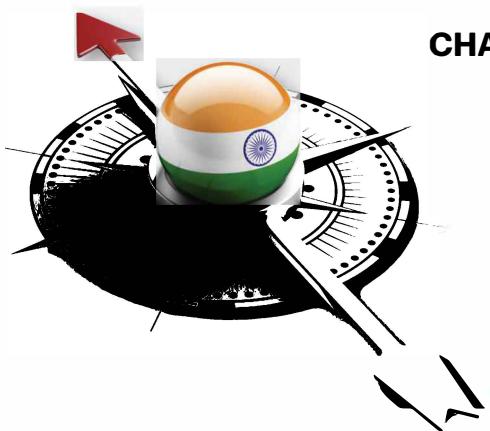
### Concepts of Economic Growth, Economic Development and Sustainable Development: Some Principal Differences

Economic Growth	Economic Development	Sustainable Development
(i) It refers to long-term increase in real per capita income.	(i) It refers to long-term increase in real per capita income along with equitable distribution for the present generation.	(i) It refers to increase in real per capita income along with equitable distribution, both for the present and future generations.
(ii) This concept is generally used with reference to developed economies.	(ii) It is generally used in the context of underdeveloped economies.	(ii) It is used for both developed and underdeveloped economies.
(iii) It ignores distribution of income.	(iii) It accounts for the distribution of income.	(iii) It accounts for the distribution of income.
(iv) It ignores protection of environment.	(iv) It lays no special emphasis on environmental protection.	(iv) It lays special emphasis on environmental protection.
(v) It does not account for the exploitation of natural capital.	(v) It does not account for the exploitation of natural capital.	(v) It emphasises rational utilisation of natural capital to safeguard the interests of future generations.
(vi) It does not account for structural, technical and institutional changes in the economy.	(vi) Lays special stress on the structural, technical and institutional changes in the economy.	(vi) Lays stress on social awareness and social responsibilities as crucial inputs of development over longer periods of time.



# DEVELOPMENT

## EXPERIENCE OF INDIA, PAKISTAN AND CHINA— A COMPARATIVE STUDY



**TO  
DO**

- *Strategy of Growth of India, Pakistan and China*
- *Comparative Performance of the Economies of India, Pakistan and China in terms of:*
  - (a) *GDP growth,*
  - (b) *Structure of growth,*
  - (c) *Demographic profile, and*
  - (d) *Human Development*
- *Common Success Story of India and Pakistan*
- *China's Edge Over India*



Countries with Similar Strategies of Growth, but Diverging Performance

## I. STRATEGY OF GROWTH OF INDIA, PAKISTAN AND CHINA

After independence (1947), India and Pakistan adopted almost a similar strategy of growth. The principal features of this strategy are as under:

- (i) It was a mixed-economy model of growth
- (ii) The strategy of growth underlined the significance of both private and public sectors.
- (iii) Public sector was assigned the key role of 'kick-starting' the process of growth.
- (iv) Private sector was assigned the secondary role of pushing the process of growth.

### Why was the public sector assigned the key role?

This was because:

- (i) Partition of the country (into India and Pakistan) had rendered both the economies as laggard economies (slow growing or backward economies).
- (ii) Both the economies needed a big push of investment. Only the government could afford it. Hence, the greater reliance on the public sector.

China, on the other hand, adopted a more rigorous model of growth. Established as People's Republic of China in 1949, it decided to bring all critical areas of production activity under government control. National resources (included all land) were declared a government monopoly.

Thus, China adopted 'Statism' as a model of growth in which:

- (i) Ownership of all resources vested with the state, and
- (ii) The state was to decide what to produce, how to produce and for whom to produce.

The common element in the strategies of growth adopted by China, India and Pakistan are as under:

- (i) All the countries relied on public sector as the core sector of the economy.
- (ii) Also, all the three economies relied basically on 'inward-looking' strategy of growth. It focussed on protection of the domestic industry, insulating it from foreign competition.

However, while Chinese economy was like a closed economy, the economies of India and Pakistan had very limited integration with the other global economies. FDI (foreign direct investment) was considered as a bane rather than a boon in the process of growth.

In China, all the national resources were under the control and command of the government. In India and Pakistan, on the other hand, private ownership of resources was allowed. Which is why the strategy/model of growth adopted by China is termed as '*statism*' (complete ownership of resources by the state), while the strategy/model of growth adopted by India and Pakistan is called the '*mixed economy growth model*'.

Over time, the strategy of growth has undergone a significant change in India and Pakistan as indicated by the following observations:

- (i) The government in both the economies are now relying on a model of growth which continues to be mixed economy model. But it is the one which assigns greater importance to the private sector rather than the public sector, and
- (ii) Now, the model of growth is the one which assigns greater importance to FDI rather than the domestic investment.

In China, on the other hand, the core element of the growth model has not changed. It continues to be a state-managed economy.

However, a substantial transformation has occurred in China in terms of the integration of the economy with the rest of the world. The Chinese economy has shown a significant transformation from a closed economy to an open economy. It now largely depends on external demand: it is an export-oriented economy. FDI is now accorded a high priority in the context of economic growth.

It is owing to the change in the strategy of growth, that all the three economies (India, China and Pakistan) have succeeded in achieving a breakthrough in their growth-path. Thus:

- (i) GDP growth has taken a substantial jump in the economies of India, Pakistan and China.
- (ii) The structure of growth has recorded a significant transformation, and
- (iii) The demographic profile is being re-written, and human development index has broken its stagnation.

However, it needs to be noted that the performance of these three economies with respect to the various indicators of growth has been different.

China has established a substantial lead over India and Pakistan, particularly in the areas of GDP growth and the structural transformation.

In what follows, we discuss the comparative performance of the three economies with reference to the various indicators of growth.

## 2. COMPARATIVE PERFORMANCE OF THE ECONOMIES OF INDIA, CHINA AND PAKISTAN

Comparative performance of the economies of India, China, and Pakistan is studied with reference to the parameters of: (1) GDP Growth, (2) Structure of Growth, (3) Demographic Profile, and (4) Human Development.

### (I) GDP Growth

Following discussion offers a brief description of the growth story of China, India and Pakistan.

#### Growth Story of China

##### Great Leap Forward

- Great Leap Forward (GLF) was the campaign launched in China in 1958 to accomplish economic and industrial development at faster rate.
- It focussed on widespread industrialisation of the economy, encouraging people to set-up household industry in their backyard.

The principal points explaining the growth story of China are as under:

- (i) In 2019, GDP in China was estimated to be 14.2 trillion USD (US dollars). It achieved the distinction of 2nd largest economy in the world (next only to US).
- (ii) Between 1979-2017, average annual GDP growth was estimated to be about 9 per cent. GDP growth reached its peak of 15.2 per cent in 1984, and it touched the bottom of 3.8 per cent in 1990. In 2018, GDP growth rate was 6.6 per cent.
- (iii) China achieved a breakthrough in GDP growth in the early 1980's. The jump has indeed been very substantial: from about 4 per cent per annum to nearly 10 per cent per annum. The breakthrough is attributed to the following factors:
  - (a) Shift from a centrally planned economy to a market economy.
  - (b) Focus on export-related domestic production.
  - (c) Influx of FDI.
  - (d) Availability of cheap labour force, giving China a comparative cost advantage.
  - (e) GLF(Great Leap Forward) campaign (launched in 1958).



Great Leap Forward—A Campaign launched in China (1958) to promote GDP Growth

- (iv) Quantum jump in FDI was achieved through the following steps:
  - (a) China established SEZ (Special Economic Zones). These zones offered all basic amenities to the investors. Accordingly, China became a lucrative destination for FDI.
  - (b) Hundred per cent equity investment permit for the foreign investors and free flow of FDI in the retail sector were the typical inducement parameters for the global investors.
- (v) **A jump in GDP growth was achieved not only through FDI, but also through domestic investment.** As noted above, domestic investment was induced through GLF campaign.

It was a campaign to generate awareness among the people that they can play a significant role in the process of GDP growth by establishing industrial units, even in their courtyards. There were no checks and no restrictions.

The campaign was so motivating that it almost generated a momentum for economic growth.

- (vi) Relying basically on external demand, China achieved a record growth in exports and by 2010 it emerged as the largest exporter in the global market.

**However, in the recent past (2014-15, 2015-16, 2016-17 and 2017-18), GDP growth in China has slowed down. Some notable reasons in this regard are as under:**

- (a) Slowdown in the global economies (European economies in particular) has lowered the demand for the Chinese products.
- (b) Growth of domestic demand in China is slowing down. This is because of the rising propensity to save in the Chinese economy. (Propensity to save refers to the ratio between saving and GDP.)
- (c) Corruption and economic crimes have tended to rise over time.
- (d) Chinese people are now exploring higher wage opportunities of employment. It is leading to massive migration of the skilled labour to rest of the world. Domestic investors are also exploring opportunities of investment in economies where government intervention is minimum and political as well as social liberty is maximum.
- (e) Chinese Government is battling with the problem of environmental degradation. High GDP growth has led to a serious challenge of sustainable development.

## **Growth Story of India**

Growth story of India is explained in terms of the following observations:

- (i) In 2019, GDP of India was estimated to be 2.972 trillion USD (US dollars). Between the years 1951-2019, Indian economy achieved an average annual growth rate of about 6 per cent.
- (ii) The GDP growth in India showed a substantial rise only after 1991, the year when New Economic Policy was launched. Between the period 1991-2019, GDP growth rate was recorded to be 6 per cent per annum. New Economic Policy that led to a significant rise in GDP, was driven by the following elements of change:
  - (a) A significant shift towards privatisation (selling off government equity in public enterprises to the private entrepreneurs).
  - (b) A big leap/jump towards liberalisation (doing away with controls and quotas).
  - (c) A big push to export-promotion in place of import substitution.
  - (d) Greater reliance on FDI rather than the domestic investment.
- (iii) Deeper integration of the domestic economy with the global economies through the market forces of supply and demand.

However, since 2014, GDP growth has lost its momentum. Opportunities of employment have tended to shrink. Growth without employment is becoming an emerging challenge of the Indian economy.

## **Growth Story of Pakistan**

Following observations highlight the growth story of Pakistan:

- (i) In 2019, GDP of Pakistan was estimated to be 274.05 billion USD (US dollars). Pakistan economy recorded an average annual growth rate of 4.2 per cent between the period 1960-2019.
- (ii) Pakistan achieved a breakthrough in GDP growth in the mid-80's. It was as a consequence of economic reforms, focusing on FDI and greater participation of the private sector in the process of growth.
- (iii) Economic reforms in Pakistan were almost similar to those in India. But, from the beginning of 2008, economic outlook in Pakistan turned to be disappointing. It is attributed to several factors, as these:
  - (a) Pakistan has been gripped by the war of terror. It has eroded business confidence of the domestic as well foreign investors.

Domestic investment as well as FDI has started shrinking. Accordingly, GDP growth has been severely hit.

- (b) Corruption and political instability are the other factors, significantly contributing to economic stagnation of the economy of Pakistan.
- (iv) The average annual growth rate of GDP has slumped to 3.75 per cent between the period 2008-2016. In 2017, economy of Pakistan grew at the rate of 5.3 per cent. In 2019, it further slumped to 3.3 per cent.
- (v) Owing to slow GDP growth, and consequently the low level of income, Pakistan economy has almost sunk into a 'low income-low growth' trap.

### **Conclusion**

Following points sum up the relative growth story of India, China and Pakistan:

- (i) China has outpaced both India and Pakistan with regard to GDP growth.
- (ii) India has performed better than Pakistan. But compared with China, India is way behind.
- (iii) The relative success of China is credited to political stability in China. Besides (unlike India and Pakistan), China has shown a strong political will to use the national resources in the best interest of the nation.

The success of China (in terms of GDP growth) is an eye-opener for most of the developing nations of the world.

China has proved that the most relevant factor in the context of GDP growth is not the availability of resources but good governance by the state and 'good compliance' by the citizens.

## **(2) Structure of Growth (Sectoral Share in Output and Employment)**

We know that the growth process causes a shift in sectoral share in output and employment. As the process of growth and development gathers momentum, percentage share of primary sector in output and employment tends to decrease while that of secondary and tertiary sectors tends to increase. [Table 1](#) sums up the experiences of India,

Pakistan and China in this respect. The table is based on the data-set for the year 2016 or close to it.

**Table 1. Structure of Growth (Sectoral Share in Output and Employment)—India, Pakistan and China**

Sector	Per Cent Share in GDP			Per Cent Share in Employment		
	India	Pakistan	China	India	Pakistan	China
Primary	15.4	24.4	7.9	47	42.3	27.7
Secondary	23.1	19.1	40.5	22	22.6	28.8
Tertiary	61.5	56.5	51.6	31	35.1	43.5

[Source: CIA World Factbook, 2018]

**Note:** This table is to be interpreted in the light of the fact that all the three countries were predominantly agricultural economies. Primary sector in these economies engaged nearly 75% of the workforce and contributed nearly 50% to the country's GDP in 1950.

**Table 1** offers following observations:

- (i) All the three countries have experienced a noticeable structural transformation. No longer primary sector is the principal contributor to GDP.
- (ii) In terms of the sectoral contribution to GDP, economies of India and Pakistan are now relying more on tertiary sector, while the economy of China is relying more on secondary sector.
  - ◆ Experience of China, in this respect, is like the experience of most developed countries in the world.
  - ◆ Historical experience of the developed countries shows that in terms of the percentage share in GDP, it was first the secondary sector and later the tertiary sector which emerged as the leading sector of the economy.
  - ◆ Experience of India and Pakistan, however, shows a major shift directly from primary to the tertiary sector. Implying that lesser emphasis has been given to industrial expansion in India and Pakistan, compared to China.
  - ◆ Expansion of services sector in India and Pakistan is owing to faster integration of these economies with the global economies (under the economic and political impact of the developed nations).

- China has succeeded in placing greater reliance on industrial sector compared to India and Pakistan.
- It is owing to:
  - (i) GLF (the Great Leap Forward), a campaign launched in China in 1958 focusing on widespread industrialisation of the country, encouraging people to set-up household industries in their backyard, and
  - (ii) Policy of 'reforms and opening-up' launched in 1978 which gave a big push to China's manufacturing exports.

- (iii) In terms of employment, the shift from primary to secondary and tertiary sectors has not been as significant in India as in China and Pakistan. India has virtually failed in this respect.

People in India have stuck to primary activities, despite a substantial reduction in percentage contribution of this sector to GDP. Suggesting the fact that while there has been a substantial increase in output outside agriculture (tertiary sector in particular) there has not been a proportionate increase in employment opportunities.

Outside agriculture, increase in output is to be explained more in terms of increase in productivity (caused by new technology) rather than increase in employment. This is like an economy slipping into a 'jobless growth process'.

### (3) Demographic Profile

Table 2 presents some critical indicators of the demographic profile of India, Pakistan and China.

**Table 2. Select Demographic Indicators, 2011**

Country	Estimated Population (in million)	Annual Growth of Population (2001-2011)	Density (per sq. km)	Sex Ratio (Number of women per thousand men)	Urbanisation
India	1210	1.76	382	940	31.2
China	1339	0.47	143	950	51.3
Pakistan	176.2	1.8	225	952	37.2

[Source: Census 2011, HDR 2012 and World Bank]

Table 2 shows that:

- (i) India and China together are a habitat for 38 per cent of the world's population.
  - ◆ India with a little more than 1.3 billion people is a habitat for nearly 18 per cent of the world's population.

- ◆ China with nearly 1.38 billion people is a habitat for nearly 20 per cent of the world's population.

In comparison, Pakistan is a small country. Its population is just 1/10th of China or India.

**Both for India and China, large size of population is a hindrance in the process of growth, as it requires a huge amount of 'maintenance investment'**—investment which is directed towards the maintenance of existing standard of living of the people.

High 'maintenance investment' implies low 'development investment'. Accordingly, pace of growth and development is impeded.

However, two demographic parameters are distinctly in favour of China: (a) moderate growth rate of population, and (b) low density of population.



One Child Policy combats Population Growth in China

'One Child Policy' adopted by China in 1979 has been very successfully pursued. Consequently, growth rate of population which was nearly 1.33 per cent in 1979 has now been reduced to 0.47 per cent per annum.

- 'One Child Policy' in China, adopted since 1979, has reduced the growth rate of population to nearly half, from 1.33 per cent in 1979 to 0.47 per cent in the recent past.
- Containing its population growth rate, China can now focus on quality of life rather than sustenance of the people.

- (ii) **Growth rate of population** continues to be fairly high in India (1.17 per cent—2017 estimate) and alarmingly high in Pakistan (1.43 per cent—2017 estimate).

It is feared that at the existing rate of growth, population size in India may soon exceed that in China.

- (iii) China has low density of population compared with India and Pakistan. It is because of a very large geographical area of China than India and Pakistan.

It is estimated to be 143 persons per square kilometer in China compared to 382 and 225 persons (per square kilometer) in India and Pakistan, respectively.

**Other things remaining constant, lower density implies lesser stress on the country's natural resources, raising its abilities for sustainable development.**

- (iv) Both China and Pakistan are showing brighter signs of urbanisation than India.

Urbanisation is closely linked with structural transformation in the country. It is a consequence of a shift of working force from agriculture to industry and services.

In India, 31.2 per cent of population is urbanised compared with 51.3 per cent in China and 37.2 per cent in Pakistan.

Accordingly, both China and Pakistan have better succeeded than India in generating job opportunities outside agriculture.

- (v) Sex ratio is found to be biased against females in all the three countries.

It is estimated to be 943, 950 and 952 for India, China and Pakistan, respectively. (This is the number of female per 1,000 of male population in the country).

Low sex ratio points to social backwardness. Female foeticide (owing to preference for a son) is the principal cause of low sex ratio.

## (4) Human Development

Some important indicators of human development are as these:

- (a) Life expectancy—higher the better.
- (b) Adult literacy rate—higher the better.
- (c) Percentage of population below poverty line—lower the better.
- (d) Infant mortality rate—lower the better.
- (e) Maternal mortality rate—lower the better.
- (f) Percentage of population having access to improved water sources—higher the better.
- (g) Percentage of undernourished population—lower the better.
- (h) Percentage of population having access to improved sanitation—higher the better.
- (i) GDP per capita (US \$) adjusted for the differences in purchasing power of a dollar across different nations (called purchasing power parity)—higher the better.



### Important

- With a view to accelerating the pace of growth, different countries are forming regional and global economic groupings, based on common agreements of bilateral relations.
- Examples: SAARC, EU, ASEAN, G-8, G-20.

Based on these indicators, a composite index is constructed, called HDI (Human Development Index).

Higher value of HDI points to a higher rank and a higher level of growth and development for a country.

In the year 2018, HDI for China, India and Pakistan was estimated to be 0.758, 0.647 and 0.560 respectively.

Higher HDI ranking of China is mainly due largely to GDP per capita. In the year 2018, its GDP per capita (2011 PPP US \$) was estimated to be US \$ 16,187, while it was merely US \$ 6,829 for India and US \$ 4,928 for Pakistan.

Besides higher GDP per capita, China has performed better (than India and Pakistan) in the area of nourishment. Percentage of undernourished population is 11 per cent in China, compared with 20 per cent both in India and Pakistan.

China has also performed better with regard to infant mortality rate and maternal mortality rate. Infant mortality rate is as low as 8.0 per thousand in China compared with 32.0 per thousand in India and 61.2 per thousand in Pakistan. Maternal mortality rate is just 27 per lakh in China compared with 174 in India and 178 in Pakistan.

As regards access to improved sanitation, again China shows better performance: 76.5 percent of its population has access to improved sanitation compared with 39.6 per cent in India and 63.5 per cent in Pakistan.

*In the provision of improved water sources, China has performed better than India and Pakistan.* In China 95.5 per cent of population has access to improved sources of water, compared with 94.1 per cent in India and 91.4 per cent in Pakistan.

#### Liberty Indicators

- It may be argued that HDI rating of India is low compared with China, partly because HDI does not include parameters of liberties of life, viz., political liberty of participating in state administration, and social liberty of freedom of speech, and related human rights.
- If these indicators are also included in the construction of HDI, India's ranking is likely to improve, as these parameters are much better in India, compared with China and Pakistan.

### 3. COMMON SUCCESS STORY OF INDIA AND PAKISTAN

Following observations highlight the common success story of India and Pakistan:

- (i) *Both India and Pakistan have succeeded in more than doubling their per capita incomes.* This is a remarkable achievement considering the fact that population has increased four-fold in Pakistan and three-fold in India.

- (ii) The incidence of absolute poverty (equated with \$1.25 per day) has been reduced significantly although the number below poverty line continues to be very large.
- (iii) **Food production has successfully kept pace with the rise in population.** Leaving aside annual fluctuations due to weather conditions, both countries are self-sufficient in food (Pakistan exports its surplus rice but imports small volumes of wheat).
- (iv) **Food self-sufficiency has been accompanied with improved nutritional status.** Daily caloric and protein intake per capita has risen by almost one-third. However, malnourishment among children is still very high.
- (v) A well-developed modern sector (along with a backward traditional sector) **has found global recognition in both the countries.**
- (vi) India and Pakistan have almost similar performance with regard to access to improved water resources. Initially, Pakistan had achieved better results as regards access to improved water resources. However, in the recent past, India has surpassed Pakistan: while in Pakistan, 91.4 per cent of population has access to improved water resources, in India it is 94.1 per cent [CIA World Factbook, 2019].

All these are key characteristics of a progressive economy.

## Common Failures of India and Pakistan

Following observations highlight the common failures of India and Pakistan:

- (i) **The relatively inward-looking economic policies and high protection to domestic industry did not allow India and Pakistan to take timely advantage of globalisation.**
- (ii) The mind-set of the politicians and the bureaucrats has not shown a progressive change: Controls continue to be their preferred option rather than freedom of choice of the producers and consumers.
- (iii) Private sector has thrived more on contacts, bribes, loans from public financial institutions. Tax evasion is a national hobby.
- (iv) Fiscal management is grossly disappointing. Higher fiscal deficit averaging 7-8 per cent of GDP has persisted for fairly long periods of time. Owing to huge borrowing by the government, private capital formation has failed to trend up to the desired extent.

- (v) Large proportion of tax revenue is spent to meet defence expenditures and internal debt servicing. It hampers the process of growth.
- (vi) Deficient urban services (water, electricity and transport) are a big hurdle in their process of growth and development.
- (vii) The politicians are yet to provide a sincere and strong leadership focusing on social welfare.
- (viii) A wide lag between the formulation of policies on the one hand and their implementation on the other, is a serious hindrance in the process of growth.

### **Areas where India has an edge over Pakistan**

Following points may be noted in this regard:

- (i) In the area of skilled manpower and research and development institutions, India is better placed than Pakistan.
- (ii) India has shown a remarkable breakthrough in the export of software and software-enabled services after economic reforms of 1991. Pakistan is far behind. According to World Bank estimates (2018), external trade-GDP ratio in case of India was 43 per cent as against 28 per cent in Pakistan.
- (iii) Human capital formation (accompanied by market-friendly economic policies) in India has emerged as a much more significant determinant of growth than in Pakistan.
- (iv) Indian scientists excel in the areas of defence technology, space research, electronics and avionics, genetics, telecommunications, etc. Pakistan is way-behind.
- (v) The number of Ph.Ds produced by India in science and engineering every year (about 5,000) is higher than the entire stock of Ph.Ds in Pakistan.
- (vi) India also has a better record of investment in education. The adult literacy rate, female literacy rate, gross enrolment ratio at all levels, and education index have trended up much faster in India than in Pakistan.
- (vii) Owing to rapid decline in fertility rate, population growth in India has been slashed to 1.17 (2017 estimate) per cent, while in Pakistan it continues to be as high as 1.43 (2017 estimate) per cent per annum.
- (viii) Issues of health facilities in general and infant mortality in particular are better addressed in India.

## Areas where Pakistan has an edge over India

It is indicated through the following observations:

- (i) Starting from almost the same level as India, Pakistan has achieved better results with regards to migration of workforce from agriculture to industry, or migration of people from rural to urban areas.
- (ii) By reducing BPL population to 29.5 per cent (in 2013) of the total (contrasting with India's 21.9 per cent, in 2011), Pakistan's growth strategy has a better human face than that of India.
- (iii) Even when the rate of investment in Pakistan has been lower than in India, efficiency of investment (in terms of output per unit of capital) has been higher.

### Poverty in India, China and Pakistan

India	:	21.9%
China	:	3.3%
Pakistan	:	29.5%

[Source: CIA World Factbook, 2018]

### Re-emergence of Poverty in Pakistan

- Starting with the process of planned development programmes after independence, Pakistan relied largely on the policy of 'protection' (protecting domestic industry from foreign competition), assigning central role to public sector enterprises.
- Like in India, Green Revolution in Pakistan brought about a structural transformation in the economy of Pakistan.
- Growth rate continued to remain low till Pakistan took to economic reforms in 1988, shifting its priorities from 'protection' to 'competition' and opening up the economy to the global investors.
- Economic reforms yielded spectacular results, and performance of the Pakistan economy was indeed convincing and (in many respects) way ahead of the performance of the Indian economy.
- But when everything was sailing smooth, Pakistan seems to have been slipping into poverty-mode once again.
- Thus, in the year 2011, while India and China recorded GDP growth rate of 8.4% and 9.5% respectively, in Pakistan it was merely 2.6% per annum.

#### Reasons:

Re-emergence of poverty in Pakistan is explained with reference to the following observations:

- (i) Pakistan has failed to bring about stable institutional reforms in agriculture. Accordingly, performance of agricultural sector has remained volatile and highly vulnerable to climatic conditions. Good harvest depends largely on good monsoon.
- (ii) For its foreign exchange requirements, Pakistan has relied largely on remittances from abroad, and (volatile) agricultural exports. A setback to these sources of foreign exchange has caused a corresponding setback to the process of growth.
- (iii) Lack of political stability in Pakistan has caused huge public expenditure on law and order.
- (iv) Pakistan is allocating huge funds to build a strong defence-system, even when it implies a huge cut in developmental expenditure.

### **Commune System**

- Commune System of collectivised agriculture was implemented in 1950s as one solution to the problem.
- The structure of the commune was such that households were organised into teams then team formed brigades, and brigades formed the commune.
- Peasants pooled their land to create larger fields that could yield greater output and shared farm implements.

## **4. CHINA'S EDGE OVER INDIA**

We may note the following observations in this regard:

- (i) The Chinese reform process began more comprehensively during the 80s, when India was in the mid-stream of slow growth process.
- (ii) Even when the reform process was actively pursued in the 90's, India focused more on GDP growth, in contrast to China's initiative of focusing on poverty alleviation. While rural poverty in China declined by 85 per cent during the period 1978 to 1989, in India it declined only by 50 per cent during this period.
- (iii) Restructuring of the Chinese agriculture went a long way. It abolished commune system of farming (a system of collective cultivation). Instead, households were allotted land for individual cultivation, though ownership of land remained with the state. This brought about a radical transformation in agriculture.  
In India, agricultural reforms have been far less effective than in China.
- (iv) Also, global exposure of the economy has been far more wider in China than in India. Thus:
  - ◆ China allowed foreign investors 100 per cent equity investment.
  - ◆ It allowed the foreign investors the freedom to 'hire and fire' the workers. It also offered them a lucrative infrastructure.
  - ◆ By establishing SEZ, it offered lucrative infrastructural facilities to the foreign investors.
  - ◆ China was liberal in allowing FDI in retail.

In all these respects, India remained far behind. As a matter of fact, India has been providing protection to the labour-intensive segments of the economy.

It is owing to these factors that China has emerged as the 2nd largest economy in the world (in terms of its percentage share in the global GDP), while India is lagging way behind.

## Power Points & Revision Window

- **India, Pakistan and China relied on Planned Development Programmes** as their basic strategy of growth and development. But whereas in India and Pakistan, 'mixed economy' served as the basic premise of the growth model, in China all critical areas of production were brought under 'state ownership' and 'command economy' served as the basic premise of the growth model.
- **Economies of India, Pakistan and China** did not show any noticeable breakthrough in their growth process till they opened up and integrated themselves with the global economy.
- **Economic Reforms** were initiated in China in the year 1978, in Pakistan in the year 1988 and in India in the year 1991.
- **Exposure of the Economy to the Market Forces** of supply and demand and integration of the economy with the global economy have been the central elements of economic reforms. Inward looking policy of self-sufficiency and protection of domestic industry from foreign competition has gradually been replaced by the policy of growth through competition. Reliance on FDI has been key parameter of growth strategy.

In China, a shift from commune system of farming to individual farming (retaining the ownership of land with the state), household system of manufacturing, 100 per cent equity to FDI, along with FDI in retail, and SEZs (Special Economic Zones) have been the distinct instruments of economic reforms. Along with sincere and strong leadership of the nation, these reforms placed China's economy far ahead the economies of India and Pakistan. Achievements of economic reforms became all the more effective in China as it successfully enforced its 'one child norm' cutting the growth rate of its population to merely 0.47 per cent per annum.

- **Comparison of India, Pakistan and China** is attempted with reference to the following indicators of comparative development:

- **GDP Growth Rate:** Prior to economic reforms, GDP growth rate was very low in all the three countries. After reforms, there was a breakthrough. But China surpassed both India and Pakistan in achieving GDP growth rate of nearly 10 per cent per annum and that too almost consistently. In case of India and Pakistan, GDP growth rate has yet to touch the double digit.
- **Structure of Growth:** All the three countries showed a structural transformation, recorded a decline in percentage share of primary sector and rise in percentage share of secondary and tertiary sectors in the GDP. Also there has been a shift of workforce from primary to secondary and tertiary sectors. However, in case of China, the shift has been more to secondary sector, while in case of India and Pakistan the shift has been more to tertiary sector. A substantial growth of export-driven manufacturing sector in China has been the distinct factor.
- **Demographic Indicators:** Growth rate of population has been cut to half in China, following strict enforcement of its policy of 'one child norm'. India and Pakistan are still wrestling with the problem of high growth rate of population, which is about 1.17 per cent (2017 estimate) in India and 1.43 per cent (2017 estimate) in Pakistan. However, the size of population is comparatively very small in Pakistan, just about 1/10th of China or India.
- Despite large size of population **density of population** is low in China, thanks to its large geographical area.
- **Sex Ratio** is found to be low in all the three countries pointing to social backwardness where people hold high preference for a son in the family.

- **Indicators of Human Development:** (i) Life expectancy, (ii) Adult literacy rate, (iii) Percentage of population below poverty line, (iv) Infant mortality rate, (v) Maternal mortality rate, (vi) Percentage of population having access to improved water sources, (vii) Percentage of population which is undernourished, (viii) Percentage of population having access to improved sanitation, (ix) GDP per capita.

In most areas of human development, China has performed better than India and Pakistan. China's HDI rank in the world is 85, contrasting with 129 and 152 for India and Pakistan, respectively. However, India may attain a higher ranking if some liberty parameters are included in HDI.
  - **Common Success Story of India and Pakistan:** (i) A substantial rise in GDP per capita, (ii) Self-sufficiency in food production, (iii) Dualistic nature of the economy is gradually declining, (iv) Considerable reduction in the incidence of poverty.
  - **Common Failures of India and Pakistan:** (i) Relatively slow pace of GDP growth, compared with China, (ii) Poor performance in HDI ranking, (iii) Dismal fiscal management, (iv) Political survival a dominating issue rather than good governance.
  - **Areas where India has an Edge over Pakistan:** (i) Skilled manpower, (ii) Investment in education, (iii) Health facilities.
  - **Areas where Pakistan has an Edge over India:** (i) Urbanisation, (ii) Less percentage of population below poverty line (in 2013), (iii) Percentage of population having access to improved water sources.
  - **Areas where China has an Edge over India:** (i) China has successfully focused on pro-poor reforms, (ii) Agrarian reforms have been effectively carried out, (iii) Export-driven manufacturing has significantly grown, adding to the pace of GDP growth, (iv) SEZ policy has proved to be a boon for FDI flow in China.



## **1. Objective Type Questions (Remembering & Understanding based Questions)**

## A. Multiple Choice Questions

### Choose the correct option:

4. Which of the following countries resorted to one child policy?  
(a) India (b) China  
(c) Pakistan (d) None of these

5. Growth rate of population is highest in which of the following countries?  
(a) India (b) China  
(c) Pakistan (d) None of these

6. Which of the following countries has the lowest density of population?  
(a) India (b) China  
(c) Pakistan (d) None of these

7. After independence, both India and Pakistan relied upon:  
(a) 'mixed-economy' as the strategy of growth  
(b) 'capitalism' as the strategy of growth  
(c) 'socialism' as the strategy of growth  
(d) 'free economy' as the strategy of growth

8. Public sector was assigned a key role in the process of growth in India and Pakistan because:  
(a) both the economies needed a big push of investment  
(b) partition of the country had rendered both of them as laggard economies  
(c) both (a) and (b)  
(d) none of these

9. With respect to 'Statism' as a model of growth adopted by China, choose the correct statement.  
(a) Ownership of all resources vested with the state  
(b) The private sector was the deciding authority with respect to what to produce, how to produce and for whom to produce  
(c) State was to maintain the population  
(d) None of these

10. To analyse a comparative performance of the economies of India, China and Pakistan, which of the following is the correct?  
(a) China achieved a breakthrough in GDP growth in early 1980s  
(b) With New Economic Policy (NEP) in place, India experienced a rebound in its GDP growth  
(c) Economic reforms in Pakistan were almost similar to that in India  
(d) All of these

11. Which of the following observations highlight the common success story of India and Pakistan?  
(a) Both have succeeded in more than doubling their per capita incomes  
(b) Food production has failed to keep pace with the rise in population  
(c) Food sufficiency has been accompanied with improved nutritional status  
(d) Both (a) and (c)

## Answers

1. (a)      2. (c)      3. (b)      4. (b)      5. (c)      6. (b)      7. (a)      8. (c)      9. (a)      10. (d)  
11. (d)

## B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. In the strategy of growth of India and Pakistan, secondary role of pushing the process of growth. sector was assigned the (public/private)
2. After independence, Pakistan adopted model of growth. (mixed-economy/socialist-economy)
3. has established a substantial lead over India in terms of GDP growth and structural transformation. (China/Pakistan)
4. The trade-GDP ratio of India is than that of Pakistan. (greater/lesser)
5. has shown brighter signs of urbanisation. (India/Pakistan)
6. One child policy was adopted in China in the year (1978/1979)
7. China adopted as a model of growth. (statism/socialism)
8. High GDP growth has led to a serious challenge of sustainable development due to the problem of environmental degradation in (China/Pakistan)
9. Owing to slow GDP growth, and consequently the low level of income, economy has moved into a 'low-income-low-growth' trap. (India's/Pakistan's)
10. The relative success of China is credited to stability in China. (social/political)

## Answers

- |            |                  |          |               |               |
|------------|------------------|----------|---------------|---------------|
| 1. private | 2. mixed-economy | 3. China | 4. greater    | 5. Pakistan   |
| 6. 1979    | 7. statism       | 8. China | 9. Pakistan's | 10. political |

## C. True or False

State whether the following statements are True or False:

1. The Great Leap Forward campaign was launched in Pakistan. (True/False)
2. All the three countries China, India and Pakistan relied on public sector as the core sector of the economy. (True/False)
3. China relied on 'outward-looking' strategy of growth. (True/False)
4. With a significant jump in the growth of GDP, the structure of growth has failed to show structural transformation in China. (True/False)
5. Availability of cheap labour force has given China a comparative cost advantage. (True/False)
6. Chinese government is battling with the problem of environmental degradation. (True/False)
7. In China, commune system is related to industry. (True/False)
8. Economic reforms in Pakistan were different from those undertaken in India. (True/False)
9. In India, agricultural reforms have been far less effective than in China. (True/False)
10. In terms of sectoral contribution to GDP, Chinese economy is relying more on secondary sector. (True/False)

## Answers

- |          |         |          |          |         |         |          |          |         |          |
|----------|---------|----------|----------|---------|---------|----------|----------|---------|----------|
| 1. False | 2. True | 3. False | 4. False | 5. True | 6. True | 7. False | 8. False | 9. True | 10. True |
|----------|---------|----------|----------|---------|---------|----------|----------|---------|----------|

## D. Matching/Chronological

I. From the set of statements given in Column I and Column II, choose the correct pair of statements:

Column I	Column II
(a) One child policy	(i) Pakistan
(b) Jobless growth process	(ii) China
(c) Availability of cheap labour force	(iii) Comparative cost advantage to China
(d) Problem of environmental degradation	(iv) Pakistan

### Answer

(c) Availability of cheap labour force— (iii) Comparative cost advantage to China

II. Choose the correct alternative showing chronological order of the following events:

- (i) One child policy in China
- (ii) Economic reforms in Pakistan
- (iii) New Economic Policy (NEP) in India
- (iv) Commune system in agriculture in China

### Alternatives:

- |                            |                            |
|----------------------------|----------------------------|
| (a) (ii), (iv), (iii), (i) | (b) (iv), (ii), (i), (iii) |
| (c) (ii), (iv), (i), (iii) | (d) (iv), (i), (ii), (iii) |

### Answer

(d)—(iv), (i), (ii), (iii)

## E. 'Very Short Answer' Objective Type Questions

1. Name any two indicators of HDI.

Ans. (i) Life expectancy, and (ii) Educational Achievement.

2. Name any two indicators of comparative development.

Ans. (i) GDP growth rate, and (ii) Demographic profile.

3. Name two areas of development where India has topped Pakistan.

Ans. Health and education.

4. Name two areas of development where Pakistan has topped India.

Ans. (i) Occupational structure, and (ii) Urbanisation.

5. What is Commune System of Farming?

Ans. Commune system of farming is a system of collective farming.

6. In which sector of the economy, has China surpassed both India and Pakistan?

Ans. Manufacturing (Industry).

7. Name the three components of NEP.

Ans. (i) Privatisation, (ii) Liberalisation, and (iii) Globalisation.

## **2. Reason-based Questions (Comprehension of the Subject-matter)**

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**Read the following statements carefully. Write True or False with a reason.**

**1. Heavy dependence on exports has led to slowdown of the Chinese economy.**

**Ans.** True. **Reason:** Economic slowdown in most parts of the world (particularly the European economies) has led to a significant fall in global demand for the Chinese goods. Hence, the slowdown of the Chinese economy.

**2. Expanding focus on defence preparedness has led to economic slowdown in Pakistan.**

**Ans.** True. **Reason:** Because, rising public expenditure on defence preparedness has led to a shortage of funds for economic growth.

**3. India has failed to tackle poverty as much as China could.**

**Ans.** True. **Reason:**

(i) India has lacked political will, owing to political instability.

(ii) India has failed to control its population growth, pushing people to BPL category.

(iii) India lacks 'effective delivery mechanism' (delivering aid to the poor without leakage and pilferage).

**4. In certain parameters of development, Pakistan has an edge over India.**

**Ans.** True. These parameters are:

(i) **Reduction of Poverty:** Pakistan had recorded lesser percentage of BPL population than India (in 2013).

(ii) **Access to Improved Water Resources:** Pakistan had achieved an edge over India as regards accessibility to improved water resources. However, in the recent past, India has surpassed Pakistan: while in Pakistan, 91.4 per cent of population has access to improved water resources, in India it is 94.1 per cent [CIA World Factbook, 2019].

(iii) **Rural-Urban Migration:** Migration of population from rural to urban areas (as well as migration of workforce from agriculture to industry) has been more effective in case of Pakistan than India.

**5. High infant mortality rate lowers the degree of Human Development Index.**

**Ans.** True. Because, high mortality rate shows the lack of medical facilities. Accordingly, high percentage of infants are vulnerable to disease and death.

**6. Low sex ratio is a pointer to social backwardness.**

**Ans.** True. Because, low sex ratio reveals preference for a male child, leading to female foeticide.

**7. Compared with India, lower density of population in China has contributed to its faster GDP growth.**

**Ans.** True. Because lower density of population in China (due to its huge geographical area) has led to lesser stress on its natural resources.

## **3. HOTS & Applications**

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**1. Do you agree with the opinion that structure of growth is more complementary with the GDP growth in China than India?**

**Ans.** It is true that the structure of growth is more complementary with the GDP growth in China than India. Historically, the structure of growth has shown a shift from the predominance of agriculture

to the predominance of industry in GDP growth of the country. This process of transformation has seen a very effective absorption of the surplus labour force (in agricultural sector) by the industrial sector of the economy. China's growth story reveals a similar process of transformation. On the contrary, Indian growth story reveals that the predominance of agricultural sector (in GDP growth) has given way to the predominance of tertiary sector, rather than the industrial sector. While the percentage share of agriculture in GDP has tended to fall, the percentage share of tertiary sector has risen more significantly than the percentage share of the industrial sector. Thus, the structure of growth has been less complementary with the GDP growth in India (compared with China).

**2. How do you explain re-emergence of poverty in Pakistan?**

**Ans.** Consequent upon economic reforms, Pakistan economy witnessed a significant breakthrough in GDP growth. But the momentum of growth has failed to sustain itself. Rather, the GDP growth has considerably slipped to once again push the Pakistan economy into the vicious circle of 'low income-low growth'. Political instability in Pakistan is perhaps the most important factor that explains the re-emergence of poverty in this country. Domestic terrorism is the second important factor. The third important factor is 'shift in focus' from economic growth to defence preparedness. Fourth, Pakistan government has failed to improve its agriculture through institutional reforms. Agriculture still continues to be controlled by absentee landlords.

**3. Explain how China has an edge over India.**

**Ans.** China has an edge over India in several ways, as under:

- (i) Its growth story reflects an historically correct process of transformation from the predominance of agriculture sector (in GDP growth) to the predominance of the industrial sector. In India, the industrial sector has not grown as much as in China.
- (ii) China is far ahead of India in terms of HDI (Human Development Index).

**4. What led to rapid growth in China, even when India, China and Pakistan together adopted the strategy of economic reforms?**

**Ans.** The reasons are as under:

- (i) Shift from a centrally planned economy to a market economy.
- (ii) Focus on export-related domestic production.
- (iii) Influx of FDI.
- (iv) Availability of cheap labour force, giving China a comparative cost advantage.
- (v) GLF (Great Leap Forward) campaign (launched in 1958).

#### **4. Analysis & Evaluation**

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**1. Do you agree with the statement that India has failed to grow as fast as China, because it has failed to check the growth rate of its population? Write your views in brief.**

**Ans.** It is true that China has succeeded in controlling the growth rate of its population, while India has failed. Owing to unbridled growth of population, the government in India has failed to reduce the BPL population. This has led to a huge expenditure by way of food subsidy, besides the expenditure related to health, housing and education of the BPL population. While, all such expenditures are welfare-oriented, these are non-productive. Such expenditures do not add to production capacity of the nation, rather they tend to erode it. Accordingly, growth process is adversely affected. This is one of the important reasons why India is lagging behind China in the area of economic growth.

2. While FDI in retail has proved to be growth-friendly in China, why should there be opposition to it in India? Give your opinion.
- Ans. It is an undisputed fact that FDI (in wholesale or retail) is growth-friendly. After all, it is an investment and increases production capacity of the nation. The opposition to FDI is not because it may be a roadblock in the process of growth. It is because it may generate unwarranted competition for the retail traders in India: they may be marginalised and finally driven out of the market. Such a situation may erode (reduce) the opportunities of self-employment in the country, and may also lead to concentration of economic power in the hands of foreign investors.

## 5. NCERT Questions (With Hints to Answers)

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1. Why are regional and economic groupings formed?

[Hint: Countries across the world have been trying various means to strengthen their domestic economies. It is in this context that regional and global economic groupings (such as the SAARC) have been formed. Basically, these groupings focus on enhancing their competitiveness in the international markets.]

2. What similar developmental strategies have India and Pakistan followed for their respective developmental paths?

[Hint: (i) Reliance on a large public sector, and  
(ii) Substantial expenditure on social development.]

3. Explain the Great Leap Forward campaign of China as initiated in 1958.

[Hint: The Great Leap Forward (GLF) campaign was launched in China (in 1958) with a view to propelling the pace of economic and industrial development. It focussed on widespread industrialisation of the economy, by inducing and encouraging people to set-up household industry in their backyard.]

4. China's rapid industrial growth can be traced back to its reforms in 1978. Do you agree? Elucidate.

[Hint: In late 1970s and early 1980s, reforms were initiated in the industrial sector in China. The breakthrough in economic growth is attributed to economic reforms in terms of greater reliance on FDI (Foreign Direct Investment) and a greater leaning towards market economy.]

5. Describe the path of developmental initiatives taken by Pakistan for its economic development.

[Hint: Pakistan has followed the mixed economy model allowing the co-existence of public and private sectors for its economic development. However, there were certain noticeable shifts in policy-orientation. Like in India, the flagship role of public sector was moderated. Instead private sector was assigned the principal role of spearheading the process of growth.]

6. What is the important implication of the 'one child norm' in China?

[Hint: 'One Child Policy' adopted by China in 1979 has been very successfully pursued. Consequently, growth rate of population has reduced to nearly half, from 1.33 per cent in 1979 to 0.47 per cent in the recent past. With a check on population growth, China can now focus on raising the quality of life rather than striving for the sustenance of the people.]

7. Mention the salient demographic indicators of China, Pakistan and India.

[Hint: Following observations highlight the salient demographic indicators of China, Pakistan and India:

- (i) Growth rate of population has been cut to half in China, following strict enforcement of its policy of 'one child norm'. India and Pakistan are still wrestling with the problem of high growth rate of population, which is about 1.76 per cent in India and 1.8 per cent in Pakistan.

- (ii) The size of population is comparatively very small in Pakistan, just about 1/10th of China or India.
- (iii) Density of population is low in China, thanks to its large geographical area compared with India and Pakistan. It is estimated to be 143 persons per square kilometer in China compared to 382 and 225 persons (per square kilometer) in India and Pakistan, respectively.
- (iv) Both China and Pakistan are showing brighter signs of urbanisation than India.
- (v) Sex ratio is found to be low in all the three countries pointing to social backwardness where people hold high preference for a son in the family.]

**8. Mention the various indicators of human development.**

[*Hint:* The various indicators of human development are:

- (i) Life expectancy – higher the better.
- (ii) Adult literacy rate – higher the better.
- (iii) Percentage of population below poverty line – lower the better.
- (iv) Infant mortality rate – lower the better.
- (v) Maternal mortality rate – lower the better.
- (vi) Percentage of population having access to improved water sources— higher the better.
- (vii) Percentage of undernourished population—lower the better.]

**9. Define the liberty indicator. Give some examples of liberty indicators.**

[*Hint:* Liberty indicators refer to such indicators as the freedom of expression, and the liberty to participate in state administration. Such indicators are often omitted in the construction of HDI, even when the scale of such indicators is much higher in India than China and Pakistan. Omission of these indicators leads to lower HDI rating of India compared to Pakistan and China.]

**10. Evaluate the various factors that led to the rapid growth in economic development in China.**

[*Hint:* The principal factors that led to rapid economic development in China are as these:

- (i) Shift from a centrally planned economy to a market economy.
- (ii) Focus on export-related domestic production.
- (iii) Influx of FDI through SEZs (special economic zones) and hundred per cent equity of the foreign investors and free flow of FDI in the retail sector.
- (iv) Availability of cheap labour force, giving China a comparative cost advantage.
- (v) GLF (Great Leap Forward) campaign (launched in 1958). ]

**11. Give reasons for the slow growth and re-emergence of poverty in Pakistan.**

[*Hint:* Slow growth and re-emergence of poverty in Pakistan is explained with reference to the following observations:

- (i) Pakistan has failed to bring about stable institutional reforms in agriculture. Accordingly, performance of agricultural sector has remained volatile.
- (ii) For its foreign exchange requirements, Pakistan has relied largely on remittances from abroad, and (volatile) agricultural exports. A setback to these sources of foreign exchange has caused a corresponding setback to the process of growth.
- (iii) Lack of political stability in Pakistan has caused huge public expenditure on law and order.
- (iv) Pakistan is allocating huge funds to build a strong defence-system, even when it implies a huge cut in developmental expenditure.]

12. Compare and contrast the development of India, China and Pakistan with respect to some salient human development indicators.

[Hint: (i) In most areas of human development, China has performed better than India and Pakistan. China's HDI rank in the world is 85, contrasting with 129 and 152 for India and Pakistan, respectively. However, India may attain a higher ranking if some liberty parameters are included in HDI.

- (ii) GDP per capita is higher in China compared with India and Pakistan.
- (iii) Besides higher GDP per capita, China has performed better (than India and Pakistan) in the area of nourishment.
- (iv) China has also performed better with regard to infant mortality rate and maternal mortality rate.
- (v) As regards access to improved sanitation, again China shows better performance than India and Pakistan.]

13. Comment on the growth rate trends witnessed in China and India in the last two decades.

[Hint: In the last two decades, China surpassed India in achieving GDP growth rate of nearly 10 per cent per annum and that too almost consistently. In case of India, GDP growth rate has yet to touch the double digit.

Between 1979-2017, average annual GDP growth in China was estimated to be about 9 per cent. It reached its peak (15.2 per cent) in 1984, and touched its bottom (3.8 per cent) in 1990. In 2018, GDP growth rate was 6.6 per cent.

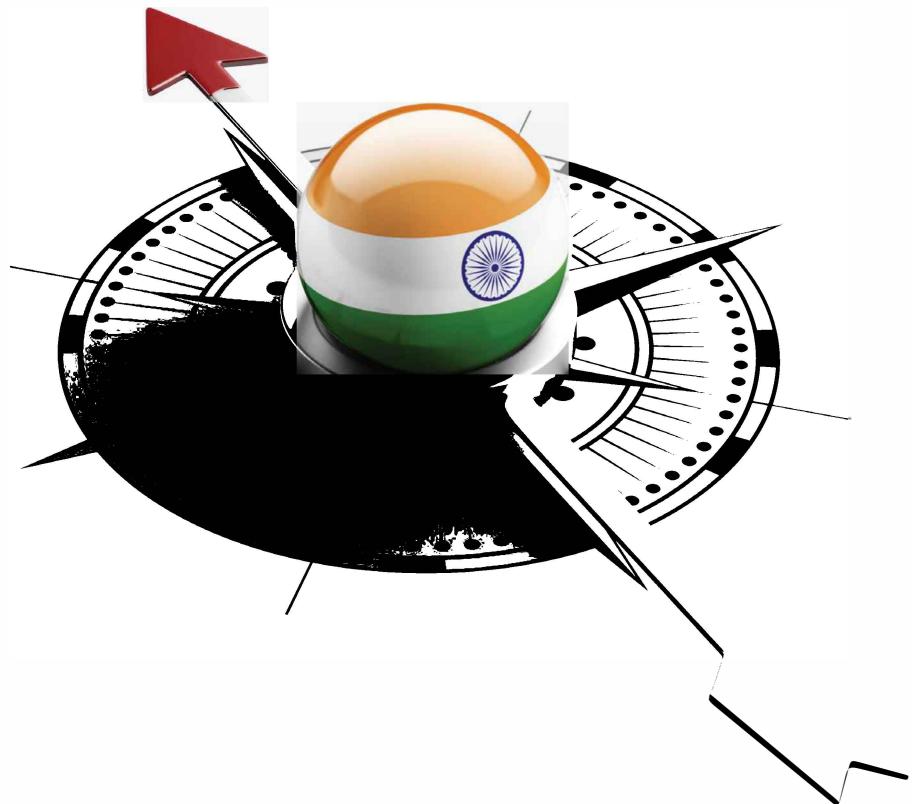
The GDP growth in India showed a substantial rise only after 1991, the year when New Economic Policy was launched. However, India has failed to take big leaps, unlike China.]

## 6. Miscellaneous Questions and Reference to the Text for Answers

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1. Give an outline of the strategy of development adopted by India and Pakistan after independence. [Page 316-318]
2. Give an outline of the strategy of development adopted by China. [Page 316-318]
3. Why has China succeeded in controlling growth rate of population, while India has failed? [Page 323-325]
4. Why has China succeeded in attracting much greater FDI than India and Pakistan? [Page 317-319]
5. State the important parameters of HDI. [Page 325, 326]
6. How was structural transformation different in China as compared with India and Pakistan? [Page 321-323]
7. What are 'liberty indicators' of development? [Page 326]
8. What are the common successes shared by India and Pakistan? [Page 326, 327]
9. Comment on the common failures of India and Pakistan. [Page 327, 328]

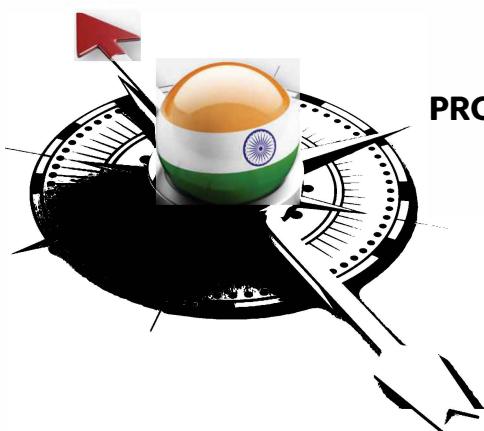




# PROJECT WORK







## PROJECT: 1

# DEMONETISATION IN INDIA

### INTRODUCTION

November 8, 2016 was the day when ₹ 500 and ₹ 1,000 notes were withdrawn from circulation. It amounted to withdrawal of 86% currency in circulation. People were advised to go to the banks to replace old notes with the new ones. There were serpentine queues inside and outside the banks. The economy was gripped by the liquidity crises. But, by and large, the people endured it. Because, they believed that demonetisation was a move against the hoarders of black money. The people believed that demonetisation was an action against the rich, and a move in favour of the poor.

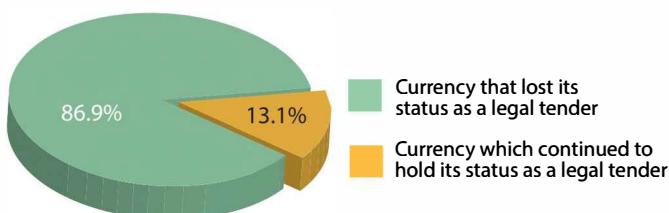
Demonetisation was a major economic event of the year 2016. It led to a deep impact on all sections of the society including households, traders and industrialists. The present paper attempts to examine the good and bad impact of demonetisation along with its overall evaluation as an economic policy.

### CONCEPT OF DEMONETISATION

A currency note of ₹ 2,000 is just a piece of paper unless the government declares it as a legal tender. It carries the exchange value of ₹ 2,000 because the government imparts this value to it. When the government withdraws the value imparted to a currency note, it no longer remains a legal tender. It is reduced to a piece of paper. Withdrawal of the status of 'legal tender' to the currency in circulation is called demonetisation. After demonetisation, the exchange value imparted to the currency ceases to exist. Demonetised currency is no longer accepted as a medium of exchange. Its purchasing power is reduced to zero. Thus, demonetisation of ₹ 1,000 and ₹ 500 notes on Nov. 8, 2016 by the Government of India implied that these notes lost their status of legal tender. These notes were no longer to be accepted as a medium of exchange. Their purchasing power was reduced to zero. These notes were reduced to pieces of paper.

### EXTENT OF DEMONETISATION

Nov. 8, 2016 was the doom's day for the holders of unaccounted cash. Because, demonetisation of ₹ 500 and ₹ 1,000 notes (high value currency notes) led to a massive loss of liquidity in the economy.



According to RBI Report, demonetised currency (on Nov. 8, 2016) valued at ₹ 15.4 trillion. It amounted to 86.9% of the value of total currency in circulation.

## WHY WAS DEMONETISATION DONE: EXPECTED BENEFITS OF DEMONETISATION

Demonetisation was expected to generate the following benefits:

### (1) Elimination of Black Money

Black money is a household name in India. It refers to unaccounted money. Holders of black money avoid payment of tax on this money. By demonetising high value currency notes, the government wanted to eliminate the stock of black money in the economy. Following demonetisation, people were forced to declare their unaccounted cash balances. Otherwise, these balances would be reduced to pieces of paper.

### (2) Eradication of Corruption

High value currency notes are the commonly accepted medium of bribe. The government wanted to strike at the root of corruption by banning these notes.

### (3) Elimination of Counterfeit Currency

Note ban would have implied the elimination of counterfeit currency. Counterfeit currency enhances money in circulation and contributes to inflationary spiral. It destabilises the economy.

### (4) Elimination of Terror Funding

Note ban also aimed at the elimination of terror funding. It is largely in high value currency notes that the terrorists receive funds through hidden sources.

### (5) Money Laundering

Demonetisation was expected to check money laundering. It refers to hidden transfer of funds across different regions of the country. With cash transactions coming to a grinding halt, demonetisation would have hurt money laundering in a big way.

### (6) Rise in Government Revenue

Demonetisation was expected to force many people to convert their black money into white by paying taxes and penalty to the government. Accordingly, government revenue was expected to rise.

### (7) Financial Inclusion

The government expected poor people to deposit their cash in Jan Dhan Accounts. This would increase financial inclusion in the economy. The poor people could avail loans from the banks on the basis of their bank deposits.

## (8) Cashless (or Low Cash) Economy

Demonetisation was expected to promote digital transactions or e-transactions in the economy. Higher level of e-transactions (implying lower level of cash transactions) would mean a shift from cash economy to cashless economy. Cash economies are breeding centres of corruption. If transactions are effected through banks, the corruption would get a big jolt. Developed economies are cashless economies and almost free from corruption.

## IMPACT OF DEMONETISATION

It is not easy to analyse the actual impact of demonetisation. Because demonetisation is a recent economic event, it is yet to unfold its full impact particularly over a longer period of time. Impact of demonetisation as discussed in the present literature is mostly immediate impact or short period impact. One can only make a guess about long period impact of demonetisation. Short period impact of demonetisation is split as good and bad impact. This is discussed as under.

### Good Impact of Demonetisation

Following observations highlight the good impact of demonetisation:

#### (1) Check on Food Inflation

Owing to a substantial withdrawal of currency in circulation, demonetisation led to a check on food inflation in the economy. Liquidity crunch led to a substantial fall in stock-piling of food grains. Accordingly, there was a sharp fall in food inflation by about 240 basic points between November 2016–January 2017.

#### (2) Elimination of Fake Currency

There was 100% elimination of fake currency (counterfeit currency) from the economy. The racketeers of fake currency were badly hurt just with one stroke of the government.

#### (3) Surge in Cash Deposits

There was a surge in cash deposits in Jan Dhan Accounts. This promoted financial inclusion to its top gear. According to the RBI estimate, ₹11.5 lakh crore money was deposited in the banks following demonetisation.

#### (4) Attack on Hawala Transactions

Hawala transaction (hidden transactions and transfers of money) were deeply hurt as cash almost evaporated from the economy.

#### (5) Realisation of Overdues

People rushed to clear their overdues related to bank loans, property tax, electricity bills, etc. Because, the government provided a window of clearing the old dues by using the old (demonetised) currency.

#### (6) Push towards Digitisation

With cash almost disappearing from the market, people were driven to digital mode of transactions. This was a big move towards cashless (or low cash) economy. It also promoted banking habits of the people, a big leap towards financial inclusion.

## (7) Tax Compliance

A shift from cash to banking transactions led to better tax compliance. The government recorded a noticeable rise in tax to GDP ratio.

## (8) Real Estate Cleansing

Demonetisation led to a deep cleansing of real estate sector. This sector served as the centre-stage of shadow economy (economy that is driven through black money transactions). With the eradication of black money (following demonetisation) real estate sector lost its sheen for speculative investment through black money. Prices in the real estate sector have crashed and housing is becoming more and more affordable for the middle and lower sections of the society.

### Bad Impact of Demonetisation

Demonetisation was not all boon; it was a bane as well. It generated bad impact in the economy, as evident from the following observations:

#### (1) A Deep Hurt to Economic Sentiment

The idea of banning nearly 86% of the currency in circulation led to a serious cut in monetary base of the country: the monetary base declined from ₹ 22.5 trillion to ₹ 13.7 trillion. This caused a deep hurt to economic sentiment in the domestic economy. Economic activity is driven by economic sentiment. If economic sentiment is hurt, economic activity must suffer. Consequently, following demonetisation, all parameters of economic activity (production, consumption, investment and exchange) received a big jolt. The producers planned lesser output, consumers planned lesser consumption, investors planned lesser investment and exchange (sale and purchase of goods and services) starting shrinking. There was an environment of economic slowdown.

#### (2) Large-Scale Lay-off in Unorganised Sector (Informal Economy)

Nearly 90 per cent of the workforce in India is engaged in informal economy (or unorganised sector of the economy) for their livelihood. And this segment of the economy is highly cash dependent and cash-sensitive. A huge cut in liquidity (following note ban) implied that cash purchase of inputs and cash payment of wages became impossible. These led to an instantaneous cut in production activity. Consequently, there was a large-scale lay-off. Daily wagers lost their employment from day-1 of demonetisation.

#### (3) Dent in GDP Growth

Massive lay-off and declining economic sentiment implied a significant dent in GDP growth. According to most estimates (including the one by Prof. Manmohan Singh, the former Prime Minister of the country), there was nearly a 2 per cent decline in country's GDP growth as a consequence of demonetisation.

Once GDP growth takes a hit, it leads to a spiral effect (snowball effect). Because, declining level of production activity (as indicated by a declining GDP growth) leads to a chain-effect in the economy. So that, the decline (the downward trend) become self-perpetuating over the years. Unless, of course, some drastic measures are initiated by the government to arrest the down-trend.

The following flow chart reveals how once a decline in GDP growth is triggered, it tends to become repetitive in nature:

*Decline in GDP growth rate —→ Decline in the level of income and employment —→ Decline in the level of AD —→ Decline in planned output —→ Further decline in GDP growth rate*

This cycle continues to repeat itself, and may drive the economy from slowdown to stagnation.

It is in view of such possibilities that various agencies have had revised their estimates of GDP growth in India as indicated in the Table 1.

**Table 1. Original and Revised Estimates of GDP Growth for the Year 2017**

(Figures in percentage)

Name of the Estimating Institution	Original Estimate	Revised Estimate
RBI	7.6	7.1
World Bank	7.6	7.0
IMF	7.6	6.6

Actual estimates of GDP growth (for the year 2017), as presented in Economic Survey (2017-18) have indeed recorded a slowdown in GDP growth to 6.6%. The rate of GDP growth has improved marginally to 6.8 per cent in 2018-19 (Economic Survey, 2018-19).

#### (4) Slump in Real Estate

Demonetisation has led to slump in real estate sector of the economy. This sector has been one of the prime GDP drivers in the Indian economy. Undoubtedly, demonetisation has significantly cleansed this sector of black money transactions. But, at the same time, sale and purchase in this sector has touched the rock-bottom. Construction activity has been severely hit, while inventory has piled up. Opportunities of employment have dried up. The hope of revival of this sector is rather bleak and remote. Stagnation of real estate sector is bound to be a serious bottleneck in the overall growth process of the Indian economy.

### SHOULD WE EXPECT THE ECONOMY TO BE BACK ON THE TRACK

It is a general belief that the dent in GDP growth may be larger than anticipated and may last longer than expected. Once the economic sentiment is negatively hurt, it turns into a momentum of economic pessimism. It is, therefore, believed that the recovery process is much longer, even when the supply of money is fully restored in the economy.

Undoubtedly, there is a lingering liquidity crunch in the economy. The government desires that the people shift to digital mode of transactions. But adoption of digital devices is not so easy in a country where even the literacy rate is not so encouraging. Indian economy is driven by cash transactions, not entirely because cash transactions facilitate corruption, but also because cash transactions are a convenient mode of exchange for the bulk of population in India which is highly cash sensitive owing to their poverty and limited survival-needs. Not that digitisation is not desired. But it is a typical characteristic of advanced economies where people have diverse needs and sound banking habits. Digitisation of transactions is perhaps a far cry for a nation which is still grappling with the problem of financial inclusion. Let financial inclusion be achieved before we look for digitisation of transactions.

Summing up, we can say that while Note Ban in India has shown good result in the elimination of black money and eradication of corruption, it has certainly dented our GDP growth.

Moreover, we have failed to realise our dream of turning cash-sensitive economy into a cash-less economy. This transition seems to be a long drawn process and perhaps could not be achieved with a single act of demonetisation.

## VIVA VOCE (EXAMINATION THROUGH SPOKEN COMMUNICATION)

### 1. Differentiate between demonetisation and remonetisation.

Ans. Demonetisation refers to withdrawal of the status of 'legal tender' to the currency in circulation. Remonetisation occurs when new currency is issued in place of the banned currency.

### 2. Has demonetisation really eradicated corruption in India?

Ans. After demonetisation, high value currency notes (₹ 1,000 and ₹ 500) were withdrawn from circulation. It amounted to withdrawal of nearly 80% of the currency in circulation. It struck at the very root of corruption, as the stock of unaccounted money was reduced to a trash and people were scared of making black money transactions. In fact, demonetisation led to a big blow to cash transactions, which implied a big blow to black money transactions, because black money transactions are conducted largely in cash. However, it would be too much to conclude that demonetisation has eradicated corruption.

### 3. What is shadow economy?

Ans. A shadow economy means a black money economy where business transactions are conducted without tax-payment. Tax evasion is the core characteristic of a shadow economy.

### 4. How is demonetisation linked with financial inclusion?

Ans. Demonetisation policy carried a provision that the people could deposit their banned notes in the banks. Accordingly, millions of people (who were alien to banking) opened their bank accounts to deposit their cash. This led to financial inclusion, as those who were not used to banking, started participating in organised financial system of the country.

### 5. How is cashless economy different from cash economy?

Ans. Cash economy is the one which is highly cash-sensitive and in which most transactions are conducted in cash. On the other hand, cashless economy is the one which is dominated by digital mode of transactions (e-transactions).

### 6. Tell the principal merit of cashless economy.

Ans. The principal merit of cashless economy is that it leads to the elimination of black money. Because, black money transactions occur largely in terms of cash.

### 7. Demonetisation has dented the GDP growth in India. How?

Ans. Indian economy is a cash-sensitive economy. Demonetisation led to the withdrawal of nearly 80% currency in circulation. With a long time lag between demonetisation and remonetisation, there was almost a drought of cash in the economy. Accordingly, economic sentiment of the people was deeply hurt and economic transactions received a big jolt. Production activity severely declined, particularly in unorganised sector of the economy. Accordingly, GDP growth was dented.

### 8. Was demonetisation a good move? Give your opinion.

Ans. Demonetisation carried its pros and cons. It was a good move as it unearthed the stock of black money in the economy. It was a good move also because it induced (or compelled) people to shift to the digital mode of transactions. Further, it improved the degree of financial inclusion in the

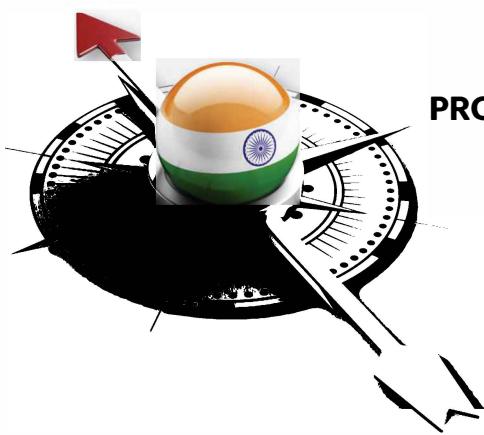
economy and significantly raised the liquid assets of the banks. But, demonetisation was not free from demerits. It led to a severe cash crunch in our cash-sensitive economy, implying a significant fall in production activity, causing a dent in GDP growth. Opportunities of employment were also deeply hurt.

In view of both the merits and demerits of demonetisation, it becomes rather difficult to either support or denounce it as a policy decision. However, it is a hard fact that we have failed to sustain the good impact of demonetisation over a longer period of time. Demonetisation was a one big blow to corruption, but never led to the end of it.

**9. Do you think demonetisation should become a recurring feature to eliminate black money from the economy?**

Ans. No, demonetisation should never become a recurring feature in the cash-sensitive economies like India. Because, the recent experience shows that demonetisation leads to a big decline in economic sentiment, implying a big dent in GDP growth. Also, it leads to social disruption as the bulk of population in India is liquidity-sensitive and not used to banking transactions or e-transactions.





## PROJECT: 2

# PROS AND CONS OF GST

### INTRODUCTION

Broadly speaking, GST (Goods and Service Tax) is one tax subsuming (replacing) all the indirect taxes in the economy. It is said to be national tax. Because, it is a uniform tax across all states of the country: only one rate will prevail on one set of goods across all parts of the country. Accordingly, GST carries the slogan of 'one tax, one nation, one market'.

So simple it appears to be. But GST has covered a long journey of nearly 18 years before coming to its final shape. Implying, that it was indeed very difficult for the government to work out a simplified tax structure relating to goods and services. Pros and Cons of GST are being hotly debated by the cross section of the society. Opposition to GST is so strong that there have been strikes and 'bandhs' in many parts of the country, following its introduction.

### CONCEPT OF GST

GST is essentially a tax on value addition covering the entire range of production activity from manufacturer to the consumer. If the producer pays GST on the purchase of inputs, he can avail of GST credit (input credit) when he converts inputs into output and there is value addition. Thus, if Good-X passes through 3 stages of value addition (before becoming a final good), the consumer is loaded with GST only at the third stage when it is purchased for final consumption. At the other two stages [which are intermediate stages of production (and during which output of one firm is used as input by the other)] tax burden will automatically be siphoned off. Thus, there is no cascading (compounding) of tax load on the consumer. The following example illustrates this point:

- Firm A manufactures household furniture.
- It buys inputs from different firms.
- Firm A buys some inputs from Firm B and pays GST = ₹ 10,000.
- Firm A buys some more inputs from Firm C and pays GST = ₹ 20,000.
- Firm A buys another set of inputs from Firm D and pays GST = ₹ 30,000.
- Firm A sells its final output to the households for ₹10,00,000 and charges 10% GST

$$\begin{aligned} &= \frac{10}{100} \times ₹ 10,00,000 \\ &= ₹ 1,00,000. \end{aligned}$$

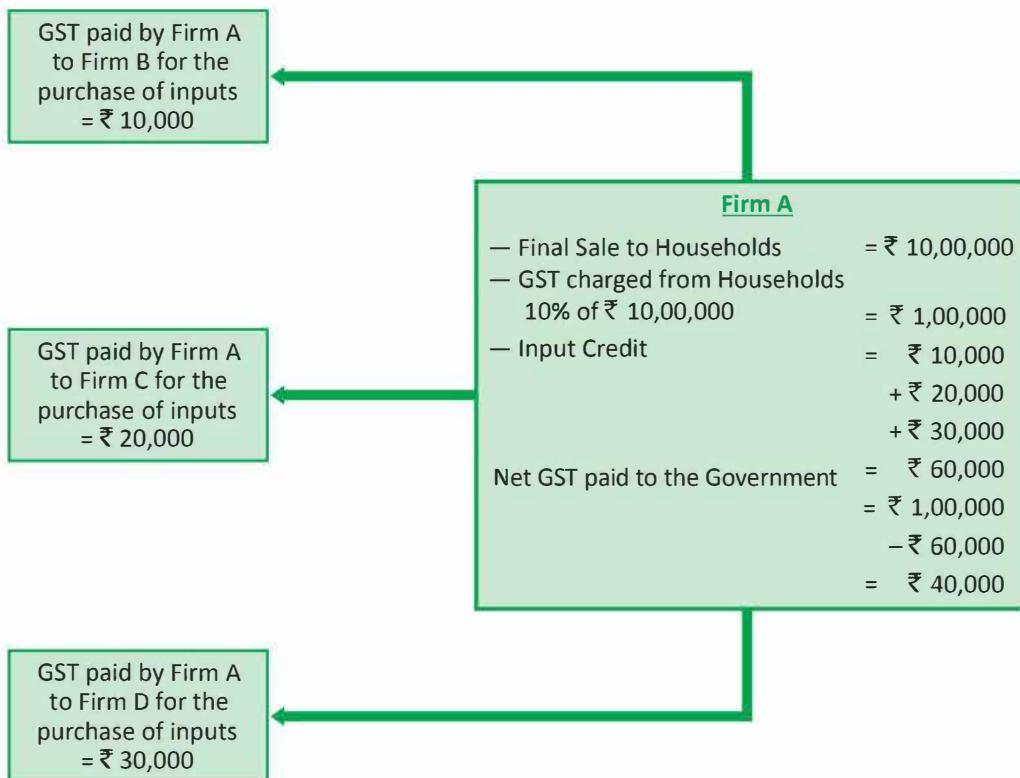
- GST liability of Firm A = GST charged – GST paid  

$$= ₹ 1,00,000 - ₹ 60,000 (₹ 10,000 + ₹ 20,000 + ₹ 30,000)$$

$$= ₹ 40,000.$$
- GST of ₹ 60,000 paid by Firm A on the purchase of inputs is adjusted against GST charged by it (= ₹ 1,00,000). This is called adjustment of 'GST credit' or 'input credit.'
- Final incidence (impact) of GST on the consumers = ₹ 1,00,000 which is 10% of the value of the FINAL PRODUCT.

Briefly, Firm A collects GST of ₹ 1,00,000 from the households (the end-users of household furniture), and it deposits ₹ 1,00,000 – ₹ 60,000 = ₹ 40,000 with the government having adjusted for 'input credit' of ₹ 60,000. Input credit is equal to GST paid by Firm A to Firm B, C and D on the purchase of inputs. The following flow chart further elaborates this point:

### GST Flow Chart



**Note:** If GST amount charged by a firm on the sale of its output is less than the GST amount paid by it on the purchase of inputs, the firm can claim refund of GST from the government.

## **STRUCTURE OF GST**

GST Council has specified multi-tier tax structure of 0%, 5%, 12%, 18% and 28% as applicable to different categories of goods and services. The latest category list (issued by the government in 2019) is as under:

### **(1) No Tax Category**

It includes goods like sanitary napkins, deities made of stone, raw material used in brooms, and fortified milk, fresh fruits & vegetables.

It also includes services like of hotels and lodges who carry a tariff below ₹ 1,000.

### **(2) 5% GST Category**

It includes goods like skimmed milk powder, fish fillet, frozen vegetables, tea, coffee, spices, pizza bread, kerosene, coal, fertilizers, electric vehicles and so on.

Services like of railways and airways are also included.

### **(3) 12% GST Category**

It includes goods like frozen meat products, butter, cheese, ghee, pickles, sausage & fruit juices, jewellery box, ayurvedic & homeopathy medicines, wooden frames for painting and photographs.

Business class air tickets and movie tickets below ₹ 100 also fall in this category.

### **(4) 18% GST Category**

Preserved vegetables, flavoured refined sugar, cornflakes, pasta, pastries and cakes, detergents are some notable items in this category.

It also includes services of restaurants located inside hotels with tariffs between ₹ 2,500 and ₹ 7,500 and above, outdoor catering & movie tickets priced above ₹ 100.

### **(5) 28% GST Category**

This includes over 200 goods, mainly sunscreen, pan masala, automobiles, dishwasher, vending machines.

Services like of five-star hotels with tariff exceeding ₹ 7,500.

## **MERITS OF GST**

The government claims the following merits of GST:

### **(I) Common Man Friendly**

A common man should get following benefits of GST:

- (i) GST Act provides that the common items of consumption of the common man remain tax-free. Thus, no tax is levied on items like milk, curd, fresh fruits, vegetables and the like. This should give a big relief to the common man.

- (ii) Only a moderate tax of 5% is levied on items like tea, coffee and medicines which is another set of items being commonly used by most people of the country.

Briefly, the essentials of life of a common man are either tax-free or moderately taxed.

## (2) Advantages for Trade and Industry

In this context, we may note the following observations:

- (i) Procedure for filing GST returns has been simplified. Facility for filing e-returns will definitely save lot of time of the traders and the industrialists.
- (ii) There shall be an uninterrupted flow of 'input credit'. So that, the incidence of taxation does not cascade (compound). The traders and the industrialists can claim 'input credit' themselves while filing GST returns.
- (iii) A cut in taxation (compared to the earlier tax structure) would enhance competitive power of the traders and the industrialists in the international goods market.
- (iv) Tax-exemption on many commonly used items would offer a more favourable market environment to the small traders who deal in these items.

## (3) Benefits to the Economy

Following points highlight the benefits of GST to the economy:

- (i) GST is expected to create one unified market for most goods and services in the country. It means that for every producer in the economy the size of the market will expand.
- (ii) If the prices of goods and services tend to fall in the domestic economy (as is expected by the government), exports will rise, leading to higher earnings of foreign exchange.
- (iii) A unified market is expected to lead to Balanced Regional Growth.
- (iv) With the growth of market size, GST is expected to raise the level of economic activity in the economy. Implying faster GDP growth. It would also mean faster generation of the opportunities of employment.
- (v) GST is expected to improve tax compliance. Because:
  - (a) Input credit will be available to only those who buy their inputs from GST-compliant firms.
  - (b) There is to be a digital record and monitoring of value addition at stages of production activity.

Higher degree of tax compliance would mean:

- (a) higher tax-GDP ratio, and
- (b) gradual elimination of the 'shadow economy' or the black money economy.

## CREATING ONE ECONOMIC INDIA

With unified market and free movement of goods across all parts of the country, GST will help create one 'Economic India'. This would mean 'level playing field' for all buyers and sellers in the country. Domestic economy would become more competitive. Higher the degree of competition, greater the need for innovations. Innovative economy is always better placed for 'takes-off' and 'sustained growth'.

## DEMERITS OF GST

GST is not free from criticism. Following points are raised against this tax:

- (i) Due to compulsions of tax compliance, small and marginal producers of the shadow economy (where tax is evaded) may find it difficult to continue their business operations.
- (ii) If the small and marginal producers are eliminated, production activity will decline. Still harder will be the impact on employment. Because, it is production activity in the shadow economy which generates most employment opportunities in the country.
- (iii) The government proposes to set up 'Anti-profiteering Authority' to monitor that the benefits of lower taxation is actually passed on to the consumers. This authority shall have the right to cancel registration of such business establishments which are found to be exploiting the consumers by charging higher price. The business community has expressed their serious resentment over this issue. They are fearing that the Anti-profiteering Authority will mean the return of 'Inspector Raj' leading to a rise in corruption.
- (iv) It is feared that the operating cost of small and marginal producers will rise owing to the maintenance of records at all levels of sale and purchase of goods and services.
- (v) There is a definite possibility that post-GST, the prices of some goods and services will rise. This might contribute to inflationary spiral in the country. Inflationary spiral is also feared owing to the fact that post-GST nearly 75% goods and services will bear the incidence (impact) of taxation.
- (vi) According to P. Chidambaram (ex-Finance Minister), small, medium and microscale entrepreneurs are not GST-prepared. Even when GST is a tax-reform, its introduction should have waited till these entrepreneurs fully understand the pros and cons of this tax. These entrepreneurs, according to Chidambaram, are still not clear as to who is leaving GST-state or the centre.
- (vii) Petroleum and Electricity are out of the ambit of GST, even when these products constitute nearly 35-40% of the economy. This is a serious demerit or deficiency of GST.

## EVALUATION

GST is a national tax replacing multiple of taxes on goods and services in the economy. 'One tax in place of all' is undoubtedly a significant reform in the field of taxation. It is also an undoubted fact that GST would increase tax compliance leading to (i) a rise in tax-GDP ratio, and (ii) elimination of the shadow economy (even though it may happen only over a longer period of time). Yet, the flaws related to GST cannot be overlooked. Particularly, the fact that petroleum products which are a significant source of revenue of the state governments are out of the ambit of GST. Presently, these products are carrying a tax load of nearly 50% of the market price. Given the fact that the highest GST slab is 28%, if petroleum products are brought in the ambit of GST, the consumers will get a significant relief by way of price cut. If GST is being propagated as consumer-friendly, then why not bring petroleum products in the ambit of GST. Also, the government must allay fears of the small and marginal entrepreneurs that Anti-profiteering Authority will not mark the return of 'Inspector Raj' in the country. This authority should work for erosion of corruption rather than promoting it through harassment of the business community.

Briefly, GST is welcome provided it is implemented in letter and spirit. The government must make GST as a landmark tax reform rather than a tax regime laden with fears and apprehensions.

# VIVA VOCE (EXAMINATION THROUGH SPOKEN COMMUNICATION)

## 1. Explain the concept of GST.

Ans. Broadly speaking, GST (Goods and Service Tax) is one tax replacing all indirect taxes in the economy. Also, it is a uniform tax across all parts of the country. 'One tax, one nation, one market' is the core characteristic of GST.

## 2. How is GST a national tax?

Ans. GST is a national tax, because it carries one tax rate for a given set of goods across all parts of the country.

## 3. What is input credit?

Ans. Input credit refers to the credit claimed by a firm on account of GST paid on the purchase of inputs.

## 4. Explain how GST is essentially a value added tax.

Ans. GST is essentially a value added tax as it is a tax levied at all stages of value addition. But, it does not mean cascading of a tax. Consumers are loaded with GST only at the final stage of value addition (when goods are ready for use by the consumers). The burden of GST on the purchase of inputs is not passed on to the final buyers (consumers). Instead, it is refunded to the firm by way of input credit.

## 5. Give a brief description of the structure of GST.

Ans. GST is a multi-tier taxation across different goods and services. Its structure includes four categories of goods and services attracting different rate of taxation. This is besides one 'exemption' category attracting zero taxation. Details are as under:

- (i) 0% GST (or GST exempt) category. It includes items of common man consumption. These are like sanitary napkins, foodgrains, fresh fruits and vegetables.
- (ii) 5% GST category. This includes items of mass consumption, such as sugar, tea and medicines as well as transport services.
- (iii) 12% GST category. This includes items like butter, cheese, ayurvedic & homeopathy medicines and spectacles.
- (iv) 18% GST category. Pasta, pastries and cakes, detergents are the items of this category.
- (v) 28% GST category. This is the highest GST slab and includes items like automobiles, dishwasher and vending machines.

## 6. GST will lead to better tax compliance. Do you agree?

Ans. Of course, GST would lead to better tax compliance. It is because of two reasons:

- (i) Input credit (refund of GST on the purchase of inputs) is available to the firms only when the inputs are purchased from the GST compliant firms, and
- (ii) A digital record is to be maintained of value addition at all stages of production.

## 7. How is GST a common man friendly tax?

Ans. GST is a common man friendly, because:

- (i) Common items of consumption (like fresh fruits and vegetables) are tax free, and
- (ii) Only a moderate tax (of 5%) is levied on items of mass consumption like tea and coffee.

**8. Explain how GST will enhance competitiveness in the economy.**

Ans. GST is expected to enhance competitiveness in the domestic market as it provides a level-playing field to all the producers of a particular commodity in the market. All producers, across all states of the country, are liable to a uniform GST.

**9. GST will lead to one unified market in the domestic economy. Explain how.**

Ans. GST is expected to lead to a unified market in the domestic economy, because a uniform tax structure (relating to goods and services) is to prevail across all parts of the country.

**10. Why is there opposition to GST?**

Ans. Opposition to GST arises owing to two factors:

- (i) The marginal producing units operating in a shadoweconomy can no longer evade their liability to pay taxes (taxes on goods and services), and
- (ii) It carries the fear that the Anti-profiteering Authority may lead to the return of 'Inspector-Raj'.

**11. Give your evaluation of GST in India.**

Ans. GST in India would undoubtedly improve tax compliance. It would enhance tax-GDP ratio. It would raise government revenue and therefore, lower fiscal deficit. But, its introduction and its compliance is not free from obstructions. It is not so very easy to convert the tax evaders into tax compliers. Also, it is not so very easy to finally settle the GST rates which would promote production activity rather than impede it. As of now, GST seems to have led to a slowdown in production activity, as GDP growth rate has hit the lowest ever during the past three years. Full scale compliance of GST would need tax-friendly environment and procedural simplifications. Conducive environment rather than harsh enforcement by the government is perhaps the need of the hour.





## PROJECT: 3

# PUBLIC HEALTH EXPENDITURE IN INDIA

### INTRODUCTION

"Sound mind in a sound body." It is an old saying conveying a significant message. It underlines the need for good health of the citizens of a nation. A country with healthy population will have healthy workforce. Healthy workforce, having sound physical and mental abilities, will set up new benchmarks of efficiency and skill. Over the long run, it would mean a shift in the potential level of output even when other resources (other than human resource) of the country remain constant. Technically, this would mean a forward shift in production possibility curve of the nation. Implying a forward shift in economic prosperity of the residents.

The present study focuses on the role played by the government in maintaining and promoting health of the residents of our country. Public health expenditure is the central parameter of this study.

### WHAT DOES PUBLIC HEALTH EXPENDITURE MEAN?

Public health expenditure in India refers to expenditure on health incurred by the three layers of the government: (i) the Central Government, (ii) the State Government, and (iii) Local Self Government (Municipal Committees and Municipal Corporations). The Central Government spends money on building medical infrastructure in the countries like AIIMS (All India Institute of Medical Sciences). It also provides Grant-in-Aid to the state governments for healthcare of the residents of the state. The state government runs several hospitals and dispensaries, offering free medical care to the residents. The state government also transfers funds to the local bodies for healthcare. The local bodies concentrate on cleanliness of their areas. Expenditure on preventive care (preventing the occurrence of diseases) is their principal concern. However, it is a matter of debate whether expenditure on sanitation by the local bodies should be included in health expenditure or not.

### THE DATA BASE AND ANALYSIS

We are relying on secondary data. The data is drawn primarily from two sources:

- (i) Economic Survey of India, and
- (ii) World Health Organisation.

The data used in the study relate to India and other countries. The idea is to assess how India fares in public health expenditure in relation to other countries of the world. The following sections of the study include diverse sets of data relating to diverse indicators of healthcare. Each data-set is presented

in the form of a Table, showing how India performs in healthcare in relation to rest of the world. We are starting with a Table, showing public health expenditure as percentage of GDP across different countries of the world including India.

**Table 1. Public Health Expenditure (Percentage of GDP) in India and Other Countries (1995 & 2016)**

Country	Expenditure 1995	Expenditure 2016
Algeria	3.7	6.65
Argentina	8.3	7.55
Australia	7.3	9.25
Austria	7.5	10.44
Bahamas	6.9	6.38
Bangladesh	3.2	2.37
Belgium	7.6	10.04
Bhutan	4.0	3.45
Brazil	6.5	11.77
Bulgaria	4.8	8.23
Canada	8.9	10.53
China	3.5	4.98
Colombia	6.8	5.91
Cuba	5.2	12.19
Denmark	8.1	10.35
EI Salvador	6.4	6.96
Ethiopia	3.0	3.97
France	10.1	11.54
Germany	9.4	11.14
Greece	8.3	8.45
Haiti	6.6	5.39
Hungary	7.2	7.36
India	4.0	3.66
Indonesia	2.0	3.12
Iran	3.7	8.10
Ireland	6.4	7.38
Israel	7.3	7.31
Italy	7.1	8.94
Japan	6.6	10.93

Source: World Bank

## Observations

**Table 1** offers the following observations:

- (i) In India, public health expenditure (as percentage of GDP) ranks amongst lowest in the world. In 2016, it is estimated to be 3.66% of GDP, contrasting with 11.54% in France, 11.14% in Germany, 10.53% in Canada and 10.35% in Denmark. Even China and Iran are performing better (than India) where it is 4.98% and 8.10% respectively. Of course, we compete better with Indonesia where it is 3.12% and Bangladesh where it is 2.37%.
- (ii) Over time, public health expenditure (as percentage of GDP) has decreased, from 4.0% in 1995 to 3.66% in 2016. Countries like Iran are showing substantial improvement, from 3.7% in 1995 to 8.10% in 2016. This shows attitude of continuous neglect by the government in India with regard to healthcare of its citizen.
- (iii) Considering the fact that India's GDP number is far smaller than that of developed countries and the fact that India's population size is far larger, low percentage of public health expenditure points to a miserably low per capita public health expenditure in India.

### Small size of total public health expenditure

Big size of total population

= Miserably low per capita public health expenditure

No wonder, if Indian population is confronted with disease and premature loss of life.

We now come to **Table 2** showing public health expenditure as percentage of total government expenditure in 2014.

**Table 2. Public Health Expenditure as Percentage of Total Government Expenditure (2014)**

Country	Government Expenditure (%)	Country	Government Expenditure (%)
Australia	17.3	Japan	20.3
Austria	16.3	Malaysia	6.4
Bangladesh	5.7	Mexico	11.6
Belgium	15.1	Myanmar	3.6
Brazil	6.8	Nepal	11.2
Canada	18.8	Netherlands	20.9
China	10.4	New Zealand	23.4
Denmark	16.8	Norway	18.2
France	15.7	Pakistan	4.7
Germany	19.6	Spain	14.5
India	5.0	Thailand	13.3
Indonesia	5.7	Sweden	19.0
Israel	11.6	UK	16.5
Iraq	6.5	USA	21.3
Italy	13.7		

## Observations

Table 2 offers the following observations:

- (i) In India, public health expenditure (as percentage of total government expenditure) is extremely low. In 2014, it was estimated to be 5.0% which is miserably low compared with most countries in the world.
- (ii) Even some less developed countries and smaller economies are performing better than India. In Bangladesh, for example, the government is allocating 5.7% of its budgetary expenditure to healthcare, while in India, it is just 5.0%. Luckily, we are performing better than Pakistan where it is just 4.7%.
- (iii) Public health expenditure (as percentage of total government expenditure) in India contrasts sharply with that in developed countries of the world. Thus, compared to 5.0% in India, it is 21.3% in USA, 20.3% in Japan, 18.8% in Canada and 19.0% in Sweden.

This reinforces our earlier conclusion that the government in India has seldom been serious about public health.

Here arises an important question: where does the government expenditure go? Of course, the bulk of it goes to the funding of welfare schemes. But these schemes focus more on freebies and cash incentives rather than medical care of the people. Freebies and cash incentives are politically more suitable to the government than public health expenditure. A poor person with cash in hand will be more inclined to vote for the government than with medicine in hand. Expenditure on promoting populist policies of the government leaves little funds for expenditure on healthcare.

We now shift to yet another parameter of public healthcare in India. Let us assess the extent to which people in India depend on 'Out of Pocket Expenditure' for their healthcare. Higher out of pocket expenditure would mean lesser healthcare expenditure by the government. It would mean that the people are left to rely on private medical care, no matter how expensive it is. Table 3 presents data indicating out of pocket healthcare expenditure as percentage of total health expenditure in India and other countries of the world.

**Table 3. Out of Pocket Healthcare Expenditure  
(Percentage of Total Health Expenditure) (2014)**

Country	Government Expenditure (%)	Country	Government Expenditure (%)
Algeria	26.5	India	62.4
Argentina	30.7	Israel	27.0
Australia	18.8	Italy	21.2
Bangladesh	67	Japan	13.9
Belgium	17	Myanmar	50.7
Bhutan	25	Nepal	47.7
Canada	13	Norway	13.6
China	32	Spain	24.0
Denmark	13.4	UK	9.7
France	6.3	USA	11.0

Ghana	26.8	World	18.2
Haiti	34.8	Least Developed Countries (UN Classification)	46.4

## Observations

Table 3 offers the following observations:

- (i) Out of pocket healthcare expenditure in India (as a percentage of total health expenditure) is extremely high. It is here that India achieves the dubious distinction of a very high rank.
- (ii) Out of pocket healthcare expenditure in India contrasts sharply with developed countries of the world. Compared with just 6.3% in France, 9.7% in UK and 11.0% in USA, in India it is as high as 62.4%.
- (iii) Even least developed countries like Myanmar, Nepal and Haiti are performing better than India. Out of pocket expenditure on healthcare (as percentage of total health expenditure) is 50.7% in Myanmar, 47.7% in Nepal and 34.8% in Haiti.

Higher percentage of out of pocket expenditure reveals a very bitter truth if it is analysed in the context of the fact that private medical treatment in India is very expensive and beyond the means of the bulk of population in India. The bitter truth is that only a small section of the population enjoys good healthcare; for the majority healthcare is like an unaffordable luxury.

It reveals an utter neglect of healthcare of the citizen of India by the Government of India.

## CONCLUSION

India is a poor country, agreed. But its performance in public healthcare is way behind even the poorer countries in the world. This points to a serious flaw in priorities of the government. The government priority has been to achieve maximum possible political mileage with every rupee of public expenditure. This has resulted in neglect of significant social issues like public healthcare. As a strategy of growth and development, the government also encouraged the growth of private healthcare system. Luxurious nursing homes offering 5-star facilities are spreading in every nook and corner of the country. So much so that we claim India to be an emerging destination of medical tourism. But who are the beneficiaries? Only the slender (small) percentage of population: the rich and the super rich. The staggering majority of the poor (some of whom are driven to commit suicide to avoid the stress of hunger) suffers deprivation of healthcare. They fall prey to sickness and diseases. With low energy and low efficiency, they are forced to survive on low wages. This amounts to a massive loss of human resource, besides bringing shame to the nation. It is high time that the government responds to the wake-up call relating to public healthcare.

Economic prosperity that neglects critical social issues (like healthcare) is meaningless. If the majority of the country's population suffers disease and sickness, the prosperity of the few would ultimately become redundant (irrelevant). The planners and the politicians are to realise that neglect of healthcare in a poor country like ours would amount to an irreparable loss of human resource, besides being a social stigma.

# VIVA VOCE (EXAMINATION THROUGH SPOKEN COMMUNICATION)

## 1. Narrate the significance of public health expenditure.

Ans. Efficiency is the under-current of growth and prosperity. Only healthy workforce, having sound physical and mental abilities, can set new benchmarks of efficiency. Low efficiency (implying low productivity) is the root cause of low wages (and therefore, low quality of life) in less developed countries. It keeps these countries in a state of perpetual poverty, implying 'vicious circle of poverty'. Efficiency levels must be raised to break the vicious circle of poverty. The foremost requirement of raising efficiency is to raise public health expenditure. Owing to their poverty and deprivation, the bulk of labour force in India are left with little or no means for their healthcare.

## 2. Give some oral information on public health expenditure in India compared to other countries of the world.

Ans. In India, public health expenditure is extremely low compared to most other countries in the world. Even some less developed countries and small economies are performing better than India. Here are some illustrations:

- In India, public health expenditure was estimated to be 3.66% of GDP in the year 2016. In France, it was 11.54%, in Germany 11.14%, in Canada 10.53%, and in Denmark 10.35%.
- In India, public health expenditure, as a percentage of total government expenditure contrasts sharply with developed countries of the world. Compared to 5% in India (2014), it was estimated to be 21.3% in USA, 20.3% in Japan, 18.8% in Canada and 19% in Sweden.

Thus, public health expenditure in India is very bleak (low), both as a percentage of GDP and as a percentage of total government expenditure.

## 3. Out of pocket healthcare expenditure in India is very high: higher than even USA. Is it not a sign of higher health consciousness in India than most other countries?

Ans. High out-of-pocket healthcare expenditure is not a sign of high health consciousness in India. Instead, it reflects low or negligible healthcare expenditure by the government of the country. Neglect of healthcare of the millions of the poor by the government leaves them in a state of lurch (state of helplessness). They are forced to neglect their health. The rich, on the other hand, spend richly on the luxurious healthcare facilities.

## 4. How does low public health expenditure in India lead to the loss of human resource?

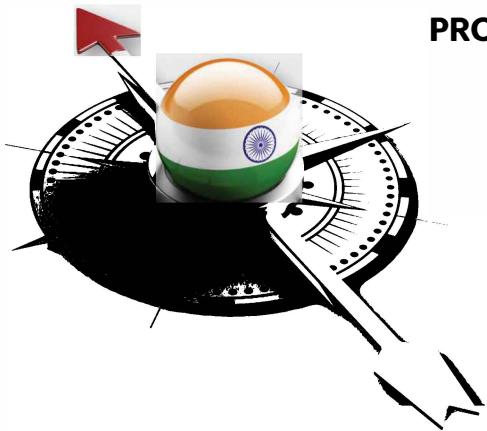
Ans. It is true that low public health expenditure in India leads to the loss of human resources. Low public health expenditure in a country where people are battling poverty and deprivation would mean loss of health. Loss of health implies loss of human resource. Because only a healthy labour force can deliver high levels of output, other things remaining constant.

## 5. How would you link low public health expenditure with the loss of efficiency or productivity?

Ans. In a poor country like India, low public health expenditure leads to low efficiency. Poor people cannot afford expensive healthcare in the market. They depend on public healthcare facilities. But low public health expenditure implies the lack of public healthcare facilities, which indeed is a hard fact in India. Consequently, people are to drag their life with disease and sickness. This implies loss of efficiency and consequently, low productivity. Low productivity is a sign of economic backwardness.



## PROJECT: 4



# BREAKING THE VICIOUS CIRCLE OF POVERTY IN THE INDIAN ECONOMY

## INTRODUCTION

Vicious circle of poverty is a typical characteristic of the Indian economy. It is a situation of widespread poverty in the economy, so widespread that poverty starts breeding itself. In the Indian economy, a significant percentage of its population is struggling to find food, shelter, and clothing. Education is a distant dream for the millions. Illiteracy is rampant and malnutrition is widespread. '*Garibi Hatao*' (remove the poverty) has become a stable slogan along with the stability of poverty. Not that our economy is not growing. True, our GDP is rising. There have been instances when we were close to achieving the double digit growth rate of GDP. We are proud of the fact that the number of billionaires is rising in the country. But, we are equally ashamed of the fact that the ghost of absolute poverty continues to haunt us with little hope of redemption. Our belief that the benefits of GDP growth would trickle down to the poorer sections of the society has ended just as a dream. Even 72 years after independence, we have failed to eradicate poverty. The millions of our countrymen continue to grapple with hunger, starvation, dearth and deprivation.

The problem of poverty was vicious at the time of independence and continuous to be vicious even today. We continue to grapple with the vicious circle of poverty. This vicious circle is growing diabolic and can be broken only if some radical measures are taken by the government.

## CONCEPT OF VICIOUS CIRCLE

Poverty in India has assumed a vicious circle. It is a situation where poverty is the cause of poverty and poverty is the result of poverty. Poverty breeds itself. Consequently, a widely held opinion: '*We are poor, simply because we are poor.*' It is because of this vicious circle of poverty that the millions in India are born in poverty, live in poverty, and die in poverty. Examples are numerous (particularly in the rural sector of the economy) of those committing suicide as they fail to sustain the burden of life. Poor rainfall leads to poor harvest, resulting in poor income of the farmers. Loans are raised to pay the loans. But the debt multiplies faster than the income of the farmers. End of life is the ultimate consequence.

## TWO VITAL ASPECTS OF VICIOUS CIRCLE

Vicious circle of poverty has two aspects: (i) supply aspect, and (ii) demand aspect. Details are as follows:

### Supply Aspect

On the supply side, vicious circle of poverty operates like this:

**Low Income → Low Saving → Low Investment → Low Production → Low Income**

Thus, low income (implying poverty) leads to low income again, because poverty does not allow surplus (saving) for further investment.

### Demand Aspect

On the demand side, vicious circle of poverty operates like this:

**Low Income → Low Purchasing Power → Low Demand → Low Inducement to Invest  
→ Low Investment → Low Production → Low Income**

Thus, low income (implying poverty) leads to low income again, because poverty does not generate demand for goods and services, because of which inducement to invest remains low. Low inducement to invest implies low investment. Consequently, production level, and therefore income level, remains low.

## BREAKING THE VICIOUS CIRCLE

### (I) Supply Side

The strategy to break the vicious circle on the supply side requires that we generate funds for investment. How do we do it? The possible remedies are as under:

#### (i) Voluntary Savings

This refers to what people wish to save. In India, voluntary savings are low, because of (a) low income of the people, and (b) low propensity to save.

However, the scope for raising voluntary savings should not be written off, simply because, the level of income is low. Definitely, there is a scope for raising household savings through '[interest rate incentives](#)'. We can expect small savings to respond to the lucrative rate of interest. Unfortunately, the government is focusing on '[low interest rate](#)' strategy (with a view to boosting investment). This has dampened the propensity (desire) to save. The government must revise its '[low interest rate- strategy](#)' in case voluntary savings are to be boosted. It needs no emphasis that voluntary savings are an important source of funds for investment.

#### (ii) Forced Savings

Forced savings are generated through taxation. It is often argued that raising the tax burden is unethical, because of widespread poverty in the Indian economy. This argument carries a sound emotional appeal. But, it lacks economic reasoning.

This is because, tax structure in the Indian economy suffers from glaring gaps. Owing to which, forced savings are not generated to the extent possible. Income from farming is totally tax-free. This

seems to be a politically convenient, rather than economically rational decision. It makes no sense to offer tax-exemption to the rich farmers. Taking advantage of this exemption, the rich industrialists have diverted huge funds to the construction of farm houses. Declaring high farm-income and low industrial-income has become the standard practice (or device) to evade taxation. Also there are other forms of tax-evasion in the country. *The extent of tax-evasion points to the surplus that the government could have mopped up and utilised as investment funds.*

### (iii) External Sources of Funds for Investment

Voluntary savings and forced savings are internal (domestic) sources of funds for investment. There are external sources as well. Funds from external sources include: (a) aids and grants from rest of the world, (b) borrowing from rest of the world, and (c) FDI (Foreign Direct Investment). However, aids and grants are gradually shrinking owing to expanding needs of the seekers. So these can be written off as of no significance. Loans (borrowings) are an important source. But often these are tied to the purchase of goods from the donor nations. Often we are to pay high price for these goods particularly when these goods are related to defence requirements. Thus, the opportunity cost of loans from abroad is very high. What is left is FDI. It is an emerging source of funds for domestic investment. It is considered to be a better option than 'borrowings from abroad'. This is because, FDI brings not only the funds for investment, but also the technology and the managerial skills. Besides, FDI infuses competitiveness in the market and thus raises opportunities of innovations. But, FDI is not available as and when we wish to have it. 'Ease of doing business' is the foremost requirement of foreign investors which is what we fail to provide. Bureaucratic Red-tapism is rampant in the Indian system which acts as a big deterrent to the flow of FDI. Environmental pollution and the lack of infrastructural facilities are the other important hinderances. Thus, even when FDI is expanding, it is far below the requirement of the Indian economy. The government needs to remove the hurdles in the free flow of FDI. Particularly, domestic infrastructure and domestic environment must be so considerably improved that the domestic economy becomes an important destination of FDI.

The crux of the remedial measures on the supply side is that: we cannot depend on the market forces to generate funds for investment. The government needs to undertake some radical reforms. These reforms should focus on raising the 'propensity to save' of the residents and 'propensity to invest' of the foreign investors in the domestic economy. In other words, supply side of the vicious circle of poverty cannot be tackled without active intervention of the government to promote domestic savings and induce foreign investment. Tax reforms (with a view to plug tax-evasion) are also urgently required.

## (2) Demand Side

The problem on demand side is of low demand. Demand is low because of low income. Income is so low that after their food expenses, the majority of the people are left with meager surplus for the purchase of comforts and luxuries of life. Most people in the country are to strive hard for the comforts of life. And, it is like a dream coming true when they get some luxuries of life. It leads to overall deficiency of demand in the economy, particularly for the industrial goods. Deficiency of demand lowers the inducement to invest. Thus, while on the one hand, investment is low (because of low savings), on the other, inducement to invest is low because of the deficiency of demand.

Why can't the Indian producers depend on foreign demand? This is because we lack competitiveness in the global market, owing to poor technology and high cost of production.

How to raise domestic demand so that the inducement to invest is raised?

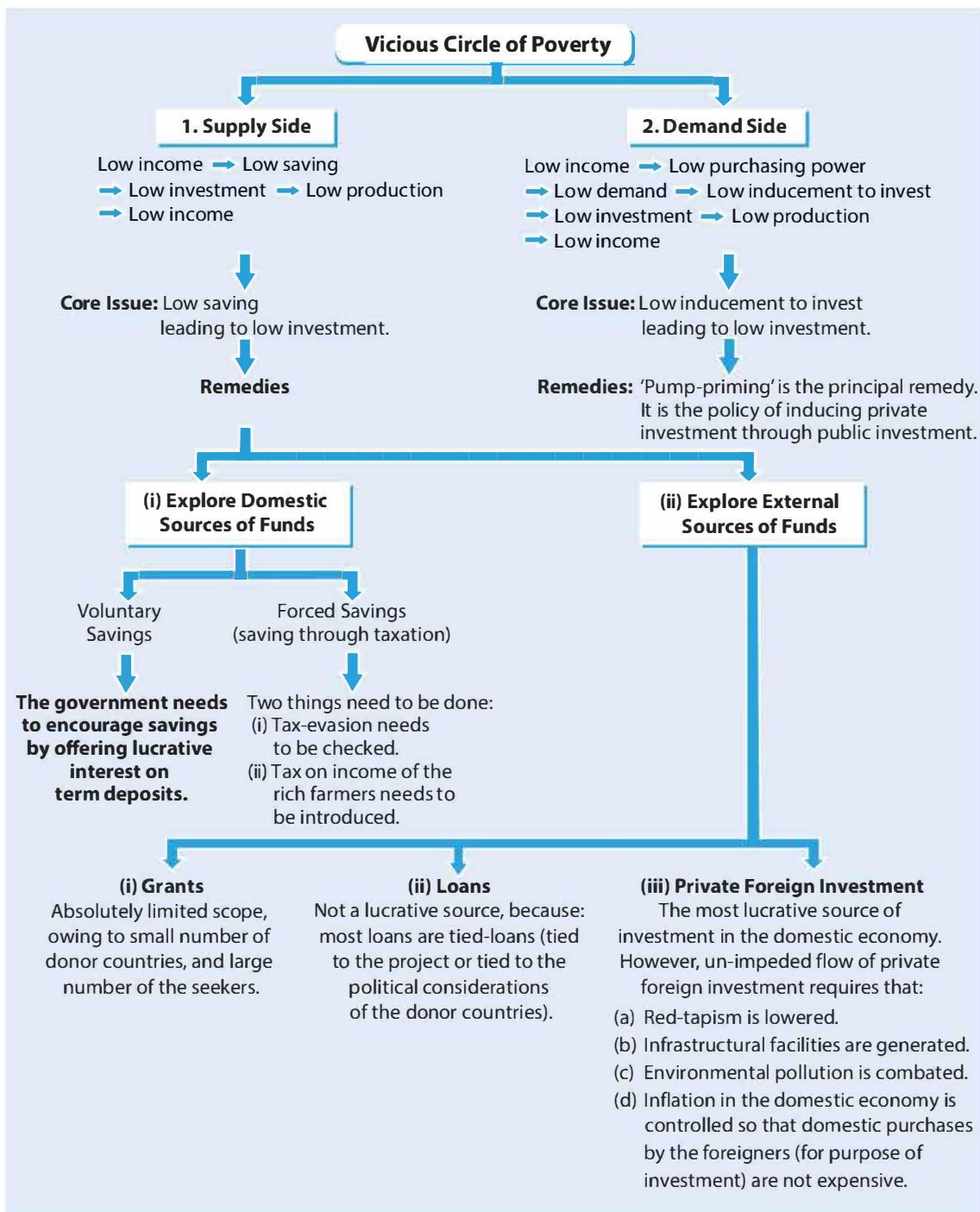
Here, before we discuss the possible remedial measures, it needs to be clearly understood that the problem of raising demand in the Indian economy is not similar to this problem in developed economies like USA or UK. In the advanced economies, the problem arises because the level of income is so high that, instead of spending, people start saving. In the less developed economies (like India), the problem arises because the level of income is low: it is so low that people are barely able to get necessities of life. Accordingly, demand for comforts and luxuries (related to industrial goods) remains low. Thus, while in advanced economies the problem can be solved just by infusing more liquidity in the economy, in less developed countries it cannot be done. In advanced countries, the infusion of liquidity would facilitate utilisation of excess capacity, in less developed countries it would not. Simply because the basic problem is not of excess capacity but that of the 'creation of capacity'. In fact, fusion of liquidity (without creation of capacity) would only lead to inflationary spiral. What then is the solution? The solution lies in the policy of '*Pump-Priming*'. It is the policy of inducing private investment through public investment.

Autonomous investment by the government is also expected to induce private investment, once the market size is widened through public investment. Unfortunately, priorities of the government are different. The government seems to be relying more on private investment rather than public investment. It does not want to increase public expenditure with a view to minimising its fiscal deficit. Accordingly, the government is concentrating on raising private investment but not through pump-priming. The government is heavily relying on the RBI for a cut in the repo rate, which would lead to a cut in the market rate of interest. A cut in the market rate of interest implies a cut in the cost of investment. It is expected that a cut in the cost of investment would lead to a rise in private investment. Accordingly, the problem of vicious circle of poverty on the demand side would be solved.

But, there is a doubt if this strategy would work. It is true that private investment is related to the cost of investment. But, would the private investors be induced to invest if there is no demand for their product in the market, no matter what the cost of investment is? The answer is 'No'. The government should realise that the basic problem is not of the cost of investment, but of the lack of demand for the goods, particularly those produced by the industrial sector of the economy. Autonomous investment by the government is the only solution to this problem. Large scale autonomous investment (independent of the cost of investment) would generate income and employment which would lead to the generation of demand for goods and services. Once income generation and demand for goods start chasing each other, private investment would automatically be prompted. Thus, large, scale '*autonomous public investment*' should be understood as a precondition to the '*induced private investment*'. It is only then that we can break the vicious circle of poverty on the demand side.

Briefly, the deadlock of vicious circle of poverty on the demand side can be broken only when the government is ready for a big booster of public investment that acts as '*pump-priming*' in the economy. The government should focus on generating infrastructural facilities that induces private investment both from the domestic investor as well the foreign investor. Infrastructural facilities are to be linked with '*ease of doing business*'. Removal of red-tapism, moderate tax structure and labour reforms are the essential ingredients of '*ease of doing business*'. These ingredients should be pursued in letter and spirit, and not end up merely as slogans and assurances.

## A Flow Chart Presentation of the Problem of Vicious Circle of Poverty and the Remedial Measures



# VIVA VOCE (EXAMINATION THROUGH SPOKEN COMMUNICATION)

## 1. What is vicious circle of poverty?

Ans. It is a situation where poverty becomes the cause of poverty, and poverty becomes the result of poverty. So that, a country is poor simply because it is poor.

## 2. Explain the supply aspect of the vicious circle of poverty.

Ans. On the supply side, the vicious circle of poverty operates like this:

Low income → Low saving → Low investment → Low production → Low income

## 3. What is the core issue on the supply side of the vicious circle of poverty?

Ans. Low saving (leading to low investment) is the core issue on the supply side of the vicious circle of poverty.

## 4. Explain the demand aspect of the vicious circle of poverty.

Ans. On the demand side, the vicious circle of poverty operates like this:

Low income → Low purchasing power → Low demand → Low inducement to invest  
→ Low investment → Low production → Low income

## 5. What is the core issue on the demand side of the vicious circle of poverty?

Ans. Low inducement to invest (owing to low demand, or limited size of the market) is the core issue on the demand side of the vicious circle of poverty.

## 6. What are the possible sources of domestic savings in less developed countries?

Ans. There are two possible sources of domestic savings in less developed countries. These are: (i) Voluntary savings, and (ii) Forced savings through taxation.

## 7. Why are voluntary savings low in the country?

Ans. Voluntary savings are low in the country because of two reasons: (i) interest rates are not lucrative, so that the inducement to save remains low, and (ii) income of most people in the country is low, making it difficult for them to save, even when they wish to save.

## 8. Suggest some ways to increase forced savings in the country.

Ans. Forced saving refers to saving through taxation. The government can increase forced saving in these ways: (i) bring agricultural income in the ambit of taxation, (ii) introduce wealth tax, (iii) combat tax-evasion, and (iv) widen the tax base, by bringing more and more people in the tax-net.

## 9. Why is FDI considered as a preferred mode of domestic investment compared to borrowings from abroad?

Ans. FDI is considered as a preferred source of investment (compared to borrowings from abroad), owing to two reasons: (i) FDI brings not only funds for investment but also managerial skill and production technology. Borrowings are just funds for investment, and (ii) unlike loans, FDI does not lead to the burden of repayment which falls on future generations.

## 10. What steps the government should take to induce FDI in the domestic economy?

Ans. The government is expected to initiate the following steps in order to induce FDI in the domestic economy:

(i) The government should provide the necessary infrastructural facilities.

(ii) Environmental pollution should be combated.

(iii) Taxation system should be stable and simple.

(iv) Labour reforms should be introduced, so that production does not suffer owing to strikes and lockouts.

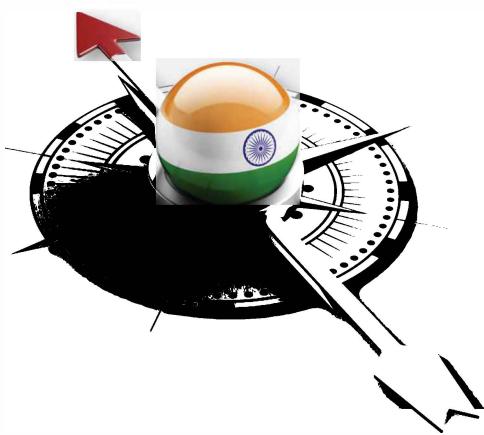
(v) Terror-free peaceful environment should be ensured.

(vi) Red-tapism should be removed.

## 11. What is pump-priming?

Ans. It is the policy of inducing private investment through public investment.





# CBSE SAMPLE QUESTION PAPER, 2020 (SOLVED)

Time Allowed : 1½ Hours

Maximum Marks : 40

## Instructions:

- (i) All the questions are compulsory. Marks for questions are indicated against each question.
- (ii) Question number 1-10 are very short-answer questions carrying 1 mark each. They are required to be answered in one word or one sentence each.
- (iii) Question number 11-12 are short-answer questions carrying 3 marks each. Answers to them should not normally exceed 60-80 words each.
- (iv) Question number 13-15 are also short-answer questions carrying 4 marks each. Answers to them should not normally exceed 80-100 words each.
- (v) Question number 16-17 are long answer questions carrying 6 marks each. Answers to them should not normally exceed 100-150 words each.
- (vi) Answers should be brief and to the point and the above word limit be adhered to as far as possible.

## SECTION-B (INDIAN ECONOMIC DEVELOPMENT)

1. Name any two taxes which were subsumed in Goods and Services Tax (GST).

Ans. (i) Excise duty, and  
(ii) VAT (Value Added Tax).

2. State whether the following statement is true or false:

'The latest demonetization of currency was undertaken by the Government of India on November 8, 2016'.

Ans. True

3. Identify the correct sequence of alternatives given in Column II by matching them with respective terms in Column I:

1

Column I	Column II
A. Land Ceiling	(i) Increase in production of food grain using high yielding variety seeds
B. Land Reforms	(ii) Portion of agricultural produce sold in the market
C. Green Revolution	(iii) Fixing the maximum limit of land holding for an individual
D. Marketed Surplus	(iv) Change in the ownership of land (land to tillers)

Ans. A-(iii), B-(iv), C-(i), D-(ii)

4. Agriculture marketing does not comprise of

(Choose the correct alternative)

- (a) Transportation of the produce to the market place for sale
- (b) Grading of the produce according to the quality
- (c) Storage of the produce for sale in future
- (d) Credit taken to meet expenditure on agriculture

Ans. (d) Credit taken to meet expenditure on agriculture

5. Under \_\_\_\_\_ type of unemployment, marginal product gained by employing one additional unit of labour is zero.

(Fill up the blank with correct answer)

Ans. disguised

Or

an indicator which is used for analyzing the employment situation of a country.

(Fill up the blank with correct answer)

Ans. Workforce participation rate

6. In 1955, Karve committee was constituted for aiming the

(Fill up the blank with correct answer)

Ans. development of small-scale industries

7. Identify the correct sequence of alternatives given in Column II by matching them with respective terms in Column I:

1

Column I	Column II
A. Study Group formed by Planning Commission for Poverty	(i) 2005
B. 'Task Force on Projections of the Minimum Needs and Effective Consumption Demand'	(ii) 1962
C. Mahatma Gandhi National Rural Employment Guarantee Act	(iii) 2014
D. Jan Dhan Yojana	(iv) 1979

Choose the correct alternative:

- |                            |                            |
|----------------------------|----------------------------|
| (a) (ii), (iii), (iv), (i) | (b) (iii), (ii), (i), (iv) |
| (c) (i), (ii), (iii), (iv) | (d) (ii), (iv), (i), (iii) |

Ans. (d)—(ii), (iv), (i), (iii)

8. Solar energy can be converted into electricity with the help of \_\_\_\_\_.

(Photovoltaic cell/Lithium cells).

*(Fill up the blank with correct alternative)*

Ans. Photovoltaic cell

9. Arrange the following events of China in chronological order and choose the correct alternative:

- (i) Great Proletarian Cultural Revolution
- (ii) Great Leap Forward campaign
- (iii) Introduction of Economic Reforms
- (iv) First five year plan

Choose the correct alternative:

- |                            |                            |
|----------------------------|----------------------------|
| (a) (ii), (iv), (iii), (i) | (b) (iv), (ii), (i), (iii) |
| (c) (ii), (iv), (i), (iii) | (d) (iv), (i), (ii), (iii) |

Ans. (b)—(iv), (ii), (i), (iii)

10. Introduction of Economic Reform in Pakistan took place in

*(Choose the correct alternative)*

- |          |          |
|----------|----------|
| (a) 1978 | (b) 1980 |
| (c) 1988 | (d) 1991 |

Ans. (c) 1988

11. “Recently Indians have drifted away from the traditional knowledge and practices and caused large scale damage to environment.”

Explain how, adopting the traditional practices can be helpful in achieving the objective of sustainable development?

3

Ans. It is true that recently we have drifted from the traditional knowledge and practices and have caused large scale damage to the environment. Here is an example:

Traditional farm practices relied on the use of organic manures. We now have shifted to the use of chemical fertilizers. It has led to an extensive use of water as well as pollution of water. No doubt we have raised productivity. But we should not forget that there has been a serious damage to the environment in terms of (i) depletion of water table, and (ii) pollution of water.

It is hightime that we revert to organic farming, save our environment and make our development process more sustainable.

Or

'Power sector in India has major issues with its installed capacity.' Discuss the given statement.

3

Ans. Power sector in India is grappling with two major issues with regard to its installed capacity.

These are: (i) insufficiency, and (ii) inefficiency. These are briefly discussed as under:

**Insufficiency:** There is a big gap between required power generation and the actual power generation, even when there has been a substantial rise in the installed capacity over time. The total installed capacity as on July 30, 2019, stood at 3,60,456 MW. This is far less than the required capacity which is growing very fast (owing to economic expansion as well as population growth) and is expected to be 9,50,000 MW by 2030. Due to shortage, power cuts are a recurring feature which impedes the process of growth.

**Inefficiency:** Inefficiency occurs in terms of extremely high losses of electricity during its transmission and distribution. Losses due to theft and pilferage are indeed very striking.

12. 'Education Commission 1964-66 had recommended that at least 6 per cent of GDP must be spent on education'. How far has India been able to achieve the said goal? 3

Ans. Investment in social infrastructure (education in particular) is considered critical to economic progress. Considering its significance, Education Commission 1964-66, had recommended that at least 6% of GDP must be spent on education. But the true story has been highly disappointing. The Economic Survey of the year 2018-19 reveals that the states and the Union government together have been investing less than 3 per cent of the country's GDP in education. In 2012-13, education expenditure was 3.1% of the GDP. It fell in 2014-15 to 2.8% and registered a further drop to 2.4% in 2015-16. Although, there have been some signs of recovery since 2016-17 (2.6%), expenditure on education hasn't been restored to the 2012-13 level, let alone be anywhere close to the stipulated level of 6% of GDP. Thus, our performance in the area of education (a critical component of social infrastructure) has been far from satisfactory.

13. 'The opening up of the Indian Economy has led to a rapid increase in Foreign Direct Investments and Foreign Exchange Reserves of the country.' Defend or refute the given statement. 4

Ans. The opening up of the Indian economy in 1991 and the corresponding economic reforms of liberalisation, privatisation and globalisation was a watershed event for the Indian economy.

Before 1991, foreign investment (Foreign Direct Investment + Foreign Institutional Investment) was negligible. Perhaps, it was due to our inward-looking development strategy that hinges upon import substitution. The opening up of the economy (shifting from inward-looking to outward looking strategy of growth) led to a massive reformation. Foreign investment started steadily rising since then, except for occasional slips between 1997 and 2000 & 2008 and 2012 (owing to global economic slowdown).

Now, 28 years later, forex reserves are at a record high. In 1991, it stood at just \$5.8 billion. As on August 2, 2019, the country's foreign exchange reserves stood at \$428.95 billion.

Thus, it is concluded that the opening up of the Indian economy significantly boosted the foreign direct investments (FDI) and foreign exchange reserves of the country. These are an essential ingredient of growth and development.

14. Define the following terms:

4



**Ans. (a) Disinvestment:** Disinvestment is generally used in context with Public Sector Undertakings (PSUs). When the government sells its shares in PSUs to private entities, it is called Disinvestment.

**(b) Import Substitution:** It refers to the policy of boosting domestic production by raising barriers against the import of goods from foreign economies. It is usually recommended as a way to encourage self-sufficiency, and also to protect the domestic industry from foreign competition.

Or

Define the following terms:

- (a) Outsourcing (b) Quota 4

**Ans. (a) Outsourcing:** Outsourcing is a business practice in which a company hires another company or an individual to perform tasks, related to its production process. This is done with a view to minimising the cost of production.

(b) **Quota:** The term quota is often related to imports. It implies a physical limit (set by the government) on the quantity of a good that can be imported into the country in a given period of time. It is a kind of trade restriction, used to protect the domestic producers.

15. Answer the following questions on the basis of the following data:

- (a) Comment upon the population growth rates among the three countries. 3  
(b) Which country has most skewed sex ratio? 1

Country	Estimated Population (in million)	Annual Growth of Population (in %)	Sex Ratio
India	1311	1.2	929
China	1371	0.5	941
Pakistan	188	2.1	947

Source: World Development Indicators, 2015, [www.worldbank.org](http://www.worldbank.org)

**Ans.** (a) As evident from the table, the rate of growth of population is the highest in Pakistan, which stands at 2.1 per cent per annum. The corresponding rates for India and China are 1.2 per cent and 0.5 per cent respectively. The low rate of growth of population in case of China is on account of its successful implementation of 'One Child Policy', introduced in 1979. The growth rate of population continues to be fairly high in India (1.2 per cent) and alarmingly high in Pakistan (2.1 per cent).

(b) Among the countries mentioned above, India has the most skewed sex ratio. It reflects a strong preference for a male child by the Indian families.

16. "Rural Economic development is essential for Indian Economic development." Do you agree with the given statement? Support your answer with valid reasons. 6

Ans. The statement that rural economic development is essential for Indian economic development is supported through the following observations:

- (i) Nearly 70% of the Indian population lives in rural areas. Rural development would mean focusing on the quality of life of bulk of the population in India.
- (ii) Rural population offers a huge demand potential for the growth of the Indian economy. A laggard rural sector, would mean lack of aggregate demand, an essential ingredient of economic growth.
- (iii) It is only through rural development that a country can achieve self-sufficiency in foodgrain production. Dependence upon other countries (as India was until the Green Revolution of 1960's) for foodgrains leads to depletion of forex-reserves which could be used for growth and development of the country.
- (iv) Rural development is often associated with rise in productivity of land as well as labour. Even when crop output rises, less labour is required than before. Surplus labour force migrates to urban areas to serve as industrial workers. Thus, rural development releases labour force for urban industrial development.
- (v) Rural development is expected to restrict rural-urban migration of population seeking better quality of life. Accordingly, problems related to urbanisation (like of housing and transport and environmental pollution) can be better addressed. It is owing to lack of rural development in India that there is massive migration of population from the rural to urban areas. Accordingly, demand for social infrastructure (schools, colleges and hospitals) as well as economic infrastructure (housing and transport ) in our towns and cities is lagging far behind than their supply.

What is aplenty in our towns and cities is environmental pollution. Summing up we can say that rural development is an essential pre-requisite of economic development. If rural economy remains a laggard economy, it would only work as a serious bottleneck in the process and pace of growth & development of the economy as a whole.

17. 'In spite of the increase in public health expenditure Indian Health System is an ailing system in itself.' Defend the statement citing any three major problems of Health sector in India. 6

Ans. Health sector in India is seriously ailing. Malnutrition is rampant. Infant mortality is high and pre-natal, natal and post-natal care is almost dismal. Poor health is reflected in low efficiency, low productivity and low wage rate. Low wage compounds the problem of healthcare and the vicious circle of low wage and deficient healthcare has firmly gripped most residents of the country. This vicious circle can be broken only through a robust system of government support. But unfortunately, government support system is in a state of shambles. Consequently, the bulk of population in India suffers a serious deprivation of health facilities.

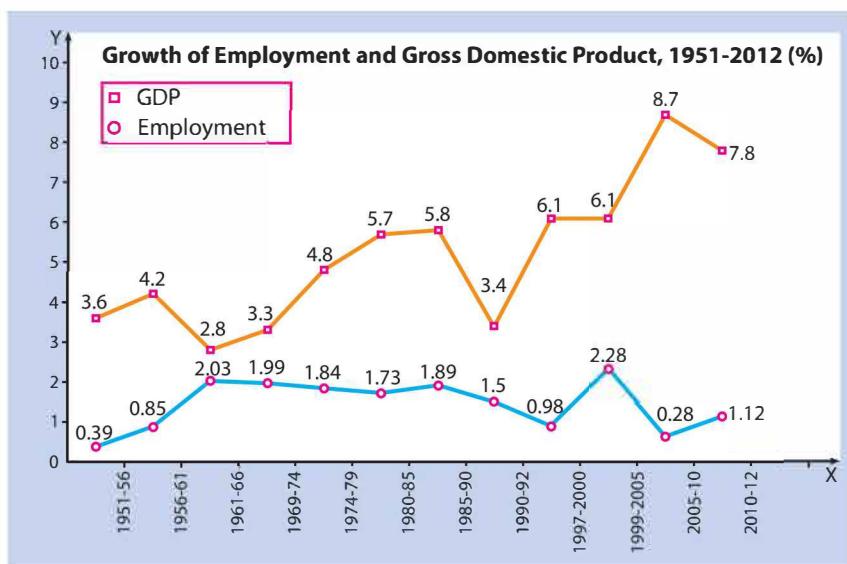
Three major problems of health sector in India are as under:

- (i) **Low Public Expenditure on Healthcare in India:** Government expenditure on healthcare as a percentage of its GDP has been miserably low, compared to the size of the problem of healthcare. India spends approximately 1.5 per cent of its GDP on healthcare, which is in sharp contrast to 9 per cent in UK and 18 per cent in USA.
- (ii) **Urban-Rural Divide:** There exists a huge gap, in terms of health infrastructure, across urban and rural India. Besides, the health infrastructure in rural areas is of sub-standard, supported with ill-trained health professionals.
- (iii) **Shortage of Medical Personnel:** In India, shortage of medical personnel (doctors, nurses and lab-technicians) is a critical problem in the health sector. India has less than one doctor per 1,000 of population, which is the stipulated minimum requirement as prescribed by the World Health Organisation (WHO).

Or

Study the following chart showing the Growth of Employment and Gross Domestic Product and analyse the trend of the two variables from 1990-2012.

6



Ans. The period between 1990-2012 witnessed a historic event in the economic history of India, in terms of onset of New Economic Policy in 1991, viz., Liberalisation, Privatisation and Globalisation. This was reflected in terms of a marked impact on the trend of two variables, viz., GDP and employment. The trend path of these variables (as reflected by the given chart) is summed up in terms of the following observations:

- (i) GDP growth rate recorded a steep rise from 3.4% in 1991 to 8.7% in 2007-08. It is attributed largely to NEP (New Economic Policy) pursued in 1991.
- (ii) There was a slump in the GDP growth rate during the period 2008-12 and it was recorded to be 7.8% in 2010-12. It is attributed largely to the world-wide recession around the year 2008.

(iii) Growth rate of employment does not show equally strong escalation as shown by GDP. Paradoxically, growth rate of employment fell from 1.5% in 1991 to 1.12% in 2012. This is explained by the fact that economic growth in India (as in other countries of the world) was driven more by 'technology' rather than 'workforce'. In other words, growth process was not labour intensive but capital intensive, and capital was invested for innovative technology which raised productivity and proportionately lowered the demand for labour.

Briefly, with globalisation of the economy in 1991, Indian economy is deeply integrated with rest of the world and must adopt 'technology' as the principal driver of growth if it is to catch up with other economies in terms of GDP growth. But, unemployment is the inevitable consequence.

