Indian Economic Policy

DECO502

Edited by:
Dr. Dilfraz Singh
INDIAN ECONOMIC POLICY
Edited By
Dr. Dilfraz Singh
## SYLLABUS
### Indian Economic Policy

**Objectives:**
Objective of this course is to acquaint students of the Indian Economy, present and future of Indian Economics, and how the Indian Economy is influencing the business environment in India context.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>Characteristics of Indian Economy on the eve of independence, <strong>Development Strategies in India:</strong> Planning in India: Objectives Strategies and Evaluation, 11th five year plan.</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Trend and Structure of National Income since 1951, Economic Reforms in India since 1991, Critique of Indian Economic Policies-Pre and Post Reforms</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Demographic Features and Indicators of Development, Poverty: Concept, Causes and Government policies, <strong>Unemployment in India:</strong> Concept, Causes and Government policies, Inflation: Nature and extent</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>**Sectoral performance I:**Agriculture: Growth, Productivity Trends and Crop Patterns, Green Revolution, Recent Issues in Indian Agriculture</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td><strong>Growth ,Trends and patterns in Agriculture:</strong> Rural Credit &amp; Marketing, WTO &amp; Agriculture</td>
</tr>
<tr>
<td><strong>6</strong></td>
<td>Industrial Sector in Pre-reform Period, Industrial Sector in Post-reform Period, Issues and Problems of Public Sector</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td><strong>Sectoral performance II:</strong> Role of Infrastructure in economic development, Indian Financial System: Money Market and Monetary Policy, Capital Market in India and Working of SEBI</td>
</tr>
<tr>
<td><strong>8</strong></td>
<td><strong>Sectoral performance III:</strong> Foreign Trade and Balance of Payment, Role of Foreign Capital-FDI and Multinational Corporations</td>
</tr>
<tr>
<td><strong>9</strong></td>
<td>Fiscal Federalism in India, Government Finance : Union and States, 12th and 13th Finance Commissions</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td><strong>Governance of the Economy:</strong> Implementation of Economic Policies, Parallel Economy, Role of Bureaucracy and Delivery Mechanism in Implementation of Economic Policies, Implementation of Economic Policies: Role of Panchayat and Pressure Groups</td>
</tr>
</tbody>
</table>
CONTENTS

Unit 1: Characteristics of Indian Economy on the Eve of Independence
  *Dilfraz Singh, Lovely Professional University*
  1

Unit 2: Development Strategies in India: Planning in India: Objectives, Strategies and Evaluation
  *Pavitar Parkash Singh, Lovely Professional University*
  14

Unit 3: Eleventh Five Year Plan
  *Dilfraz Singh, Lovely Professional University*
  26

Unit 4: Economic Reforms in India Since 1991
  *Dilfraz Singh, Lovely Professional University*
  37

Unit 5: Trends and Structure of National Income Since 1951
  *Pavitar Parkash Singh, Lovely Professional University*
  47

Unit 6: Demographic Features and Indicators of Development
  *Dilfraz Singh, Lovely Professional University*
  57

Unit 7: Poverty: Concept, Cause and Government Policies
  *Pavitar Parkash Singh, Lovely Professional University*
  63

Unit 8: Unemployment in India: Concept Causes and Government Policies
  *Dilfraz Singh, Lovely Professional University*
  78

Unit 9: Inflation: Nature and Extent
  *Hitesh Jhanji, Lovely Professional University*
  92

Unit 10: Critique of Indian Economy Policies—Pre and Post Reforms
  *Pavitar Parkash Singh, Lovely Professional University*
  105

Unit 11: Sectoral Performance I: Agriculture: Growth Productivity Trends and Crop Patterns
  *Dilfraz Singh, Lovely Professional University*
  116

Unit 12: Green Revolution
  *Hitesh Jhanji, Lovely Professional University*
  135

Unit 13: Recent Issues in Indian Agriculture
  *Dilfraz Singh, Lovely Professional University*
  149

Unit 14: Rural Credit and Marketing
  *Dilfraz Singh, Lovely Professional University*
  159

Unit 15: WTO and Agriculture
  *Pavitar Parkash Singh, Lovely Professional University*
  183
<table>
<thead>
<tr>
<th>Unit 16:</th>
<th>Industrial Sector in Pre-Reform Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Hitesh Jhanji, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 17:</th>
<th>Industrial Sector in Post-Reform Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Pavitar Parkash Singh, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 18:</th>
<th>Issues and Problems of Public Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Pavitar Parkash Singh, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 19:</th>
<th>Sectoral Performance II: Role of Infrastructure in Economic Development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Dilfraz Singh, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 20:</th>
<th>Indian Financial System: Money Market and Monetary Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Pavitar Parkash Singh, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 21:</th>
<th>Capital Market in India and Working of SEBI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Hitesh Jhanji, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 22:</th>
<th>Sectoral Performance III—Foreign Trade and Balance of Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Pavitar Parkash Singh, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 23:</th>
<th>Role of Foreign Capital—FDI and Multinational Corporations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Hitesh Jhanji, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 24:</th>
<th>Fiscal Federalism in India</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Pavitar Parkash Singh, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 25:</th>
<th>Government Finance: Union and States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Pavitar Parkash Singh, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 26:</th>
<th>12th and 13th Finance Commissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Dilfraz Singh, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 27:</th>
<th>Governance of the Economy—Implementation of Economic Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Hitesh Jhanji, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 28:</th>
<th>Parallel Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Dilfraz Singh, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 29:</th>
<th>Role of Bureaucracy and Delivery Mechanism in Implementation of Economic Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Hitesh Jhanji, Lovely Professional University</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 30:</th>
<th>Implementation of Economic Policies: Role of Panchayats and Pressure Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Dilfraz Singh, Lovely Professional University</em></td>
</tr>
</tbody>
</table>
Unit 1: Characteristics of Indian Economy on the Eve of Independence

Objectives

After reading this Unit students will be able to:

• Explain the characteristics of Indian Economy on the Eve of Independence.
• Discuss Commercialisation of Agriculture.
• Assess the process of Industrial Transition in India.

Introduction

A close look at the economic development of India during the British period reveals that whenever India’s colonial economic links in terms of foreign trade and inflow of foreign capital were disrupted, Indian economy made strides in industrial development. During the 20th century, the colonial economic links were interrupted thrice: first, during the First World War (1914-18) and second, at the time of the Great Depression (1929-34) and third during the Second World War (1939-45). In other words, free flow of foreign trade and capital meant economic stagnation in India, while their absence (partial or total) provided an opportunity for Indian capital to open up avenues of industrial growth in areas choked off by imports.

1.1 Characteristics of Indian Economy

The Indian economy in the pre-British period consisted of isolated and self-sustaining villages on the one hand, and towns, which were the seats of administration, pilgrimage, commerce and handicrafts, on the other. Means of transport and communication were highly underdeveloped and so the size of the market was very small. To understand pre-British India, it is essential to study the structure of the village community, the character of towns, the character of internal and foreign trade, the state of the means of transport and communications.

(a) The structure and organisation of villages

The village community was based on a simple division of labour. The farmers cultivated the soil and tended cattle. Similarly, there existed classes of people called weavers, goldsmiths,
carpenters, potters, oil pressers, washermen, cobblers, barber-surgeons, etc. All these occupations were hereditary and passed by tradition from father to son. These craftsmen were paid a stipend out of the crops at the harvest time in lieu of the services performed.

Most of the food produced in the village was consumed by the village population itself. The raw materials produced from primary industries were the feed for the handicrafts. Thus the interdependence of agriculture and hand industry provided the basis of the small village republics to function independently of the outside world. Sir Charles Metcalfe writes in this connection: “The village communities are little republics having nearly everything they want within themselves; and almost independent of foreign relations. They seem to last where nothing lasts. This union of the village communities, each one forming a separate little state by itself... is in high degree conducive to their happiness, and to the enjoyment of a great portion of freedom and independence.” The villages did acknowledge some outside authority, maybe that of a local princeling, who in turn may be under a Muslim Nawab or a Hindu king, by paying a portion of the agricultural produce varying between one-sixth to one-third or even in some periods one-half as land revenue. The land revenue sustained the government.

The agriculturists could be further divided into the land-owning and the tenants. Labour and capital needed was either supplied by the producers themselves out of their savings or by the village landlord or by the village moneylender.

Did you know? There were three distinct classes in village India: (i) the agriculturists, (ii) the village artisans and menials, and (iii) the village officials.

(b) The structure and character of the towns

Towns had come into being principally on account of the following three reasons:

1. Towns were the places of pilgrimage or sacred religious centres. Important examples of such towns were Allahabad, Banaras, Gaya, Puri, Nasik etc.

2. Towns were the seat of a court or the capital of a province. In this category may be included Delhi, Lahore, Poona, Lucknow, Tanjore, etc. These towns lost their importance as the prop of the court was withdrawn.

3. Towns were trading or commercial centres. These towns existed on important trade routes. Mirzapur, Bangalore, Hubli, etc. are examples of this category.

Towns had a life much different from the villages. There existed a large variety of occupations and trades in towns. They catered to wider markets.

1.2 Industries and Handicrafts in Pre-British India

The popular belief that India had never been an industrial country, is incorrect. It was true that agriculture was the dominant occupation of her people but the products of Indian industries enjoyed a worldwide reputation. The muslin of Dacca, the calicos of Bengal, the sarees of Banaras and other cotton fabrics were known to the foreigners. Egyptian mummies dating back to 2000 B.C. were wrapped in Indian muslin. Similarly, the muslin of Dacca was known to the Greeks under the name Gangetika.

The chief industry spread over the whole country was textile handicrafts. The high artistic skill of the Indian artisans can be visualised from this account given by T.N. Mukherjee: “A piece of the muslin 20 yards long and one yard wide could be made to pass through a finger ring and required six months to manufacture.” Besides the muslins, the textile handicrafts included chintzes of Lucknow, dhotis and dopattas of Ahmedabad, silk, bordered cloth of Nagpur and Murshidabad. In addition to cotton fabrics, the shawls of Kashmir, Amritsar and Ludhiana were very famous.

Not only that India was also quite well-known for her artistic industries like marble-work, stone-carving, jewellery, brass, copper and bell-metal wares, wood-carving, etc. The cast-iron pillar near
Delhi is a testament to the high level of metallurgy that existed in India. The Indian industries “not only supplied all local wants but also enabled India to export its finished products to foreign countries.” Thus, Indian exports consisted chiefly of manufactures like cotton and silk fabrics, calicos, artistic wares, silk and woollen cloth. Besides, there were other articles of commerce like pepper, cinnamon, opium, indigo, etc. In this way, Europe was a customer of Indian manufactures during the 17th and 18th centuries. It was this superior industrial status of India in the pre-British period that prompted the Industrial Commission (1918) to record:

“At a time when the West of Europe, the birth place of modern industrial system, was inhabited by uncivilised tribes, India was famous for the wealth of her rulers and for high artistic skill of her craftsmen. And even at a much later period, when the merchant adventurers from the West made their first appearance in India, the industrial development of this country was, at any rate, not inferior to that of the more advanced European nations.”

1.3 Commercialisation of Agriculture (1850-1947)

Another noteworthy change in Indian agriculture was its commercialisation that spread between 1850-1947. Commercialisation of agriculture implies production of crops for sale rather than for family consumption. At every stage of the economic history of the nation, a part of the agricultural output is produced for the market. Then, what distinguished commercial agriculture from normal sales of marketable surplus? It was a deliberate policy worked up under pressure from British industries. By the middle of the nineteenth century. Industrial Revolution had been completed in England. There was a tremendous demand for raw materials, especially cotton, jute, sugarcane, groundnuts for the British industries. By offering a higher bait of market price, the peasants were induced to substitute commercial crops for the food crops as the former were more paying than the latter. Consequently, the peasants shifted to industrial crops and in some districts, the movement for commercial agriculture became so strong that the peasants started buying foodstuffs from the mandis for their domestic needs. This led to a fall in the production of food and, consequently this period is marked by the occurrence of most terrible famines in the economic history of India. Commercial agriculture was also, to some extent, the result of the mounting demands of the land revenue by the state and excessive rents by the landlords from the peasantry.

The process of commercial agriculture necessitated by the Industria Revolution was intensified by the development of an elaborate network of railway in India after 1850. Railways linked the interior of the country with ports and harbours, urban marketing centres and thus Indian agriculture began to produce for world markets. Large quantities of wheal from Punjab, jute from Bengal and cotton from Bombay poured in for export to England. The same railways which carried commercial crops from the various parts of the country, brought back the foreign machine-made manufactures to India. Thus, railways and link-roads connecting the hinter-land of country with commercial and trading centres were instrumental in intensifying commercial agriculture on the one hand and sharpening competition of machine-made goods with Indian handicrafts, on the other. These factors led to the ruin of Indian industries.

1.4 Famines and Famine Relief in India

The new land system and commercialisation of Indian agriculture produced very adverse economic consequences on the Indian economy. These influences retarded, nay halted, the process of industrialisation the Indian economy, created “built-in depressors” in agriculture and were responsible for the occurrence of famines in India.

The Nature of Famines in India

Before the advent of modern means of transport, especially railways, the famines in India were localised scarcities of food in those regions where the crops had shrunk on account of bad rains. Both the construction of railways and the growth of trade after 1860 brought about a radical change in the nature of famines. Previously a famine meant extreme hunger and the population had to undergo suffering on account of lack of food because there were no means of transporting the surplus foodgrain even if it was available in other parts of the country. The position after 1860 was that the rapid means
of transport made it possible to carry food from one region to the other without much loss of time. But periods of famine were invariably periods of high food prices and extensive agricultural unemployment. Therefore, the mass of the poor people found it impossible to purchase food. Consequently, the earlier famines were described as food famines but later ones are more appropriately described as purchasing power famines. The Famine Commission (1898) made it abundantly clear when it emphasized that food was “always purchasable in the market though at high and in some remote places at excessively high prices.” Two factors were responsible for pushing up food prices: First, an impending shortage of food meant hoarding and speculation which helped to push up the price level very fast. Secondly, government did not allow any decrease in the export of foodgrains even in the lean years. Consequently, the speculator and the Government both accentuated the gravity of the problem.

Causes of Famines

There is no doubt that the immediate cause of famines was the failure or the unseasonableness of rains. It is common knowledge that the means of irrigation were undeveloped and rainfall played a crucial role in agricultural production. Famines were a common occurrence in the dry regions and areas with a rainfall varying between 15 and 60 inches. The areas affected most by famines were Bihar, West Bengal, Orissa, Rajasthan, Tamil Nadu, Maharashtra, Andhra Pradesh and Karnataka. Failure of rains caused an absolute deficiency which resulted in great famines, but unseasonableness of rainfall also proved destructive to crops and, therefore, created food scarcity. In a country wholly or mainly depending on rainfall, considered as the most dominant factor determining agricultural production was the behavior of monsoons.

To understand the real factors which led to the occurrence of famines again and again in India—while they were banished after 1850 from Europe—it is quite desirable to understand the economic and sociological transformation that took place during the British rule. Three factors can be discerned in the Indian agricultural society during the British period :

(1) The destruction of Indian handicrafts: Fierce competition from British manufactures resulted in the destruction of Indian handicrafts. It stripped the artisan, the weaver and the handicraftsman of his means of livelihood. Under the circumstances, the unemployed increased the pressure of population dependent on land. This led to excessive sub-division and fragmentation of land, the creation of a class of landless labourers and an increase in the rent of land. Whereas in 1842, Sir Thomas Munro did not deem it necessary to statistically measure the number of landless labourers because they formed a too insignificant portion of Indian agricultural population, in 1872 the Census Commission counted agricultural labourers as 18 per cent of agricultural working force. This sudden increase of the agricultural proletariat in the 30-year period exposed the most vulnerable section of the population in Indian rural society to the uncertainties of weather.

(2) The new land system: The British created a class of landlords so as to affix responsibility for land revenue, but the British left the process of rent fixation to the free market mechanism. The increasing demand for land for a growing agricultural population led to an exorbitant increase in rents. Land was transformed in this process to an attractive capital asset. Thus, there was a great desire among the moneylending classes to acquire land. The rise in prices of land enhanced the value of the security in the form of land against which peasants could borrow. This led to increase in agricultural debt of the Indian peasantry repeatedly exposed to uncertainties. The high rates of interest charged by the moneylending classes made it impossible for the peasants to repay their debts. Gradually lands passed on to the moneylending classes. The dispossession of the peasantry by the moneylenders added to the process of pauperisation of the cultivating classes.

Thus, the new land relations which embodied the creation of a class of land owners and a class of cultivators (whether on a tenancy basis or a daily wage) separated ownership from cultivation. The landlords were interested in extracting high rents leaving a pittance with the cultivators. The investment on land fell sharply because the cultivators had to part off with a major portion of the produce in the form of rent to the landlords and interest to the moneylenders. This created
in Indian agriculture a built-in-depressor. Thus, the new agrarian relations were disincentive-ridden and therefore, retarded the process of agricultural development.

(3) **The impact of colonial rule:** Colonialism also had a deep impact on the repeated occurrence of famines in India. The destruction of the Indian handicrafts increased unemployment in the rural areas. Whereas in England, surplus labour from rural areas was quickly absorbed in new industries created in the process of industrialisation, nothing of this kind happened in India. The industrialisation of the Indian economy would have deprived England of a ready market for its goods and so the colonial interests were opposed to the development of industries in India. Thus, labour thrown out of employment in traditional industries imposed additional burden on a subsistence agriculture.

But the burden of colonialism was to be borne by agriculture. The cost of extravagant and lavish British administration, the cost of imperial wars in Burma and Afghanistan, the depreciation of the value of the Indian currency since 1873 and the growing burden of home charges were to be paid by the Indian people. The major taxes were land revenue, excise, salt tax, stamps and opium. Income tax which was levied in 1886 was withdrawn because its yield was too poor. Apart from opium, all other taxes fell on the rural classes. Land revenue was the chief fiscal engine and this increased the burden on the peasantry.

On account of these factors, India was forced to keep a favourable balance of trade with England. But her principal exports were mainly food and agricultural raw materials. Thus, even in the famine years exports of foodgrains had to be maintained in order to create an export surplus on merchandise account. There is evidence that after 1870, foodgrains exports increased because the railways became a convenient vehicle of mobilisation of the food surplus. Thus, the compulsions of colonialism in maintaining an export surplus, burdening the peasantry with higher taxes and the swelling up of an agricultural population led to the impoverishment of the rural classes.

### 1.5 Process of Industrial Transition in India

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

(A) **Private enterprise and industrial growth in the 19th century**

The outstanding industrial events of the 19th century were the decline of indigenous industries and the rise of large-scale modern industries. This change was brought about by private enterprise. The rise of large-scale industries was slow in the beginning but by the close of the 19th century, the movement was more rapid.

The period 1850-55 saw the establishment of the first cotton mill, first jute mill and the first coal mine. In the same period, the first railway line was laid in India. In a period of 25 years, that is, by the last quarter of the 19th century, there were 51 cotton mills and 18 jute mills. During the same period, India produced one million tonnes of coal per annum and the Indian railways had a mileage of 8,000. By the end of the 19th century there were 194 cotton mills and 36 jute mills, and coal production had risen to over 6 million tonnes per annum. In spite of the very rapid increase in industrialisation and the fact that the foundations for the development of modern industries for the utilisation of coal and iron resources were laid by the end of the 19th century, India was being gradually converted into an agricultural colony of the British. By 1900, India had become a great exporter of rice, wheat, cotton, jute, oilseeds, tea, etc. and an importer of British manufactures. In this way India had become an appendage of the British colonial system.

During the 19th century, it was but natural that British business should pioneer industrial enterprise in India. The Britihsers had experience of running industries at home. British enterprise received maximum state-support. Besides, much of the business developed in India was related
either to the Government or interests in some way connected with Britain. Though industrialisation was started by the British in the 19th century, the Britishers were more interested in their profit and not in accelerating the economic growth of India.

Apart from the British, the Parsis, the Jews and the Americans were also prominent first as merchants and later as industrialists. They were close-knit and highly progressive communities. The Parsis were particularly progressive to rapidly adopt European business methods. Within the Indian community, conditions were not favourable for the emergence of industrial leaders, partly because of the peculiar way in which factory industry came to India, as compared to its development in England. In the West two principal groups were ready to set up factories: the merchants and the master craftsmen. The merchants had capital, marketing ability and capacity to manage labour. The master craftsmen did not have capital but had understood the materials and their proper handling. Because of certain peculiar features, neither Indian merchants nor Indian craftsmen took interest in the factory system. Most Indian merchants belonged to the Baniya or moneylending community. They possessed capital and were always eager for its security and profits. But when the factory system was introduced in India by the British, the merchant class found greater opportunities for trade. The development of shipping and the building of railways resulted in larger trade, both external and internal. Besides, there were more opportunities for lending money. Thus, the merchants found greater scope for profits in their traditional occupations and hence did not give them up and take to the factory industries.

However, Indians joined the ranks of industrialists early in the middle of the 19th century and their role grew throughout the period, continuously and steadily. They used the same managing agency system as the Britishers. They were becoming increasingly important members of companies established by the Britishers. Those indigenous business groups who gave up traditional occupations and who took to industrial ventures were the Parsis, the Gujaratis, the Marwaris, the Jains and the Chettiars.

(B) Private enterprise and industrial growth in the first half of the 20th century

Over 70 cotton mills and nearly 30 jute mills were set up in the country. Coal production was more than doubled. Extension of railways continued at the rate of about 800 miles per annum. The foundation of iron and steel industry was finally laid during this period.

The war of 1914-18 created enormous demand for factory goods in India. Imports from England and other foreign countries fell substantially. Besides, the government demand for war purposes increased considerably. As a result, great stimulus was given to the production of iron and steel, jute, leather goods, cotton and woollen textiles. Indian mills and factories increased their production and were working to full capacity. But on account of the absence of heavy industries and also of the machine tools industry, they could not develop fast enough.

(C) Causes of slow growth of private enterprise in India's industrialisation (1850-1957)

It is important to find out the reasons why Indian industry did not expand significantly relative to the rest of the economy over the hundred years before Independence. They were:

(a) Unimaginative private enterprise: One important reason frequently mentioned is the inadequacy of entrepreneurial ability. Indians were reluctant to enter the industrial field because of the comparatively easier and secure scope for profit which existed in trading and moneylending. The Britishers who pioneered industrial change in India were not
really interested in industrialisation of the country as such. But then Indian industrialists too were so short-sighted, they rarely bothered about the future and cared very little for replacement and for renovation of machinery. They were influenced by nepotism rather than ability in their choice of personnel. They were also influenced by their trading background viz., high price and high profit margin rather than low prices and larger sales. They emphasized sales than production. To a certain extent, therefore, unimaginative private enterprise was responsible for the slow growth of industrialisation in this country.

(b) Problem of capital and private enterprise: In the 19th and 20th centuries, Indian industrialists had suffered from lack of adequate capital. Just as British enterprise was prominent, so also British Capital was significant in India’s industrialisation. A larger part of the total invested capital in modern enterprises in India was imported from Britain. Capital was scarce not only because the resources of the country were underdeveloped but also because the avenues for the investment of surplus wealth were few. There were no Government loans or company stocks and debentures. Accordingly, people held their wealth in the form of gold and silver.

There was complete absence of financial institutions to help the transfer of savings to industrial investment. The indigenous financial institutions concerned themselves with rural moneylending and financing of internal trade. Institutions which concerned themselves with rural savings for a comparatively long period, were altogether neglected. In the early days of industrialisation, people were generally hesitant to entrust their savings to the company promoters.

(c) Private enterprise and the role of the Government: One of the important reasons and according to some authorities, the most important reason for the slow growth of Indian industries was the lack of support from the Government. In the 19th century, the Government did provide certain overhead investments which helped private enterprise. Examples were the railways and communications. But the Government did not provide the other conditions essential for private enterprise. The important fact to remember is that in the critical years of growth (between 1850 and 1947) Indian enterprise was operating under a foreign government which was extremely unsympathetic to native private enterprise.

1.6 Colonial Exploitation: Forms and Consequences

The major form through which the exploitation of India was done was trade. Later, the British started making investments in Indian industries and the process of economic drain started through investment income in the form of dividends and profits. In addition to this, India had to pay the costs of British administration, in the form of home charges. They included salaries of British officers (both civil and military), payment of pensions, furloughs and other benefits, as also interest payments on sterling debt.

The main forms of colonial exploitation were:

(i) Trade policies aimed at developing a colonial pattern of trade in which India would become an exporter of foodstuffs and raw materials and an importer of manufactures; (ii) encouragement of British capital to take up direct investment in Indian consumer goods industries; (iii) encouragement of finance capital, through the managing agency system, to appropriate a major portion of the profits through various malpractices; and (iv) to force India to pay the costs of British administration as well as to finance the wars and expeditions undertaken by the British Government.

(a) Exploitation through Trade Policies

Trade policies were used against India by the East India Company and later by the British Government to drain away wealth from India to feed the expanding British industry with raw materials and also to encourage the trend towards commercialisation of agriculture so that the Indian economy could be transformed as an appendage of the British colonial system. Thus, trade policies were a very convenient, but a potent source of exploitation.
1. Exploitation of cultivators to boost indigo-export: East India Company wanted to encourage indigo export. Some (500 to 1000) European planters were settled in Bengal. They were given land at a very nominal price. They forced the cultivators on their land to cultivate and sell the indigo plant at a very low price. Even other zamindars were compelled to allocate a portion of their land for indigo cultivation. Once an agreement was signed with a zamindar or aryot accepted the advance for cultivation he had to suffer the ruthless exploitation of the indigo planters who made fabulous profits from its export.

2. Exploitation of artisans through Company agents to deliver cotton and silk fabrics much below the market price: During the 18th century, the East India Company wanted to benefit from the export of Indian cotton and silk fabrics which enjoyed a world-wide reputation. For this purpose, the Company made use of agents called as Gomastas. The gomastas who were Indians in the employment of the Company, would go to the village and force the artisans to sign a bond to deliver a certain quantity of goods at a price to be fixed by the gomasta. The price fixed was at least 15 per cent and in extreme cases, even 40 per cent lower than the market price. In case, an artisan refused to accept the advance offered by the Company’s gomasta, he was punished by flogging and in certain cases, by imprisonment. In this way, through the Company’s gomastas, the East India company was able to procure cotton and silk fabrics at very low prices. Thus, the poor artisan was squeezed so that the East India Company made huge profits through the export of these fabrics. The ruthlessness of the Company was so inhuman that the artisans worked like bonded labour and this explains their growing pauperisation.

3. Exploitation through the manipulation of import and export duties: Though Great Britain professed to be a follower of free trade, but her trade policies towards Indian goods only revealed that she never followed the policy of free trade. During the 18th century. Indian goods, specially cotton and silk fabrics, enjoyed a lead over the British goods. The aim of British trade policies was to destroy the supremacy of the Indian goods, protect the interests of British industries and ultimately succeed in penetrating the Indian market by the machine-made goods.

(b) Exploitation through export of British Capital to India

In the early phase of colonialism, the chief instrument of exploitation was trade but later the British thought of encouraging investment in India. There were three principal purposes of these investments. Firstly after the first war of Indian Independence (1857), which, the British described, as the Mutiny, it was realised by the Government that for the effective control and administration of the country, it was essential that an efficient system of transport and communication should be developed. Secondly, in order to effectively exploit the natural resources of India, it was essential to develop public utilities like generation of electricity and water works. Thirdly, to promote foreign trade so that food and raw materials collected in various mandis are quickly transported abroad and the manufactures imported in India are quickly distributed in various markets, the British thought it necessary to link railways with major ports on the one hand and the marketing centres (mandis) on the other. This explains why railway development in India was planned in such a manner that it served the colonial interests. Thus, the major fields of direct foreign investments were as under:

Fields of direct foreign investments

(1) Economic overheads and infrastructure like railways, ports, shipping, generation of electric energy, water works, roads and communications; (2) for promoting mining of coal, gold and petroleum and metal-lurgical industries; (3) for promoting commercial agriculture, investments in tea, coffee and rubber plantations; (4) to undertake investments in consumer goods industries like cotton and jute textiles, matches, woollen textiles, paper, tobacco, sugar, etc; (5) investments in banking, insurance and trade; and (6) some investments were made in machine building, engineering industries and chemicals.

All these investments were undertaken by the British multi-nationals operating through their subsidiaries. Some of these investments took the form of loans to the British Government in India in the form of sterling debts.
Two major forms of investment

(i) Direct private foreign investment in India was made in coal, mining companies, in jute mills, tea, coffee, rubber plantations and in sugar.

(ii) Sterling loans given to the British Government in India and public and semi-public organisations to undertake investments in railways, ports, electricity undertakings and other public utilities. These loans represented sterling debt.

(c) Exploitation through finance capital via the Managing agency system

Indian business did not possess any experience of the organisation of modern industry by setting up joint stock companies. The British merchants who had earlier set up trading firms acted as pioneers and promoters in several industries like jute, tea and coal. These persons were called as managing agents.

The managing agency firms may be described as partnerships of companies formed by a group of individuals with strong financial resources and business experience. The managing agency firm is entitled to the management of the whole affairs of the Company unless otherwise provided in the agreement.

The principal functions of the managing agents were as follows: (i) to do the pioneering work of floating new concerns; (ii) to provide their own funds and also to arrange for finance by acting as the guarantors; (iii) to act as agents for the purchase of raw materials, stores, equipments and machinery; (iv) to act as agents for marketing of the produce; and (v) to manage the affairs of the business.

(d) Exploitation through payments for the costs of British administration

The British employed a large number of British officers for the military and civil administration of the country. The British officers in the army were given a separate cadre and were paid much higher salaries and allowances than their Indian counterparts. All the top ranking positions were monopolised by the British officers.

Similar situation prevailed in the civil administration. All the key positions and top ranks were manned by British officers. They were also paid fabulous salaries and allowances. Besides this, they were provided other benefits for the maintenance of their children. These officers had immense administrative powers. They could award contracts for supplies and stores and thus the contractors paid them commissions for the favours. These unauthorised earnings had also become a part of the system. These officers after a certain specified period of service could seek retirement and thus were entitled to benefits of pension. The payments which were remitted to England out of the savings of the officers living in India and also on account of pension and other benefits were called as family remittances. These payments were a heavy drain on our resources. Besides, India had also to pay interest on sterling loans raised for the construction of railway and irrigation works. Payments accruing on account of interest on debts incurred by India and those connected with civil departments in India, such as pensions, gratuities, furlough allowances, and payments for stores purchased in India — all taken together were called Home Charges. In 1931, the payments accruing to Britain on account of home charges amounted to ₹ 43 crores.

Not only that, India was forced to pay for the various wars of the East India Company like the Mysore and Maratha Wars, the Afghan and Burmese Wars. The British forced the Indian people to pay through their nose for their expeditions to Prussia, Africa etc. The entire cost of the telegraph line from England to India was charged from India.

During the two World Wars, India exported more to Britain than it imported. Against this positive balance of trade, Britain authorised the Government of India to issue more currency on the backing of the Sterling Balance held in England. India exported more and imported less. The Sterling Balances, therefore, represented the sweat, the tears and the toil of the millions of the poor people of India. But Great Britain by its policy only exported inflation to India. This accounted for a much larger rise of the price level in India during the war. It imposed a heavy burden on the Indian people.
The consequences of the various forms of exploitation were that:

(i) India remained primarily an agricultural country and its agriculture became commercialised to serve the interests of Great Britain by exporting tea, coffee, spices, oilseeds, sugarcane and other foodstuffs, besides other raw materials.

(ii) India which was an industrially advanced country during the 16th and 17th century was not permitted to modernize her industrial structure during the 18th and 19th century. Her handicrafts were destroyed and she became an importer of manufactured goods.

(iii) The British employed the policy of discriminating protection along with imperial preference to have complete control over the Indian market. This also helped to provide safe and secure avenues for the British investors in India.

(iv) The British developed the economic infrastructure in the form of railways and irrigation and electricity works with a view to promote foreign trade and exploit India’s natural resources to their advantage. Direct British investment was made in consumer goods industries like tea, coffee and rubber plantations, but no effort was made to develop heavy and basic industries.

(v) The Managing Agency System did help to promote consumer goods industries in the initial phase, but became exploitative in character later. It appropriated nearly 50 per cent of the gross profits as managerial remuneration.

(vi) The British exploited India through the economic drain via home charges. India was also forced to pay for several wars like Afghan and Burmese Wars. This was indicative of the highly exploitative character of the British rule.

The net result of the British policies was poverty and stagnation of the Indian economy.

Poverty of the Masses and the Economic Drain

Dadabhai Naoroji, a distinguished Indian economist, in his classic paper on the ‘Poverty of India’ (1876), emphasized that the drain of wealth and capital from the country which started after 1757 was responsible for absence of development of India. According to Dadabhai Naoroji, “The drain consists of two elements—first, that arising from the remittances by European officials of their savings, and for their expenditure in England for their various wants both there and in India: from pensions and salaries paid in England: and second that arising from remittances by non-official Europeans.” This implies that India had to export much more than she imported in order to meet the requirements of the economic drain. During the period of the East India Company, an outright plunder in the form of gift exactions and tributes was carried out. Dadabhai Naoroji, Y.S. Pandit and S.B. Saul have estimated the annual drain for various periods. Taking the estimates based on the balance of payments alone, Saul’s figure for 1880 amounts to 4.14% of the Indian national income. Irfan Habib, therefore, writes: “The fact that India had to have a rule of saving of 4 % of its national income just to pay the Tribute must be borne in mind when economists speak of the lack of internal capacities for development, or the low per capita income base, from which the British could not lift the Indians, however, much they tried.’”

The economic drain of wealth prevented the process of capital creation in India but the British brought back the drained out capital and set up industrial concerns in India owned by British nationals. The government protected their interests and thus the British could secure almost a monopoly of all trade and principal industries. The British component of industries established in India further drained off Indian wealth in the form of remittances of profits and interest. Thus, the economic drain which commenced right from the inception of the British rule acted as a drag on economic development till 1947.

1.7 Colonialism and Modernization

The British economists have always upheld that the backwardness of the Indian economy and its failure to modernize itself was largely due to the value system, i.e., spiritualism, asceticism, the caste system, joint family, etc. Similarly, the British economists have always argued that Indian capital was proverbially shy, it always sought safe avenues of investment and thus lacked the basic quality of
adventure, which is an essential condition for dynamic entrepreneurship. Dr. Bipan Chandra who has examined the impact of colonial rule in modernizing India rejects both these arguments for absence of modernization as mere shibboleths. He writes: “It is a historical fallacy to assume that India under British rule did not undergo a fundamental transformation, or that it remained basically traditional.” But the modernization of India was brought within the political parameters of a colonial economy. Thus, the colonial links between India and Britain resulted in the progress of the Industrial Revolution in Britain while it meant the modernization of those sectors of the Indian economy which strengthened the process of integration of the Indian economy with British capitalism. “It was, therefore, not an accident nor was it historically exceptional that India was integrated into world capitalism without enjoying any of the benefits of capitalism, without taking part in the industrial revolution. It was modernized and underdeveloped at the same time.”

It is also not correct to argue that British capital showed a spirit of adventure. The British developed the railways in India under the Guarantee System which assured a minimum return on whatever capital they invested. Similarly, the development of tea and coffee plantations or investment in jute industry was undertaken only when the British investor felt attracted by high profits available in these areas. Not only that, the entire policy of protection was aimed at protecting British industrial and commercial interests. The introduction of the clause of most favoured nation treatment’ further made it clear that along with profit maximization, the British used the arm of the state to obtain security maximization. There is, therefore, no basis for the assertion that British capital was more adventurous than Indian capital.

Did you know? In 1905, the Swadeshi movement was started. It stimulated Indian industries and there was a slow but steady growth in the field of existing industries as well as the establishment of new industries between 1890 and the outbreak of the war of 1914.

The British rule was a long story of the systematic exploitation by an imperialistic government of a people whom they had enslaved by their policy of divide and rule. The benefits of British rule were only incidental, if any. The main motive of all British policies was to serve the interests of England. Thus, in 1947 when the British transferred power to India, we inherited a crippled economy with a stagnant agriculture and a peasantry steeped in poverty. As Jawaharlal Nehru put it: “India was under an industrial capitalist regime, but here economy was largely that of the procapitalist period, minus many of the wealth-producing elements of that pre-capitalist economy. She became a passive agent of modern industrial capitalism suffering all its ills and with hardly any of its advantages.”

Self-Assessment

1. Choose the correct option:

(i) The Great Depression happened during
   (a) 1929-34
   (b) 1914-18
   (c) 1939-45
   (d) None of these

(ii) The Suez Canal was opened in
   (a) 1890
   (b) 1862
   (c) 1869
   (d) None of these

(iii) The commercialization in Indian agriculture was spread during
   (a) 1850-1947
   (b) 1857-1919
   (c) 1891-1951
   (d) None of these

(iv) During the 18th century, the East India Company wanted to benefit from the export of Indian cotton, the company made use of these agents called
   (a) East India Company
   (b) Company agents
   (c) Gomastas
   (d) None of these
1.8 Summary

- The Indian economy in the pre-British period consisted of isolated and self-sustaining villages on the one hand, and towns, which were the seats of administration, pilgrimage, commerce and handicrafts, on the other. Means of transport and communication were highly underdeveloped and so the size of the market was very small. To understand pre-British India, it is essential to study the structure of the village community, the character of towns, the character of internal and foreign trade, the state of the means of transport and communications.

- India had been conquered before the British too but the invaders settled in India. The difference of the British conquest lies in the fact that it led to the emergence of a new political and economic system whose interests were rooted in a foreign soil and whose policies were guided solely by those interests. Whereas the early invaders Indianized themselves, the British tried to keep a distance between them and the Indian people and thus created the distinction erstwhile not known to Indian history--the foreign rulers and the Indian subjects.

- The process of commercial agriculture necessitated by the Industria Revolution was intensified by the development of an elaborate network of railway in India after 1850.

- The new land system and commercialisation of Indian agriculture produced very adverse economic consequences on the Indian economy. These influences retarded, nay halted, the process of industrialisation the Indian economy, created “built-in depressors” in agriculture and were responsible for the occurrence of famines in India.

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

- The outstanding industrial events of the 19th century were the decline of indigenous industries and the rise of large-scale modern industries. This change was brought about by private enterprise. The rise of large-scale industries was slow in the beginning but by the close of the 19th century, the movement was more rapid.

- Over 70 cotton mills and nearly 30 jute mills were set up in the country. Coal production was more than doubled. Extension of railways continued at the rate of about 800 miles per annum. The foundation of iron and steel industry was Finally laid during this period.

- The major form through which the exploitation of India was done was trade. Later, the British started making investments in Indian industries and the process of economic drain started through investment income in the form of dividends and profits. In addition to this, India had to pay the costs of British administration, in the form of home charges. They included salaries of British officers (both civil and military), payment of pensions, furloughs and other benefits, as also interest payments on sterling debt.

- Trade policies were used against India by the East India Company and later by the British Government to drain away wealth from India to feed the expanding British industry with raw materials and also to encourage the trend towards commercialisation of agriculture so that the Indian economy could be transformed as an appendage of the British colonial system.

- In the early phase of colonialism, the chief instrument of exploitation was trade but later the British thought of encouraging investment in India. There were three principal purposes of these investments. Firstly after the first war of Indian Independence (1857), which, the British described, as the Mutiny, it was realised by the Government that for the effective control and administration of the country, it was essential that an efficient system of transport and communication should be developed.
• Indian business did not possess any experience of the organisation of modern industry by setting up joint stock companies. The British merchants who had earlier set up trading firms acted as pioneers and promoters in several industries like jute, tea and coal. These persons were called as managing agents.

• The British employed a large number of British officers for the military and civil administration of the country. The British officers in the army were given a separate cadre and were paid much higher salaries and allowances than their Indian counterparts. All the top ranking positions were monopolised by the British officers.

• During the two World Wars, India exported more to Britain than it imported. Against this positive balance of trade, Britain authorised the Government of India to issue more currency on the backing of the Sterling Balance held in England. India exported more and imported less.

• Dadabhai Naoroji, a distinguished Indian economist, in his classic paper on the ‘Poverty of India’ (1876), emphasized that the drain of wealth and capital from the country which started after 1757 was responsible for absence of development of India.

• The British economists have always upheld that the backwardness of the Indian economy and its failure to modernize itself was largely due to the value system, i.e., spiritualism, asceticism, the caste system, joint family, etc.

• The British rule was a long story of the systematic exploitation by an imperialistic government of a people whom they had enslaved by their policy of divide and rule. The benefits of British rule were only incidental, if any. The main motive of all British policies was to serve the interests of England. Thus, in 1947 when the British transferred power to India, we inherited a crippled economy with a stagnant agriculture and a peasantry steeped in poverty.

1.9 Key-Words

1. Colonised : Come to settle among and establish political control over (the indigenous people of an area).

2. Monopolised : (of an organization or group) Obtain exclusive possession or control of (a trade, commodity, or service).

1.10 Review Questions

1. What are the characteristics of Indian Economy? Discuss.

2. Write a short note on industries and handicrafts in pre-British India.

3. What are the causes of the decline of Indian Handicrafts? Explain.

4. Discuss the commercialization of agriculture.

5. Explain the process to Industrial transition in India.

Answers: Self-Assessment

1. (i) (a) (ii) (c) (iii) (a) (iv) (c) (v) (a)

1.11 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.

2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Unit 2: Development Strategies in India: Planning in India: Objectives, Strategies and Evaluation

CONTENTS
Objective
Introduction
2.1 Planning in India
2.2 Objectives of Economic Planning in India
2.3 Strategies and Evaluation of Planning
2.4 Summary
2.5 Key-Words
2.6 Review Questions
2.7 Further Readings

Objectives
After reading this Unit students will be able to:
• Describe the Planning in India.
• Explain the Objective, Strategies and Evaluation of Planning.

Introduction
India follows the concept of mixed economy, with public and private sectors playing complementary roles, remaining active partners in the common tasks of development. Since independence, India has following planning for social and economic development. This means the state plays a proactive role in deciding about ‘what, how, how much, where and whom’ in economic and social activities of the system. At the same time, it also by and large respects institutions of private property and market. The Indian Constitution itself gave scope for market to function and yet asked the State to intervene in the functioning of the market. India’s democratic planning aims to achieve a high and sustained rate of growth, a progressive improvement in the standards of living of the people, eradication of poverty and unemployment to lay the foundation for a self-reliant economy. It may be noted that planning strategy envisaging the role of state vis-a-vis market has drastically shifted in favour of market in the 1990s onwards.

2.1 Planning in India
Mixed economy is the outcome of the compromise between the two diametrically opposite schools of thought—the one which champions the cause of capitalism and the other which strongly pleads for the socialisation of all the means of production and of the control of the entire economy by the state. The economic development of U.K., USA and many free nations of Europe and America was due to private enterprise. This explains why in the writings of the 18th and 19th century economists, the concept of mixed economy finds no mention, since in those days, economic liberty and non-interference of the state in economic affairs were cardinal principles. According to the English classical and neo-classical economists, the economic system worked smoothly and what was most profitable for the individual, was also most conducive to the economic welfare of the community at large. Perfect harmony in the economic system could be achieved through the acceptance of the invisible hand of self-interest and the use of market forces of demand and supply.
Karl Marx believed that the capitalist economy allowed a few powerful industrialists and traders to exploit the vast majority of workers. Marx advocated socialization of all the means of production and wanted the state to direct the economy. He would have no private enterprise system based on self-interest, private property, market forces of demand and supply and maximization of profit for the individual. The rise of communist regimes in USSR in 1917 and eastern European countries, Communist China, Vietnam, Cuba etc., later was the direct consequence of the impact of Marxist ideas.

2.2 Objectives of Economic Planning in India

The Committee produced a series of studies on different subjects concerned with economic development. The Committee laid down that the State should own or control all key industries and services, mineral resources and railways, waterways, shipping and other public utilities and, in fact, all those large-scale industries which were likely to become monopolistic in character. Besides the National Planning Committee (NPC) eight leading industrialists of India conceived “A Plan of Economic Development” which was popularly known as the Bombay Plan. There was also a Gandhian Plan which was prepared by Shriman Narayan. The world famous revolutionary M.N. Roy formulated the People’s Plan. All these plans were only of historical importance because they were just paper plans which were never implemented. But they stimulated thinking about the various aspects of planning in India. Just after the attainment of Independence the Prime Minister Nehru set up the Planning Commission in 1950 to assess the country’s needs of material capital and human resources and to formulate economic plans for their more balanced and effective utilisation. The First Five Year Plan commenced in 1950-51 and it was followed by a series of Five-Year Plans.

The India National Congress, under the inspiration of Jawaharlal Nehru, set up the National Planning Committee (NPC) towards the end of 1938.

The Directive Principles of our Constitution laid down: “The State shall, in particular, direct its policy towards securing - (a) that citizens, men and women equally, have the right to an adequate means of livelihood; (b) that the ownership and control of the resources of the community are so distributed as best to subserve the common good; (c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment.” The Directive Principles of the Indian Constitution are, thus, an expression of the will of the of people of India for rapid economic growth. Accordingly, the Government of India adopted planning as a means of fostering economic development. The Planning Commission set out the following four long term objectives of planning:

(i) to increase production to the maximum possible extent so as achieve higher level of national and per capita income;
(ii) to achieve full employment;
(iii) to reduce inequalities of income and wealth; and
(iv) to set up a socialist society based on equality and justice and absence of exploitation.

The First Five-Year Plan expressed clearly the long-term objectives of goals of economic planning in India as follows: “Maximum production and full employment, the attainment of economic equality or social justice which constitute the accepted objectives of planning under present day conditions are not really so many different ideas but a series of related aims which the country must work for. None of these objectives can be pursued to the exclusion of others, a plan of development must place balanced emphasis on all of these. In his book “Planning and the Poor”, B.S. Minhas a former member of the Indian Planning Commission states: “Securing rapid economic growth and expansion of employment, reduction of disparities in income and wealth, prevention of concentration of economic power, and creation of the value and attitudes of a free and equal society have been among the objectives of all our plans.”
Indian Economic Policy

We may discuss the above socio-economic objectives under the headings of (a) Economic planning and removal of poverty, and (b) Economic planning and social change.

A. Economic Planning and Removal of Poverty

Rapid economic growth: The basic aim of economic planning in India is to bring about rapid economic growth through development of agriculture, industry, power transport and communications, and all other sectors of the economy. The basic measure of economic growth of a country is the continuous expansion, year after year, of real national income and real per capita income. Economic growth, should also include improvements in quality of life consisting of life expectancy, infant mortality, literacy, etc. A little consideration will show that all these indicators of development are inter-related in the sense that expansion of real national income is the basis for increase in per capita income and also improvement in the quality of life. For a poor country such as India with a large mass of people steeped in poverty and misery, increase in national income by itself is not enough-instead. consistent increase in per capita income over a period, alongwith improvement in quality of life is the yardstick to judge the economic development of India.

Indian planners aimed at increasing national and per capita incomes on the assumption that the continuous increase in these incomes would reduce and eventually remove poverty and misery and raise the standard of living of the masses. But when our planners found that increase in national income was not accompanied by reduction of poverty in the country, the objective of planning from the Fourth Plan onwards was not simply economic growth but raising the standard of living of those who have been living in abject poverty for generations, nay, for centuries. According to the Fourth Five-Year Plan, “the basic goal is a rapid increase in the standard of living of the people”, and again” emphasis is placed on the common man, the weaker sections and the less privileged.” In fact, the slogans of “garibi hatao” (Removal of poverty) and “growth with justice” were coined during the early 1970’s to indicate clearly that the emphasis would be on removal of poverty and not simply on increase in national income.

Increase in employment: Unemployment and under-employment are important causes of poverty in India. Hence, from the very beginning, removal of unemployment and underemployment has been an important objective of economic planning in the country. The Planning Commission has all along assumed that increase in investment would be accompanied by increase in employment as well as increase in national income of the country. The Commission argued explicitly in the Third Plan that as national income increased in response to investment and development outlay, the demand for labour would automatically rise and more employment would the created.

At the same time, the removal of unemployment would result in increase in gross national product and standard of living of people on the other. Accordingly all the Five-Year Plans had programmes of economic growth, with increase in employment as inherent in the development programmes.

Even though employment has been mentioned as one of the objectives of economic planning in all our Five-Year Plans, it has never been accorded a high priority. In no plan, do we find separate employment plans framed for each one of the sectors and regions, so as to boost employment on the one side and national income on the other. This explains why unemployment has increased over the years. For the first time, the Planning Commission admitted in the Janata Party Sixth Plan (1978-83) the possibilities of real conflict between employment and economic growth and accorded employment a pride of place in the Plan. However, in the Sixth Plan (1980-85) which was finally accepted and implemented by the Congress Party, the main focus reverted to the traditional growth approach, with the usual assumption that employment would increase with rise in investment, irrespective of choice of techniques. Thus, not a single plan has been framed keeping employment generation as a primary objective and only lip service was paid to the achievement of full employment goal.

B. Economic Planning and Social Justice

In an unplanned society, various types of retrogressive forces operate, such as inequalities of income, poverty, absence of equal opportunities for progress, etc. India’s economic plans made
conscious effort to remove all these retrogressive forces and foster social as well as individual
development. Reduction of inequalities of income and the establishment of a socialist society
create conditions in which everyone will have equal opportunities in the matter of education
and employment. Besides, there will be no concentration of economic power and exploitation
of one individual by another.

**Reduction of inequality of incomes**: A very small group of persons in India are better-off and
have not experienced poverty and misery. These are rich landlords in the countryside, merchants,
industrialists, bankers, top officials of the Government, etc. The vast majority of people are,
however, very poor because their income is very low. Extreme inequalities of income and wealth
in India have their roots in the traditional social formation and necessarily, therefore, the
reduction of inequalities of income and wealth would be possible only through abolishing the
semifeudal relations of production in our villages. The Planning Commission outlined such
measures as the removal of all intermediaries and the ceiling on landholding for reduction of
inequalities of wealth and income in rural areas.

Another aspect of inequalities of income in India is the large disparities between rural and
urban incomes which are bound to be accentuated over the years with industrialisation and
economic growth. The Planning Commission has suggested measures to raise agricultural
productivity, development of agro-based industries, fair price to farmers for their products, etc.

Even though reduction of income inequalities has always been mentioned as one of the objectives
in all the plans, in terms of priority this objective invariably got a very low position. This could
possibly be so because Nehru, the architect of Indian planning, did not believe that the problem
of economic inequalities of income and wealth could ever be solved merely by redistribution.
The Fourth Plan stated clearly: “In a rich country, greater equality could be achieved in by
transfer of income through fiscal, price and other policies. No significant results to be achieved
through such measures in a poor country.”

**Socialism and democracy are the means for the creation of a society in India in which all
have equal opportunities to education, health care, employment etc; and exploitation of
one class by another is abolished.**

### 2.3 Strategies and Evaluation of Planning

The basic objectives of our Five-Year Plans were development along socialist lines to secure rapid
economic growth and expansion of employment, reduction of disparities in income and wealth,
prevention of concentration of economic power and creation of values and attitudes of a free and
equal society.” In order achieve these objectives, the planners formulated a strategy of planned
economic development.

**Mahalanobis Model of Growth**

It was only with the Second Plan that there was a clear enunciation of a strategy of development by
Indian planners. Prof. P.C. Mahalanobis who was the real architect of the Second Plan, was responsible
for introducing a clear strategy of development based on the Russian experience. This strategy
emphasised investment in heavy industry to achieve industrialisation which was assumed to be the
basic condition for rapid economic development. For Jawahar Lal Nehru, the first Prime Minister of
India, the development of heavy industry was synonymous with industrialisation. He stated: “If we
are to industrialise, it is of primary importance that we must have the heavy industries which build
machines.” Again, “there are some who argue that we must not go in for heavy industry but for
lighter ones. Of course, we have to have light industries also but it is not possible to industrialise the
nation rapidly without concentrating on the basic industries which produce industrial machines.
which are utilised in industrial development.” Nehru was, thus, extremely forthright in pointing out that industrialisation meant development of heavy industries. The Plan frame of the Second Plan stated this, in unequivocal terms, as follows:

“In the long run, the rate of industrialisation and the growth of the national economy would depend upon the increasing production of coal, electricity, iron and steel, heavy machinery, heavy chemicals and heavy industries generally—which would increase the capacity for capital formation. One important aim is to make India independent as quickly as possible of foreign imports of producer goods so that the accumulation of capital would not be hampered by difficulties in securing supplies of essential producer goods from other countries. The heavy industry must, therefore, be expanded with all possible speed.”

Thus the core of the strategy adopted by Indian planners for the Second Plan and with minor modification for the subsequent three Plans (i.e. up to the Fifth Plan) - was rapid industrialisation through lumpy investment on heavy, basic and machine-building industries.

The Need for Rapid Industrialisation

The planners justified their strategy of rapid economic development through rapid industrialisation.

(a) At the time of Independence, India was essentially agrarian, though the country with its vast natural and human resources was ideally suited for industries. The planners felt that diversification of the use of resources would be in the interest of the country from the point of view of production, employment and defence. Resources should, therefore be applied more towards the development of industry rather than to agriculture.

(b) Indian agriculture was already, suffering from heavy population pressure on land and productivity of labour on land was quite low—it was even thought that marginal productivity of labour on land might be zero and even be negative. One method of reducing this pressure of population on land and to raise agricultural productivity was to reduce the percentage of people living on land, and to shift the surplus population to industries. The setting up and expansion of the industrial sector was thus a necessary condition for raising the national product in general and for agricultural development in particular.

(c) Rapid industrialisation was an essential condition for the development of not only agriculture but also for all other sectors in the country. For instance, with the expansion of industries and the shifting of labour from rural to urban areas, the demand for foodgrains and agricultural raw materials (such as cotton, jute, oil seeds, etc.) would increase. At the same time, increased production and supply of fertilisers, pesticides, agricultural machinery, etc. would help in the expansion of agricultural production. With rapid industrialisation, and with rapid expansion of markets, there would be expansion in trade and commerce, in transportation, in banking and finance, etc.

(d) Productivity of labour is much higher in manufacturing than in agriculture. The growth rates are much higher in industry than in agriculture. Rapid increase in national and per capita income would be possible only through rapid industrialisation.

(e) The income elasticity of demand for industrial goods was much higher and export opportunities for manufactured goods were also high.

It was for all these reasons that industrialisation was emphasised by the Indian planners.

Implications of Heavy Industry Strategy

The important implications of this strategy may be noted here.

Small scale industries and supply of consumer goods: The planners of the Nehru era were clear in their mind that the growth of heavy industries would be limited by the growth of consumer goods in the household sector. Naturally, they did not ignore or neglect the growth of small sector for instance, the Second Plan framework stated: “The greater the marketable surplus of consumer goods in the household or hand industries, the greater will be possibilities of investments in heavy industries with any fear of inflation.”

For one thing, the growing population has fed and clothed; actually, the demand for constituted goods will increase with the growth of population. For another, increasing rate of investment on heavy industries with long gestation periods would responsible for increase in money supply with general
public and in the absence of matching of supply of consumer goods will result in inflationary press.
The Nehru-Mahalanobis model, gave and encouragement to cottage and small industries producing
consumer goods. It was asserted that input-output ratio would be low in small-scale cottage industries
and the gestation period was very short and obviously, the small sector was ideal suited to increase
the supply of consumer go Besides, Professor Mahalanobis argued that the co-production in the
cottage and small sector need not higher than that of the factory sector since the sector would also be
making use of modern machines and electricity.
Nehru also gave due importance to small sector of industries and agriculture which were the sources
consumer goods. In his own words, “The test; country’s advance in industrialisation is heavy
industry – not the small industries that may be put. That does not mean that small industries should
ignored. They are highly important in themselves production and for employment.” The framework
the Second Five Year Plan stated : “The strategy requires all-out efforts for the maximum utilisation
of capacity in existing industries and for the development of additional production in the capital
light small sector of industries.”

**Place of Agriculture in the development strategy** : On agriculture, Nehru stated : “We shall that this
industrial progress cannot be achieved without agricultural advance and progress... Every knows
that unless we are self-sufficent in agriculture we cannot have the wherewithal to advance industries.
If we have to import food, then we doomed so far as progress is concerned. We can import both food
and machinery.”
It is thus clear that the Mahalanobis strategy self-sustained growth based on heavy industries not ignore
or neglect the growth of small and cottage industries for increasing the supply of consumer good.
In spite of many favourable factors for increasing the supply of consumer goods, Professor Mahalanobis
nobis did anticipate shortage in supply of consumer goods and possible rising prices and costs
endangering the planning process. In his strategy of development, therefore, he provided for fiscal
and physical controls including rationing to keep the prices in check.

**Role of the Public Sector** : The Mahalanobis investment strategy assigned a dominant role to the
public sector. As investment in the heavy sector was very high and as the gestation period was too
long and that too with low profitability, the Government felt that heavy industries should be, by and
large, in the public sector. Except in isolated cases, the private sector too was not keen on providing
infrastructural facilities. Besides, the control of the public sector would vest the control of the
commanding heights with the Government and this would help the development of a socialist
economy. Above all, the public sector would prevent the rise of monopoly ownership and exploitation
which are inherent in the private sector. It was for these reasons that from the Second Plan onwards,
the Government went in a big way for the expansion of the public sector.

**The role of the private sector** : While giving direct responsibility to the public sector for infrastructure
investment and the development of heavy industry, the development strategy expected the private
sector to develop and expand its activities in a large area of economic activity. In fact, the private
sector was given an important place in the mixed economy of India. But the activities of the private
sector were seen to be essentially complementary to a rapidly growing public sector. The private
sector was also expected to function in harmony with the overall aims and policies of economic
planning. The planners anticipated a growing trend towards concentration of economic power in the
private sector and to counter this trend, the planners provided larger opportunities for new entrants
for medium and small-sized units and also for extensive use of controls and regulations and also use
of appropriate fiscal measures.

**Role of foreign trade and foreign aid** : Initially, the Planning Commission relied considerably on
foreign aid to meet India’s requirements of capital goods, as our foreign exchange earnings were
inadequate. At the same time, the planners had to provide for foreign aid, since the rate of domestic
savings was inadequate to match the planned higher rate of investment. They also emphasised that
the creation of export surplus and export promotion should go hand in hand with rapid
industrialisation. However, this aspect of the strategy was forgotten in practice even during the first
decade of planning. The Third Plan clearly brought out this point : “One of the main drawbacks in
the past has been that the programme for exports has not been regarded as an integral part of the
country’s development effort.”
Development Strategy and Employment Objective

The Mahalanobis strategy of planning was essentially to achieve the objective of self-sustained long-term growth via investment in the heavy sector. For "rapid industrialisation and diversification of the economy", the Mahalanobis strategy considered the development of “basic industries and industries which make machines to make machines needed for further development as the crucial element. This strategy naturally came in conflict with the employment objective of our plans. For, a fast and self-sustained economic growth could be ushered in only through emphasis on capital-intensive production, namely, “by building of economic and social overheads, exploration and development of minerals and promotion of basic industries like steel, machine building, coal and heavy electricals”. To solve the conflict between rapid growth on the one side and immediate increase in employment opportunities on the other, Mahalanobis strategy adopted a "policy of encouraging labour-in-tensive techniques in consumer goods industries even as the capital-intensive sector of heavy industry was being expanded rapidly.”

Strategy to Achieve Social Objectives: Use of Fiscal Policy

The Mahalanobis investment strategy broadly implied that increase in production would be accompanied by better and more equal distribution of income and wealth. Apart from this assumption, Indian planners relied on Fabian socialist strategy of using fiscal policy of taxation and public expenditure to achieve the two social objectives of planning, viz., the removal of inequalities of income and wealth on the one hand and the establishment of a socialist society based on equality and justice, on the other.

Fiscal policy aiming at the reduction of inequality of income and wealth had two aspects. Highly progressive income tax was to be imposed to lop off the high incomes beyond a certain level (marginal rate of income tax at one time was 97.25 per cent). Estate duty was to be highly progressive so as to remove a portion of large fortunes; other taxes falling exclusively on affluent sections of the community included wealth tax, capital gains tax and gift tax. While direct taxes attempted to transfer part of the income and wealth of the rich to the Government, public expenditure was specifically used to promote the welfare of the lower income groups and weaker sections of the community.

A fast and concerted development of education was to be an important means for ensuring greater equality of opportunity to different sections of the population. Public expenditure on public health and sanitation, housing, etc. was used to achieve “a measure of redistribution in the consumption of basic necessities such as health and medical care, sanitation, water supply and cheap housing. Tribals, Dalits and other backward classes were to receive favoured treatment under special programmes.”

Apart from the use of fiscal policy, the planners did not adopt any measures for direct redistribution of property and wealth to achieve reduction of disparities of income and wealth and to prevent concentration of economic power. The only exception was the half-hearted attempts at land reforms and ceiling on land holdings in rural areas.

Appraisal of the Heavy Industries Development Strategy

The “heavy industries” investment strategy formulated during the Second Plan was the basis of the development of the Indian economy during the last five decades, except for the short period of two years or so — 1977-79 when the Janata Party attempted a shift in favour of small industry and consumer goods.

The heavy industries strategy was hailed during the Second and Third Plans but came in for considerable criticism later. It was commended for the smart rise in saving and investment rates in the country, for the impressive development of economic infrastructure specially in irrigation, energy, transport and communication, etc., considerable expansion in the capital goods sector via the dominant role of the public sector, self-sufficiency in consumer goods and in basic commodities, diversification and expansion of industrial capacity and impressive growth of science and technology. However, this development strategy was severely criticised for its inadequate emphasis on agriculture and small-scale and cottage industries, for the emergence of continuous trade deficits, for growing unemployment in the country and above all, for growing inequality of incomes and wealth on the one side and very slow reduction of poverty on the other.
Models of Economic Development: Nehru Vs. Gandhi

Nehru-Mahalanobis model of development emerged as the driving force of the strategy of development adopted in the mid-fifties at the time of formulation of the Second Five Year Plan. This strategy has continued right up to the eighties with a short interregnum about 2-3 years when Janata Party was in power during 1977-80. Nehru-Mahalanobis model was based on long run development strategy which accorded greater preference to the long-term goals of development, rather than succumbing to the immediate and short-term goals. The strategy, therefore emphasised

(a) a high rate of saving so as to boost investment to a higher level,
(b) it preferred a heavy industry bias to development the industrial base of the economy,
(c) it opted for the protectionist path so as the safeguard infant industry,
(d) it encouraged import-substitution so as the achieve self-reliance, and
(e) it aimed at enlargement of opportunities forthless privileged sections of the society. Growth wave social justice was thus the goal of Nehru-Mahalanobis model since it intended to foster a self-generating path development with an assurance to the common man the poverty, unemployment, disease and ignorance would removed so that individuals could realise their potent with the extension of social and economic opportunities. Since it was the credo of the fifties that market mechanism could not bring about judicious allocation of the sources to meet the objective of growth with social justice, a much greater role was assigned to the State. The principal functions of the State in the economic sphere were the development of economic and social infrastructure. The economic infrastructure was concerned enlargement of irrigation, power, transport and communications so as to expand markets as also to remove constraints in the form of power on industrial development and irrigation for agricultural development. He increasing social infrastructure in the form of education and health, the State intended to develop skilled man power so that it could provide the necessary skills need for the functioning of the new industries. To channelite investment into socially desired lines of production, the State nationalised major banks. Thus, in the Nehru-Mahalanobis model the State controlled the commanding heights of the economy through the public sections.

The Gandhian Model of Growth

Acharya S.N. Agarwala brought out the ‘Gandhian Plan’ in 1944 and re-affirmed it in 1948. These publications form the basis of Gandhian planning or ‘Gandhian model of growth. The basic objective of the Gandhian model is to raise the material as well as the cultural level of the Indian masses so as to provide a basic standard of life. It aims primarily at improving the economic conditions of the 5.5 lakh villages of India and therefore, it lays the greatest emphasis on the scientific development of agriculture and rapid growth of cottage and village industries.

Agriculture

The Gandhian model aims at the reform of agriculture as the most important sector in economic planning in India. The primary objective of agricultural development is national self-sufficiency in foodstuffs and maximum regional self-sufficiency in food. This has to be achieved not only by larger and better inputs but also through land reforms-change in the system of tenure, abolition of the proprietary rights on land, consolidation of holdings, organisation of co-operative farms, etc. Money-lending should be abolished, and there should be increased credit facilities for the farmers. The Gandhian model lays special emphasis on dairy farming as an occupation and as an auxiliary to agriculture.

Cottage and Village Industries

The primary aim of the Gandhian plan is the attainment of maximum self-sufficiency in village communities. Hence, the plan emphasises the rehabilitation, development and expansion of cottage industries side by side with agriculture. Spinning and weaving are given the first place. The manufacturing of khadi is important and it is almost on the same level as the production of rice and wheat. “Just as villagers cook their own roti (bread) and rice so must they make their own khadi for personal use. The surplus, if any they may sell.” The Gandhian plan outlines a scheme for making
Notes

every village self-sufficient in cloth. At the same time, the Gandhian plan wants the State to consider
the revival and expansion of rural cottage industries as the main plank of its industrial planning.
Gandhi emphasized the conflict between village industries and capital-intensive pattern of
industrialisation based on high degree of urbanisation. E. Haribabu of the Indian Institute of
Technology (Kanpur) writes: “The twin compulsions of reconstructing the economy and achieving
rapid economic development after Independence, prompted India’s rulers to adopt a model of
development based on the experience of the West: the implicit emphasis on capital-intensive
industrialisation and urbanisation. Over a time a distinct bias became apparent towards urban
settlements in general and big cities in particular”. Explaining the role of rural areas in the process of
industrial development of India in the post-Independence period, the late Anasasaheb Sahasrabudhe
wrote: “The rural areas were encouraged to start such industries which provide urban population
with things like milk, vegetables, oil seeds, cotton and foodgrains and purchase from the urban areas
items such as cloth, oil and other manufactures”. The villagers have thus been turned into second
class citizens to supply cheap raw materials and semifinished products to the urban organised sector.
The principal element in this strategy is the transfer of all but most primitive jobs to the cities. In 1910,
village industries constituted 40 per cent of the labour force. By 1946, this had decreased to 10 per
cent. Today, they remain at two per cent.” Claude Alvares, therefore, questions in a very incisive
manner: “How long can we continue to assume the illusion that when the British destroyed local
industries, that was wicked, but that when we do so, it is desirable.”

Basic Industries

There is a general misconception about Gandhi being against the development of large-scale industries.
Actually, the Gandhian Plan recognises the need for and the importance of certain selected basic
and key industries in India, especially defence industries, hydro-electric and thermal power
generation, mining and metallurgy, machinery and machine-tools, heavy engineering, and heavy
chemicals. The Gandhian Plan would like the development of basic industries not to interfere with or
to hinder the growth of cottage industries. The most dynamic scientific aspect of the Gandhian model
is that the basic and key industries will be owned and managed by the State—they will be in the public
sector. On this point there is no difference between Nehruvian and Gandhian models of growth.

Generally, people assume that Gandhi’s emphasis on cottage industries and handicrafts is a clear
indication of his opposition to modern machinery. This is wrong. Gandhi is not against all machinery,
for the spinning-wheel itself is a piece of machinery. He protests, however, against the craze for
machinery and its indiscriminate multiplication. He believes that the factory system using extensive
machinery has become the source of exploitation of labour by a few capitalists. He welcomes machinery
and modern amenities wherever they lighten the burden of the villagers without displacing human
labour. Machinery is good when it operates in the interests of all; it is evil when it serves the
interests of the few.

If we carefully analyse the Gandhian model, we will find that the aim is to develop agriculture and
industries side by side and to integrate them. The handicrafts and cottage industries are emphasised
from the point of view of production as well as that of employment. After Independence. Nehru
dominated the Indian scene and Gandhi and his economic ideas were forgotten. During the short
period of the Janata rule 1977-79 as well as in the Draft Sixth some of these ideas were incorporated.
In concern terms the Gandhian model of growth calls for following changes in the present system of
planner.

(a) Employment-oriented planning to repeat production-oriented planning: The basic prem here
is that unemployment is our greatest enemy that in its solution lies the key to the problems
poverty and inequality. It would, therefore, advisable to replace production-oriented planner
with employment oriented planning. This work necessitate demarcation of areas of high
employments potential which also ensures high and efficiency production.

(b) Agriculture and employment potential: Agriculture offers great scope for enlarging emplement
in: (i) agriculture including animal husband compost-making, sanitation and gobar gas;
(ii) new works such as irrigation projects, soil conservation land reclamation, afforestation etc. and (iii) rural cottage industries.

Under intensive cultivation—land can support much larger number of workers. According to an easy mate, in 1971, 39 workers were employed per land acres in India and as such India was classified as low-performance country but in Japan, South Korea, Taiwan and Egypt during 1965, the number of women employed per 100 acres was between 87 and. These countries are high-performance nations models of small farms and highly labour-intensive pattern. The experience of these countries shows home another 50 to 60 million people can be employed agriculture in India and at the same time increase total output. The employment potential in the newly-integrated areas can be increased by 60 per cent provided there is only limited mechanisation i.e., the adoption of machines which supplement human effort and easy or lighten its burden rather than supplant it—"the Japanese style of farm machinery.”

(c) Large Vs. Small Industries: The Gandhian model of growth is in favour of small-scale and cottage industries and it is against large scale industries producing consumer goods. Charan Singh, an ardent supporter of the Gandhian model of economic growth states: “No medium or large-scale enterprise shall be allowed to come into existence in future which will produce goods or services that cottage or small-scale enterprises can produce and no small scale industries shall be allowed to be established which will produce goods or services that cottage enterprise can produce.”

(d) Equitable distribution: Growing concentration of economic power in the hands of a few and inequality of incomes are the two major economic ills of the Indian economy despite the profession of Socialism under Nehru model of economic growth. Accumulation of wealth and the concentration of economic power are directly due to centralisation of the means of production and centralised large-scale production. Gandhi has got probably the best and the most natural solution to the problem of distribution. The natural solution is decentralised small-scale production—this will cut at the very root of accumulation of wealth. And wherever large-scale production is inevitable (as in basic and key industries), it should be left to Government ownership and management. In the Gandhian model, the problem of distribution is tackled at the production end and not at the consumption end.

The Gandhian model of growth hopes to achieve a national minimum level of living within the shortest possible time and aims at removal of concentration of income and wealth and growth with stability.

Self-Assessment

2. Choose the correct option:

1. The communist regimes in USSR rised in
   (a) 1917 (b) 1914 (c) 1939 (d) None of these

2. LPG model of Deployment was introduced in
   (a) 1990 (b) 1962 (c) 1991 (d) None of these

3. Food Security Summit took place in
   (a) 2004 (b) 2000 (c) 1997 (d) None of these

4. The End of Laissz Fair was written by
   (a) Kal Marx (b) Keynes (c) Engels (d) None of these
2.4 Summary

- Mixed economy is the outcome of the compromise between the two diametrically opposite schools of thought—the one which champions the cause of capitalism and the other which strongly pleads for the socialisation of all the means of production and of the control of the entire economy by the state.

- India is regarded as a good example of a mixed economy. Under the Directive Principles of the India Constitution, it has been laid down that the State should strive “to promote the welfare of the people by securing and protecting as effectively as it may a social order which justice, social, economic and political, shall inform all the institutions of national life.”

- A mixed economy is necessarily a planned economy. The public sector will have to be operated according to certain priorities and to achieve certain specified social and economic goals.

- The experiment of mixed economy in India has been carried on for over six decades now. Both Central and State Governments in India set up several public sector enterprises in many lines of production, trade and finance.

- Further, the private sector has been constantly and incessantly trying to evade and, in many ways, distort the planning process. The private sector has corrupted the bureaucracy and the politicians-in-power.

- The India National Congress, under the inspiration of Jawaharlal Nehru, set up the National Planning National Planning Committee (NPC) towards the end of 1938.

- The Directive Principles of our Constitution laid down: “The State shall, in particular, direct its policy towards securing - (a) that citizens, men and women equally, have the right to an adequate means of livelihood; (b) that the ownership and control of the resources of the community are so distributed as best to subserve the common good; (c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment.”

- The First Five-Year Plan expressed clearly the long-term objectives of goals of economic planning in India as follows: “Maximum production and full employment, the attainment of economic equality or social justice which constitute the accepted objectives of planning under present day conditions are not really so many different ideas but a series of related aims which the country must work for.

- Unemployment and under-employment are important causes of poverty in India. Hence, from the very beginning, removal of unemployment and underemployment has been an important objective of economic planning in the country.

- In an unplanned society, various types of retrogressive forces operate, such as inequalities of income, poverty, absence of equal opportunities for progress, etc. India’s economic plans made conscious effort to remove all these retrogressive forces and foster social as well as individual development.

- On paper, the long-term objectives of India planning appear to be perfectly sound and would achieving. While the first two are economic objective and relate to increase in income and employment, last two are social objectives and relate to the distribution of wealth and income and the establishment of an egalitarian society in the country. But these sets of objectives obviously conflict with each other. For instance, the objective of rapid economic grow based on heavy investment and development of cantal-intensive production could raise national income but was bound to lead to concentration of wealth income and accentuation of income disparities.

- The basic objectives of our Five-Year Plans were development along socialist lines to secure rapid economic growth and expansion of employment, reduction of disparities in income and wealth, prevention of concentration of economic power and creation of values and attitudes of a free and equal society.” In order achieve these objectives, the planners formulated a strategy of planned economic development.

- Nehru-Mahalanobis model of development emerged as the driving force of the strategy of development adopted in the mid-fifties at the time of formulation of the Second Five Year Plan.
• The LPG Model of development which was introduced in 1991 by the then Finance Minister Dr. Manmohan Singh with a big bang was intended to charter a new strategy with emphasis on liberalisation, privatisation and globalisation. (LPG) Several major changes at the domestic level were introduced.

• Dr. A.P.J. Abdul Kalam, ever since he became the President of India has been advocating his Vision 2020, and, to eradicate poverty from India, he has been emphasizing the adoption of PURA (Providing Urban Amenities in Rural Areas). In his address to the Food Security Summit on 5th February 2004, he outlined the concept and strategy of PURA as the lever of economic upliftment of the villages.

• The objective of PURA is to propel economic development without population transfers. To put in the words of late Prof. A.M. Khusro : Instead of moving human beings where infrastructure exists, it is better take infrastructure to villages where human beings live. The PURA concept is the response to the need for creating social and economic infrastructure which create a conducive climate for investment by the private sector to invest in rural areas.

2.5 Key-Words

1. Mixed economy : An economic system in which both the private enterprise and a degree of state monopoly (usually in public services, defense, infrastructure, and basic industries) coexist. All modern economies are mixed where the means of production are shared between the private and public sectors.

2. Distortion : A distortion is departure from the allocation of economic resources from the state in which each agent maximizes her own welfare. A proportional wage-income tax, for instance, is distortionary, whereas a lump-sum tax is not. In a competitive equilibrium, a proportional wage income tax discourages work.

2.6 Review Questions

1. What are the objectives of economic planning? Discuss
2. Explain the strategies and evaluation of planning.
3. India as a mixed economy? Explain.
4. What is meant by democratic socialism in India? Explain.

Answers: Self-Assessment

1. (i) (a)  (ii) (c)  (iii) (a)  (iv) (b)

2.7 Further Readings

Books

1. Indian Economy ; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
2. The Indian Economy ; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
CONTENTS

Objective
Introduction
3.1 Eleventh Five Year Plan
3.2 Objectives of the Eleventh Plan
3.3 Financing the Eleventh Plan
3.4 Critique of the Eleventh Plan
3.5 Summary
3.6 Key-Words
3.7 Review Questions
3.8 Further Readings

Objectives

After reading this Unit students will be able to:
• Discuss the objectives of the Eleventh Five Year Plan.
• Understand the Micro-Economic Dimensions of the Eleventh Plan.
• Know the Financing the Eleventh Five Year Plan.

Introduction

The National Development Council in December 2006 approved the Approach to the 11th Plan document titled “Towards faster and more Inclusive growth” and directed the Planning Commission to prepare a detailed plan to assess the resources required to meet the broad objective set forth in the Approach Paper. The detailed version of the Eleventh Five Year Plan (2007-12) was approved by the National Development Council in December 2007.

3.1 Eleventh Five Year Plan

Outlining its vision, the Eleventh Plan noted that ‘the economy accelerated in the Tenth Plan period (2002-03 to 2006-07) to a record average of growth of 7.6 percent – the highest in any Plan period so far.’ It emphasized the fact that during the last 4 years of the Tenth Plan, average GDP growth was 8.6% making India one of the fastest growing economies in the world. The saving and investment rates have also increased. The industrial sector has responded well to face competition in the global economy. Foreign investors are keen to invest in the Indian economy.

But “a major weakness in the economy is that growth is not perceived as being sufficiently inclusive for many groups, especially SCs, STs and minorities... The lack of inclusiveness is borne out by data on several dimensions of performance.”

1. “The percentage of population below the official poverty line has come down from 36% in 1993-94 to 28% in 2004-05. However, not only this is high, the rate of decline in poverty has not accelerated with GDP growth and the incidence of poverty among certain marginalized groups, e.g. the Scheduled Tribes, has hardly declined at all. Because the population has grown, the absolute number of poor people has declined only marginally form 320 million in 1993-94 to 302 million in 2004-05. This performance is all the more disappointing since the poverty line on which the estimate of the poor is based is the same as in 1973-74, when per capita incomes were much lower.” (emphasis added)
2. Indicators of deprivation suggest that the proportion of population deprived of a minimum level of living is much higher. This is indicated by the following:

(a) According to National Family Health Survey, 46% of the children in the 0-3 age group suffered from malnutrition in 2005-06, but the more disturbing fact is that there is no decline from the level of 47% reported in 1998.

(b) Human Development indicators like literacy, maternal and infant mortality rates also show that the progress is slow and India lags behind several other countries in Asia. While literacy rate has gone up to 64.8% in 2001, the number of illiterates still exceeds 304 million, making India the country with the largest number of illiterates. Life expectancy during 2001-06 is 63.9 years for males and 66.9 years for females, is still below 72 years for China. Adverse sex ratio with only 933 women for 1,000 men is another cause for concern. More disturbingly, the child sex ratio (ages 0-6) has declined sharply from 962 in 1981 to 927 in 2001. Infant mortality rates are higher than those of countries in East Asia.

3. Agriculture growth continues to be sluggish and was of the order of 2.1 percent during the 10th Plan, despite a target of 4% growth.

4. Current daily status unemployment rate increased from 7.3% in 1999-00 to 8.3% in 2004-05, despite the higher GDP growth of 7.6% during the 10th Plan. Moreover, the entire increase in employment has taken place in the unorganized sector. A very disturbing feature of the employment situation is: “Permanent employment in the organized sector has decreased, although organized sector firms may be increasing their informal employment.” This indicates deterioration in the quality of employment.

3.2 Objectives of the Eleventh Plan

The Plan envisages a high growth of GDP of the order of 9 percent for the country as whole. This implies that per capita GDP would grow at about 7.5% per year to double in 10 years.

However, the Plan document hastens to add that the target is not just faster growth but also inclusive growth which ensures broad based improvement in the quality of life of the people, especially the poor SCs/STs, OBCs and the minorities.

Vision for the Eleventh Plan

The broad vision of the 11th Plan includes several inter-related components:

1. Rapid growth that reduces poverty and creates employment opportunities;
2. Access to essential services in health and education especially for the poor;
3. Empowerment through education and skill development;
4. Extension of employment opportunities using National Rural Employment Guarantee Programme;
5. Environmental sustainability;
6. Reduction of gender inequality; and
7. Improvement of governance.

3.3 Financing the Eleventh Plan

Table 1 provides us an idea of the Tenth Plan Realizations and the Eleventh Plan projections of financing. During the Tenth Plan, for the public sector total realizations of ₹ 16,53,865 crores, 73.9 percent were obtained from market borrowings and 34.9 percent were contributed by public sector undertakings. However, balance from current revenues (both Centre and States) were negative to the tune of 9.6 percent of total plan resources.
Table 1: Eleventh Plan Projection of Resources

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<td>-1,27,166</td>
<td>-31,722</td>
<td>-1,58,888</td>
<td>6,53,989</td>
<td>3,85,050</td>
<td>10,39,039</td>
</tr>
<tr>
<td>Revenues (-13.5)</td>
<td>(-4.5)</td>
<td>(-9.6)</td>
<td></td>
<td>(30.3)</td>
<td>(25.9)</td>
<td>(28.5)</td>
</tr>
<tr>
<td>2. Borrowings</td>
<td>8,50,382</td>
<td>3,71,779</td>
<td>12,22,161</td>
<td>7,67,722</td>
<td>6,49,423</td>
<td>14,17,145</td>
</tr>
<tr>
<td>including MC ₹</td>
<td>(89.9)</td>
<td>(52.5)</td>
<td>(73.9)</td>
<td>(35.6)</td>
<td>(43.6)</td>
<td>(38.9)</td>
</tr>
<tr>
<td>3. Net inflow from</td>
<td>16,121</td>
<td>—</td>
<td>16,121</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>abroad (1.7)</td>
<td>(1.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support (1+2+3)</td>
<td>(78.2)</td>
<td>(48.0)</td>
<td>(65.3)</td>
<td>(65.9)</td>
<td>(69.5)</td>
<td>(67.4)</td>
</tr>
<tr>
<td>5. Central Assistance</td>
<td>-2,52,539</td>
<td>+2,48,677</td>
<td>-3,862</td>
<td>-3,24,851</td>
<td>+3,24,851</td>
<td>-</td>
</tr>
<tr>
<td>to States &amp; UTs. (-26.7)</td>
<td>(35.2)</td>
<td>(-0.2)</td>
<td></td>
<td>(-15.1)</td>
<td>(21.8)</td>
<td>-</td>
</tr>
<tr>
<td>support (4 + 5)</td>
<td>(51.5)</td>
<td>(83.2)</td>
<td>(65.1)</td>
<td>(50.8)</td>
<td>(91.3)</td>
<td>(67.4)</td>
</tr>
<tr>
<td>7. Resources of</td>
<td>4,58,530</td>
<td>1,19,003</td>
<td>5,77,533</td>
<td>10,59,710</td>
<td>11,88,534</td>
<td></td>
</tr>
<tr>
<td>Public sector</td>
<td>(48.5)</td>
<td>(16.8)</td>
<td>(34.9)</td>
<td>(49.2)</td>
<td>(8.7)</td>
<td>(32.6)</td>
</tr>
<tr>
<td>undertakings</td>
<td>(100.0)</td>
<td>(100.0)</td>
<td>(100.0)</td>
<td>(100.0)</td>
<td>(100.0)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

As against this picture of Tenth Plan realizations, the Eleventh Plan hopes to generate ₹ 10,39,039 crores – 28.5 of the resources from balance from current revenues. The Planning Commission states: “This outcome is the consequence of tighter fiscal discipline imposed by fiscal responsibility framework, both at the Centre and the States and an optimistic revenue outlook driven by buoyancies in revenue collections during the last three years of the Tenth Plan reflects the robust performance of the economy.” The planners are conscious of the fact that this optimism may not be realized because there are certain uncertainties associated with the impact of Sixth Pay Commission recommendations. Equally important is the upward pressure on subsidies, particularly fertilizer and petroleum subsidies. The hike in the international price of petroleum above $115 per barrel is already pushing the petroleum subsidy very sharply. Similarly, fertilizer subsidies are also increasing. There is an urgent need to undertake reform of the subsidies. However, the Central Government is not taking a courageous step to control them, fearing backlash in the impending General Election due in 2009. This may upset the optimistic calculations of the Planning Commission which will force the planners either to cut the size of the Plan or take greater resort to market borrowing.

Resources of surplus from public sector undertakings are continuing their forward march and all likely to finance 32.6% - or nearly one-third of the total public sector plan. But subsidies provided to petroleum products may reduce resources generation by public sector oil companies – a major source of resource generation. Actual realization from PSUs will be affected by two factors: (a) international price of oil, and (b) the policy of the Central government on petroleum subsidies. If the realization from PSUs decline in the Eleventh Plan, the country may witness a higher dose of market borrowing to finance the Plan.

It is, therefore, difficult to agree with the rosy picture presented by the Planning Commission about the financial pattern of the Eleventh Plan. A similar optimistic outlook was presented at the time of the formulation of the Tenth Plan, but its financial pattern went haywire. In the absence of bold policies in view of the problems of coalition government, actual realizations in the Eleventh Plan may vary sharply from projected figures on various components.
Employment Perspective in the Eleventh Plan

Eleventh Plan rightly states: “Generation of productive and gainful employment, with decent working conditions, on a sufficient scale to absorb our growing labour force form a critical element in the strategy for achieving inclusive growth.”

Weaknesses of Past Experience

“The basic weakness in our employment performance is the failure of the Indian economy to create a sufficient volume of additional high quality employment to absorb new entrants into the labour force while also facilitating the absorption of surplus labour that currently exists in the agricultural sector into higher wage non-agricultural employment.”

The following major weaknesses were noticed in the Eleventh Plan:

- The rate of unemployment has increased from 6.1% in 1993-94 to 7.3% in 1999-00 and further to 8.3% in 2004-05.
- Unemployment among agricultural labour house-holds has risen from 9.5% in 1993-94 to 15.3% in 2004-05.
- While non-agricultural employment expanded a robust rate of 4.7% during the period 1999-00 to 2004-05, this growth was largely in the unorganized sector.
- Despite fairly healthy GDP growth, employment in the organized sector actually declined, leading to frustration among the educated youth.
- Although real wages of casual labour in agriculture continue to rise during 2000-2005, growth has decelerated strongly as compared to 1994-2000 which reflects poor performance in agriculture.
- Growth of real wage rates in non-agricultural employment during 1999-00 to 2004-05 has been negligible.
- Real wages stagnated or declined even for workers in the organized industry although managerial and technical staff did secure large increase.
- Wage share in the organized sector has halved after 1980s and is now among the lowest in the world.

During the Tenth Plan, as against a target of 50 million employment opportunities, 47 million employment opportunities were created which indicates that the employment target was more or less achieved. More over, employment growth rate improved from 1.25% during 1993-94 to 1999-00 to 2.62% during 1999-00 to 2004-05. The annual increase in employment rose form 4 million per annum to 9.3 million per annum during 1999-00 to 2004-05.

Table 2: Employment scenario during 1993-94 to 2004-05

<table>
<thead>
<tr>
<th>Current daily status</th>
<th>All India</th>
<th>1993-94</th>
<th>1999-00</th>
<th>2004-05</th>
<th>Growth rate during 1993-94 to 1999-00 to 2004-05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Million Persons)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Population</td>
<td></td>
<td>893.4</td>
<td>1005.0</td>
<td>1092.8</td>
<td>1.98</td>
</tr>
<tr>
<td>2. Labour</td>
<td></td>
<td>334.2</td>
<td>364.9</td>
<td>419.6</td>
<td>1.47</td>
</tr>
<tr>
<td>3. Workforce</td>
<td></td>
<td>313.9</td>
<td>338.2</td>
<td>384.9</td>
<td>1.25</td>
</tr>
<tr>
<td>4. No. of employed (2-3)</td>
<td></td>
<td>20.3</td>
<td>26.7</td>
<td>34.7</td>
<td>4.69</td>
</tr>
<tr>
<td>5. Unemployment rate (%) (4/2*100)</td>
<td></td>
<td>6.1</td>
<td>7.3</td>
<td>8.3</td>
<td>5.40</td>
</tr>
</tbody>
</table>
### Table 3: Sector wise share of employment by current daily status

<table>
<thead>
<tr>
<th></th>
<th>1993-94</th>
<th>1999-00</th>
<th>2004-05</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(1) Agriculture</strong></td>
<td>61.0</td>
<td>56.6</td>
<td>52.1</td>
</tr>
<tr>
<td>(a) Mining &amp; Quarrying</td>
<td>0.8</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>(b) Manufacturing</td>
<td>11.1</td>
<td>12.1</td>
<td>12.9</td>
</tr>
<tr>
<td>(c) Electricity, water etc.</td>
<td>0.4</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>(d) Construction</td>
<td>3.6</td>
<td>4.5</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>(2) Industry (a+b+c+d)</strong></td>
<td>15.9</td>
<td>17.6</td>
<td>19.5</td>
</tr>
<tr>
<td>(e) Trade, hotel &amp; Restaurant</td>
<td>8.3</td>
<td>11.2</td>
<td>12.6</td>
</tr>
<tr>
<td>(f) Transport, storage &amp; Comm.</td>
<td>3.2</td>
<td>4.1</td>
<td>4.6</td>
</tr>
<tr>
<td>(g) Finance, insurance, real estate &amp; business services</td>
<td>1.1</td>
<td>1.4</td>
<td>2.0</td>
</tr>
<tr>
<td>(h) Community, social &amp; personal services</td>
<td>10.5</td>
<td>9.1</td>
<td>9.2</td>
</tr>
<tr>
<td><strong>(3) Services (e+f+g+h)</strong></td>
<td>23.1</td>
<td>25.8</td>
<td>28.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Source:** Compiled from Planning Commission (2007), *Eleventh Five Year Plan*, Vol. 1., p.71

Share of Employment in different sectors reveals the share agricultural employment declined from 61.0% in 1993-94 to 52.1% in 2004. The share of industry improved from 15.9% in 1993-94 to 19.5% in 2004-05. Services indicated the sharpest increase from 23.1% in 1993-94 to 28.4% in 2004-05.

### Employment Projections for the Eleventh and Twelfth Plans

The Approach Paper of the Eleventh Plan had projected an addition to labour force of 52 million in the Plan period. However, the projections of labour force growth have been revised in view of the latest population projections made by the National Commission on Population and work done by the Eleventh Plan Working Group on Labour Force and Employment Projections. The projected increase in labour force during the Eleventh Plan is now estimated as 45 million.

Since the backlog of unemployed in 2006-07 were reckoned as 36.7 million, the total requirement of employment opportunities works out to be about 82 million.

With the generation of additional employment opportunities of the order of 58 million in the Eleventh Plan, the backlog of unemployed at the end of the

### Table 4: Population, Labour Force and Employment Projection

<table>
<thead>
<tr>
<th></th>
<th>2004-05</th>
<th>2006-07</th>
<th>2011-12</th>
<th>2016-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Population</td>
<td>1,092.8</td>
<td>1,128.1</td>
<td>1,208.0</td>
<td>1,283.2</td>
</tr>
<tr>
<td>(b) Labour Force</td>
<td>419.6</td>
<td>438.9</td>
<td>483.6</td>
<td>524.0</td>
</tr>
<tr>
<td>(c) Employment opportunities</td>
<td>384.9</td>
<td>402.2</td>
<td>460.3</td>
<td>518.2</td>
</tr>
<tr>
<td>(d) Unemployed</td>
<td>34.7</td>
<td>36.7</td>
<td>23.3</td>
<td>5.8</td>
</tr>
<tr>
<td>(e) Unemployment Rate (%)</td>
<td>8.28</td>
<td>8.36</td>
<td>4.83</td>
<td>1.12</td>
</tr>
</tbody>
</table>

**Source:** Planning Commission (2007), *Eleventh Five Year Plan*, Vol.1., p.71
Eleventh Plan will be of the order of 23-24 million. Consequently, the rate of unemployment will decline from 8.36% in 2006-07 to 4.83% in 2011-12. Similarly, another 58 million employment opportunities will be created in the Twelfth Plan and as a consequence, the backlog unemployed will get further reduced to merely 6 million. The rate of unemployment will fall still further to 1.12% in 2016-17. If the projections and the actual realizations are achieved as per schedule, India will attain a state of full employment by 2016-17. But the Planning Commission is itself not sure of its labour force projections and employment generation capacity of the economy. To safeguard itself, it mentions:

"There are important qualifications to these projections which must be kept in mind, arising from the limitation of employment elasticity as a projection tool. The concept of employment elasticity is at best a mechanical device to project employment on the basis of projected growth of output and past relationships between employment and output. These relationships can change as a result of changing technology and change in real wages. The labour force participation rate is also subject to changes especially because of possible changes in female participation rates in urban areas associated with advances in women’s education. For all these reasons, the projected decrease in unemployment rate must be treated with caution."

Table 6 presents data about additional employment opportunities created in agriculture during the Tenth Plan, the Eleventh Plan contemplates zero additional employment. To assume zero employment elasticity in agriculture when the rate of GDP growth in agriculture is sought to be stepped up from 2% to 4%, is to say the least, preposterous. This is more so when the Eleventh Plan itself recommends encouragement to employment generating sectors in the economy. If 8.84 million employment opportunities could be generated in the Tenth Plan in agriculture, it pass one’s comprehension why the same order of employment opportunities, if not more, be generated during the Eleventh Plan, more so when its growth rate is to be doubled. Agriculturally backward states like Bihar, Orissa, Chhattisgarh, Rajasthan and Uttar Pradesh can certainly create more employment opportunities via extension of irrigation and watershed development. If the target of additional employment in agriculture had been kept at the same level as in the Tenth Plan i.e. 8.8 million, the employment generation in the Eleventh Plan would have reached the level contemplated by the Approach Paper (65 million). It appears that the Planning Commission intends to develop agriculture via contract farming and treating the corporate sector as the main source of agricultural growth. If that is so, it goes against the philosophy of inclusive growth.

It would be worthwhile to compare this optimism moderated with a certain degree of caution along with the observations made in the Approach to the Eleventh Five Year Plan (December 2006): “On the supply side, the labour force will increase by about 52 million during the 11th Plan if it grows at the same rate as current projections of working age population. The increase could be much higher, around 65 million if female participation rises at the pace observed during 1999-2005. Since the increase will be over and above the present backlog of 35 million unemployed on a typical day, and since inclusiveness requires a shift from agriculture to non-agriculture, we must plan for at least 65 million additional non-agricultural opportunities in the 11th Plan.”
The basic message of the Approach Paper was that total employment requirement would be 100 million in the 11th Plan (65 million new entrants plus 35 million backlog). In case, 65 million new employment opportunities are created during the 11th Plan, then the same backlog of unemployment (35 million) will be left at the end of the 11th Plan.

**Table 6: Sectorwise Generation of Additional Employment**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Tenth Plan Achievement (2000-05)</th>
<th>Eleventh Plan Projected for (2007-12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>8.84</td>
<td>0.00</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>0.17</td>
<td>0.00</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>8.64</td>
<td>11.94</td>
</tr>
<tr>
<td>Electricity, water etc.</td>
<td>0.18</td>
<td>0.02</td>
</tr>
<tr>
<td>Construction</td>
<td>6.44</td>
<td>11.92</td>
</tr>
<tr>
<td>Trade, Hotels &amp; restaurant</td>
<td>10.70</td>
<td>17.40</td>
</tr>
<tr>
<td>Transport, storage &amp; communication</td>
<td>4.04</td>
<td>9.02</td>
</tr>
<tr>
<td>Finance, insurance, real estate &amp; business services</td>
<td>3.12</td>
<td>3.43</td>
</tr>
<tr>
<td>Community, social &amp; personal services</td>
<td>4.59</td>
<td>4.34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46.71</strong></td>
<td><strong>58.07</strong></td>
</tr>
</tbody>
</table>


The Planning Commission has now reduced the estimate of new entrants to the labour force from 65 million to 45 million — a drastic reduction by 20 million in the estimate of the labour force. Even when the Planning Commission has now estimated the target of additional employment to a lower level of 58 million opportunities, it has been able to bring the backlog of unemployed at the end of the 11th Plan to 23-24 million and bring about a reduction in the rate of unemployment from 8.36% in 2006-07 to 4.83% in 2011-12. What else is this but statistically jugglery!

Another issue which has evaded the Planning Commission is: What strategy should be adopted to increase the wage share in organized sector when it has itself admitted that “it has halved after the 1980’s and is now among the lowest in the world.” Similarly real wages stagnated or declined even for workers in organized industry, although managerial and technical staff did secure large increase. Since inclusive growth implies that the growth process should benefit the low paid workers and provide decent work, what we observe is that growth process in industry and even in services, is helping only managerial and technical staff securing large increase in their emoluments, but the workers are left high and dry. The Planning Commission has elaborated the social security measures being introduced by the Government, but they help only marginally on account of the large labour force in the country.

**Did you know?** The major sources of employment generation in the Eleventh Plan are trade, hotels and restaurants (17.4 million), manufacturing (11.94 million), construction (11.92 million) and transport, storage and communications (9 million).

The fact of the matter is that profits of enterprises in the organized sector are rising fast, and wage share is declining. The Planning Commission has not applied its mind to generate a process by which wage share in organized sector should improve. Failure to do this will mean ‘growth for the few’ or
‘exclusive growth’ and not ‘inclusive growth’ which is the central theme of the Eleventh Plan. Since the entire additional employment is to be generated by the unorganized sector, then to treat the corporate sector as the engine of growth is meaningless. The country should concentrate its attention towards the unorganized sector as suggested by the National Commission for Enterprises in the Unorganized Sector (2007) headed by Dr. Arjun Sengupta.

Moreover, the Planners themselves admit, “Permanent employment has decreased, although organized sector firms may be increasing their informal employment.” The fact of the matter is that even without any change in chapter VB of the Industrial Disputes Act, organized sector firms have succeeded in increasing the share of informal employment to about 23 percent, which is a tacit admission of the fact that the labour laws are observed more in their breach than in compliance, but the Planning Commission is not tired of in recommending amendment of labour laws to enlarge and improve employment. But as facts stare us in face, in a labour surplus economy, the tendency to employ contract labour or casual employment is intended to enhance profits at the cost of cutting wage share in value added. This is what has happened during the last decade. Inclusive growth requires an improvement in the share of permanent jobs in the economy and increase in wage share, but what we witness and what is proposed to strengthened, is precisely the opposite.

Notes

In 2004-05, the proportion of the poor was 27.5% - 28.3% for rural areas and 25.7% for urban areas.

3.5 Critique of the Eleventh Plan

The 11th Plan visualizes “Faster and more inclusive growth” as its objective. This, by itself is a welcome development that after a period of a decade and half of reforms initiated in 1991, it is being realized that the reform process has widened disparities between the rich and the poor, it has slowed down reduction of poverty to a modest figure of 0.74 percent for a period 1993-94 and 2004-05, it has resulted in a rise of unemployment from about 6 percent in 1993-94 to 7.32 percent in 1999-00 and further to 8.3 percent in 2004-05. Besides, it has sharpened the rural-urban divide as well as the regional divide between the fast growing forward states and slow growing backward states. The iniquitous growth that the reform process had generated was shaking he political foundation of the Indian society and there was a need for a course correction. Failure to do this would pose a serious threat to the UPA Government which rode to power on the plank of helping Aam Admi (Common Man).

The question arises: Does the Eleventh Plan really address the concerns which it has chosen to redress?

Eleventh Plan has fixed a target of pushing up overall GDP growth to an average rate of 9.0 percent, this will be achieved by boosting growth of agriculture to about 4 percent after a disappointing growth of 2.1 percent during the 10th Plan, and by pushing up growth of industry to 10-11 percent and services to 9-11 percent. It would be good to recall that industry indicated a growth rate of 8.3 percent and services to 9.0 percent during the 10th Plan. Obviously, in industry and services, the 11th Plan intends to improve growth rates only marginally, it is only by doubling growth rate in agriculture that its target of 9 percent growth is likely to be achieved. This implies that the success of the 11th Plan will be determined by the success in achieving growth target in agriculture, moreso, when agriculture still continues to provide livelihood to 58 percent of our population. To that extent, the strategy indicates that the concept of ‘inclusive growth’ is a part of Eleventh Plan framework.

Reduction of Poverty - The Basic Issue

But inclusive growth would become a reality only if there is a rapid decline in poverty coupled with rapid reduction of unemployment in the 11th Plan.
On the question of setting a target of poverty reduction, the Eleventh Plan mentions: “The Plan document has admitted that the percentage of poverty in 2004-05 is about 28 percent and thus, the 11th Plan intends to reduce it by 10 percentage points by 2017. This would imply a rate of reduction of poverty by about 1 percent during 2004-05 and 2016-17. This is even less than the decline in poverty observed during 1973-74 and 1986-87 when the average growth rate of GDP ranged around 5 percent.”

There is another problem raised by Mohan Guruswamy et. al. about the definition of poverty line. “While the definition of hunger in terms of calories can remain constant, the definition of poverty is relative to the present levels of general prosperity...the present official poverty line is based only on calories and hence accounts for little else but the satiation of one’s hunger.

(Emphasis added). The Planning Commission, thus, intends to reduce starvation line up by 10 percent by 2017. For providing a basic minimum, poverty line needs to be redefined in terms of basic needs approach. While India is aiming to become a super-economic power by 2020, it will only reduce starvation by the date. In the light of this. India should adopt the International Poverty Line of $2 per day as the basis of determining the percentage of people in poverty. As per the Human Development Report (2007/2008), on the basis of $1 per day, for the year 1999-00, people below the poverty line in India were of the order of 34.3% and if we use the norm of $2 per day, then 80 percent of the Indian population was below the poverty line. The present poverty line on the basis of calories does not even meet the rock bottom standard of poverty set at $1 per day, not to speak of reaching the standard of $2 per day basis on basic needs approach. The Planning Commission should, therefore, upgrade the poverty line to reach international standards as it intends to do in other sectors of manufacturing, services and yield of output in agriculture. It should not seek a false sense of satisfaction that it has been able to effectively reduce poverty. It is heartening to note that the Planning Commission has appointed an expert group to revise the poverty line.

Reduction of Unemployment

The Planning by reducing the estimate of new entrants to the labour force to 45 million instead of 65 million as indicated by the Approach paper and with a backlog of 35 million unemployed has reduced the total requirement of employment opportunities to 80 million. By providing the target of 58 million employment opportunities, the rate of unemployment has been reduced from 8.36% in 2006-07 to 4.83% in 2011-12. The Planning Commission is itself not sure of the projection of 45 million new entrants and to save itself from criticism, it has stated a number of qualifications. The whole approach to reduce the rate of unemployment so sharply in a span of 5 years is nothing but statistical jugglery.

Issue of Labour Flexibility

Shorn of its frills to pay homage to inclusive growth, the 11th Plan is a new avatar of the Report of the Task Force on Employment Opportunities headed by Dr. Ahluwalia in 2001. It mentions. “It must be emphasized that labour flexibility does not mean "hire and fire". There are many aspects of labour laws where greater flexibility is needed and would be in the interest of labour as a whole in the sense that it would actually generate large volumes of employment in the organized sector by encouraging employers to expand employment. This flexibility is especially needed if we want to exploit the enormous opportunities offered by export markets...we should evolve a consensus on the scope of reforming key labour laws including especially the industrial Disputes Act and the Contract Labour (Regularization and abolition) Act.” The statement very admirably clothes the hidden agenda of the Planning Commission. This is due to the developments taking place in the organized sector in recent years. The Textile Minister wants (i) raising of working hours from 48 to 60 per week, (ii) allowing women to work in night shifts, (iii) permitting contract labour, (iv) easy exit norms and (v) treating export industry as a public utility for the purpose of Industrial Disputes Act. To add to it. Commerce and Industry Minister wants Special Economic Zones to be exempted from labour laws. Obviously, the direction in which the UPA government intends to push labour laws is amply clear, however, it may camouflage its policy in the 11th Plan by soft words.

The Planning Commission has set the goal of inclusive growth. It notes the fact that despite sharp increase in productivity, real wages of labour have declined. ILO report on Labour and social Trends
in Asia and the Pacific (2006) brings out the hard reality that between 1990 and 2002, there was a
decline in real wages in manufacturing in India by 22 percent, despite an increase in manufacturing
labour productivity of over 84 percent over the same period. Obviously, this implies that the fruits of
economic reforms are pocketed by the corporate sector, while labour is denied its due. Ironically, the
salaries of managerial and technical personnel have been increasing at the rate of 15% per annum.
The Planning Commission’s ‘inclusive growth’ fails to provide any strategy for improving the share
of labour in the surplus generated by faster growth. Critics have serious doubts about the sincerity
with which the equity objective is sought to be achieved by the 11th Plan. The determination of wages
by market forces and taking away even the modicum of protection by labour laws will give the
organized sector business magnates unbridled power to freely exploit and pauperize labour.

Self-Assessment

1. Choose the correct option:

(i) The eleventh five year plan was approved in
   (a) 2007    (b) 2002    (c) 2006    (d) 2001

(ii) The percentage of population below the official poverty line has come down from 36% to
    (a) 40%    (b) 20%    (c) 28%    (d) none of these

(iii) During the Tenth Plan, All India GDP growth average was
     (a) 5%    (b) 6%    (c) 7.6%    (d) None of these

(iv) The planning commission’s target of creating ------million jobs during the eleventh plan.
   (a) 30    (b) 40    (c) 50    (d) 58

3.6 Summary

- The Eleventh Plan has set the correct goal in the form of moving ‘Towards Faster and More
  Inclusive Growth’ but it intends to chart out a course which is basically anti-labour and pro-
corporate sector. This is precisely in conflict with the goal of providing secure income and
employment for ‘aam admi’ (common man).

- The best way to achieve this is to promote small and medium enterprises (SMEs) and small
  peasant agriculture. But there is no clear policy of promoting SMEs.

- It sidetracks the issue of small peasant agriculture and pleads for contract farming which is
  capital-intensive and not labour intensive. The recommendations of the National Commission
  on Farmers (NCF) headed by eminent agricultural scientist Dr. M S Swaminathan regarding
  the setting up a fund for farmers affected by crop losses on the lines of national calamity fund,
  reducing interest on farm loans to 4% and not charging compound rate of interest and imposing
  quantitative restrictions on import of agricultural products, have not been included in the
  Eleventh Plan.

- The Planning Commission’s target of creating 58 million jobs during the Eleventh Plan is
  inadequate and it would have been much better if the Commission had adhered to the target of
  65 million jobs as suggested by the Approach Paper.

- The removal of poverty requires targeted attention to the poor. The Planning Commission has
given a long catalogue of schemes such as National Rural Employment Guarantee Scheme,
Swaran Jayanti Rozgar Yojana (SJRY), slum improvement programme, housing for the poor
and skill development programmes etc. The effectivity of implementation will indicate the extent
to which the targeted beneficiaries are helped.

- The Planning commission is silent on some issues like food security, strengthening price support
  systems, creation of price stabilization fund for agricultural commodities, universalizing crop
  insurance, protection to peasantry from subsidized imports of agricultural commodities and
  land reform.
Eleventh Plan is a very ambitious plan which seeks 125 percent increase over resources over the Tenth Plan. Its initiative in providing over 30 percent resources to improve the quality of social services deserves a word of appreciation. The country may able to reach the target of 9% GDP growth. However, its success will be judged by the extent to which, it is able to convert the growth process into pro-poor growth and reduce the urban-rural divide and the rich-poor divide.

3.7 Key-Words

1. Sidetracks: To divert from a main issue or course
2. Deficit: An excess of expenditure or liabilities over income or assets in a given period.
3. Surplus: An amount of something left over when requirements have been met; an excess of production or supply over demand.

3.8 Review Questions

1. Write a short note on the Eleventh five year plan.
2. What are the objectives of the Eleventh plan?
3. Discuss the macro economic dimensions of the eleventh plan.
4. Briefly explain the sectoral allocation of resources.

Answers: Self-Assessment

1. (i) (a) (ii) (c) (iii) (c) (iv) (d)

3.9 Further Readings

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Unit 4: Economic Reforms in India Since 1991

CONTENTS

Objective
Introduction
4.1 Economic Reforms in India Since 1991
4.2 Summary
4.3 Key-Words
4.4 Review Questions
4.5 Further Readings

Objectives

After reading this Unit students will be able to:

• Discuss the Economic Reforms in India Since 1991.

Introduction

It is now about 15 years when the reform process was initiated in 1991. There is near unanimity among political parties regarding the implementation of economic reforms. The two major political parties-Congress and the BJP have a common agenda of economic reforms. Even the left political parties - CPI, CPI (M) and Janata Dal (United) are not opposed to economic reforms. However, they stress that the interests of labour and the common man should not be ignored and the reform process should not follow the dictates of capitalist lobbies. Similarly, regional parties have also been wooing foreign capital to undertake investments in their states. Thus, every political party is keen on accelerating the pace of economic reforms to acquire higher GDP growth, enlarge investment in infrastructure, and persuade Indian big business and multinationals to promote investments. It is believed that the levels of living of the people cannot be improved unless the growth process is accelerated and the country achieves a sustained growth of GDP of 7-8% for over a decade or two in future.

4.1 Economic Reforms in India Since 1991

There is near unanimity among major political parties on the implementation of economic reforms. The agenda of the two major political parties viz., the Congress and the Bhartiya Janata Party have shown a very large consensus about economic reforms. Janata Dal, CPI, CPI(M), though indicated some shades of difference, have also accepted the reform package. Some of the regional parties like DMK, AIDMK, Samata Party, Samajwadi Party, the Rashtriya Janata Dal also woo foreign capital to undertake investments in their respective states. In nutshell, it may be pointed out that a consensus has been achieved in the country to introduce and implement economic reforms so as to accelerate the process of development.

Did u know? Economic Reforms in India were introduced in 1991 by the Congress government led by Mr. P. V. Narasimha Rao.

The reforms process has completed 17 years and this cannot be considered as too short a period to assess the impact of economic reforms. It would, therefore, be proper to undertake an appraisal of the
achievements and shortcomings of economic reforms to understand as to whether the country is moving in the right direction, or alternatively, there is a need to reform the reform process undertaken during the nineties.

Before undertaking an appraisal of the economic reforms, it would be desirable to state the goals of the process of economic development. The reforms process while accelerating economic development should lead thus to the following ends:

(i) A higher rate of growth;
(ii) an enlargement of employment potential leading to full employment;
(iii) reduction of population living below the poverty line;
(iv) promotion of equity leading to a better deal for the poor and less well-off sections of our society; and
(v) reduction of regional disparities between the rich and the poor states of India.

It would be of interest to examine economic reforms in terms of goals of the society listed above.

1. **GDP Growth and Poverty reduction**

There is no doubt that economic reforms have been able to promote a relatively higher growth. After the teething troubles of the first two years viz., 1991-92 and 1992-93, the growth rate during 1993-94 to 1997-98 has averaged to more than 7 per cent per annum. After 1991-92, the momentum of growth has been maintained providing increasing evidence that the growth potential has improved as a result of the reforms initiated in 1991.

If we compare the annual average growth rate during the pre-reform period (1980-81 to 1990-91) which was of the order of 5.2 per cent per annum, then the post-reform decade (1990-91 to 2000-01) also shows a little higher average annual growth rate of 5.8 per cent of real GDP. However, there is a distinct improvement in growth rate of GDP during the 5-year period (2000-01 to 2003-04) to an average of 6.0 per cent and further to 8.7 percent in next 5-years from 2004-05 to 2009-10.

(a) **Economic Reforms and Reduction of Poverty**

Dr. Gaurav Datt of the World Bank in his article “Has Poverty Declined Since Economic Reforms ?” has compared the decline in head-count index, poverty gap index and squared poverty gap index for rural and urban India in the pre-reform and the post-reform period. The main conclusions of the study are as under:

1. Mid-1980s seems to be a significant watershed in the evolution of living standards in India. ... While there was a marked decline in both rural and urban poverty rates between 1973-74 and 1986-87, there is no sign of anything comparable.

2. For the rural sector, the results indicate that while there was a significant trend decline in all the three poverty measures up to mid-1991 (at an annual rate of 2.7 per cent for the headcount index, 4.5 per cent for the poverty gap and 5.9 per cent for the squared poverty gap index), the rate of decline since then is not significantly different from zero.

3. For the urban sector, in the pre-reform period (1973-74 to 1990-91), the results indicate a declining trend in all the three poverty measures upto mid-1991 (at an annual rate of 2.2 per cent for headcount index, 2.8 per cent for poverty gap and 3.1 per cent for squared poverty gap), the same trend is continued even in the post-reform period (1990-91 to 1996-97) and all the three poverty measures register a decline (at an annual rate of 2.2 per cent for headcount index, 2.65 per cent for poverty gap and 3.7 per cent for squared poverty gap).

4. While the urban sector appears to have continued its trajectory of growth and poverty reduction through the 1990s, rural poverty reduction was choked off by lack of rural growth.
(b) GDP Growth, Employment Growth and Poverty

The question arises: Why is it that although GDP growth rates have been very high during the recent years (especially after 1993-94), they have not been accompanied by corresponding reduction in poverty. If poverty implies either unemployment or underemployment or absence of good quality employment, then it would be of interest to study the change in employment scenario before and after the economic reforms. Data provided in Table 3 reveals that total employment increased from 3,026 lakhs in 1983 to about 3,568 lakhs in 1990-91 and then improved to about 3.829 lakhs in 1997-98. The rate of growth of employment was of the order of 2.39 per cent per annum during 1983 and 1990-91, which was just equal to the rate of growth of labour force during this period. However, it was hoped that if this rate of growth of employment is sustained in the next decade, the country would be able to reduce the backlog of unemployment significantly. But unfortunately, the period of reforms (1990-91 to 1997-98) reveals that the overall growth rate of employment was only of the order of 1.0 per cent. It may also be noted that since the reform process is limited to the organised sector, more so to the large corporate sector, the growth rate of employment in the organised sector also decelerated to 0.60 per cent during 1990-91 to 1997-98 as against 1.73 per cent per annum witnessed in the 7-year pre-reform period of 1983 - 1990-91. This was just one-third of the growth rate of the employment witnessed earlier. There was also a substantial slowdown in the employment growth rate of the unorganised sector to merely 1.1 per cent during 1990-91 to 1997-98 as against employment growth rate of 2.41 per cent witnessed during the 7-year pre-reform period (1983 to 1990-91). This leads one to the natural conclusion that the trickle down effects of the growth process did not benefit the poor. Dr. S. P. Gupta, therefore, states: "All these trends make one rethink the utility of an exclusive policy on 'GDP growth' in resolving poverty or employment. In contrast, it has been observed that high growth in employment in India has almost always been associated with some reduction in poverty. For example, the period of high growth of employment in the 1980s with a comparatively lower GDP growth has witnessed a significant reduction in poverty. In the 1990s as hypothesized, a low growth of employment is seen to be associated with an increase in poverty."

Trend of Employment in Organised Sector

Since the focus of the reform process is on organised sector employment, it would be desirable to examine the growth of employment in the organised sector.

2. Increase in Productivity and Real Wage Earning

Industrialist lobbies have frequently charged labour for not raising labour productivity, but forcing an increase in the real wage of earnings of labour. Shariff and Gomber (1999) have studied the problem of increase in labour productivity and real earnings of regular wage/salaried employees. Their study reveals, whereas overall real labour productivity showed an increase during 1983-88 by 3.16 per cent and during 1988-94 by 3.32 per cent, the real earning of workers increased at the annual average rate of 7.0 per cent during 1983 and 1987-88, but showed a miserably low increase of 1.0 per cent during 1987-88 and 1993-94. Though the post-reform period is not long enough to arrive at any definite conclusion, but it does give some indication of the straws in the wind that the gains of productivity increase during 1988-94 by 3.32 per cent were passed on to the workers by only 1.0 per cent and the rest were pocketed by the employers. This had an unhealthy impact on labour welfare.

The upshot of the analysis given above is that the basic problem with economic reforms is not to treat labour as an asset but as a mere instrument, which can be dispensed with when in the judgment of the employer, it is no longer useful. This is a very mechanical view of labour, which is resented by trade unions on the one hand, and judiciary on the other. For the employer, it is an attempt at downsizing leading to cost reduction, for the employee, it is the loss of job. In developed countries, where social security systems have been extensively developed, the process of downsizing is much less painful, because the worker can at least get some dole and thus is
not deprived of a basic minimum essential for livelihood, but in a developing economy like India, this restructuring and downsizing leading to retrenchment or closure results in depriving the workers of their livelihood.

3. **Neglect of Agriculture — The Major Sin of Economic Reforms**

A major criticism of the process of economic reforms is the neglect of agriculture. Data reveal that foodgrains production increased from 129.6 million tonnes in 1980-81 to 176.4 million tonnes in 1990-91 resulting in annual compound rate of 3.1 per cent. But during the 18-year period of economic reforms, foodgrains production increased from 176.4 million tonnes in 1990-91 to 234 million tonnes in 2008-09, indicating an annual average growth rate of 1.6 per cent, which was lower than the growth rate of population. Complacency on the foodgrains front can certainly cost the nation very dearly in the coming decade.

Various reasons have been assigned for this situation. Firstly, the reform process has emphasised the growth of manufacturing and service sectors and thus neglected agriculture. Agricultural growth has stagnated around 2 percent during the last decade. It was 2.1 percent during the Ninth Plan (1997-2002) and is estimated to be 2.3 percent during the Tenth Plan (2002-07). *Economic Survey* (2006-07) explaining the situation states: “The structural weaknesses of the agriculture sector reflected in low level of investment, exhaustion of the yield potential of new yielding varieties of wheat and rice, unbalanced fertilizer use, low seeds replacement rate, an inadequate incentive system and post-harvest value addition were manifest in the lack luster agricultural growth during the new millennium.”

That total investment in agriculture as a percentage of GDP was only 2.8% in 1999-00. It fell to 2.4% of GDP in 2003-04 but improved marginally to 3.34 percent in 2008-09 but again fell to 2.97 percent in 2009-10. While the economy has indicated a sharp increase in investment to 36.5% of GDP in 2008-09, the share of investment in agriculture to a level of 2.97% of GDP is too inadequate, more so when cognizance is taken of the fact that agriculture provides livelihood to 58 percent of population.

It may also be pointed that public sector investment in irrigation, flood control, water harvesting, rural infrastructure reclamation of degraded lands etc. has a much greater spread effect. In contrast, private sector investment in tube wells, tractors and harvesters increases the income of the landowning classes only. It has impacted to reduce employment.

This lack of development of irrigation infrastructure by withdrawing public sector investment with the hope that the private sector investment will expand irrigation, did not materialise. This was specially the case in backward states like Bihar, Madhya Pradesh and Orissa, which indicates ‘very poor growth rates in foodgrains production - even lower than the national average. Last but not the least, whereas the green revolution states like Punjab, Haryana, Uttar Pradesh have reached a plateau, the country could not trigger higher yields in backward states.

Dr. G. S. Bhalla and G. R. Singh (1997) in their study have pointed out “a sharp pick-up in agricultural growth experienced by the Eastern Region has been facilitated by a remarkable increase in area under irrigation triggered by a substantial private investment in pumpssets and tubewells.”

If we study the implementation of the Water-Seed-Fertilizer technology (popularly known as the Green Revolution), then during the decade 1970-71 to 1980-81, irrigated area indicated an annual average growth rate of 3.6 per cent, which declined to 2.7 per cent during the decade 1980-81 to 1990-91 and further to merely 1.9 per cent during 1990-91 to 1997-98. Since irrigation is the basic input which helps the fuller utilisation other inputs - seeds and fertilizers, we also observe declining growth rates in the irrigated area under rice and wheat from seventies to eighties and nineties. In case of pulses, irrigated area growth experienced a negative growth rate of the order of 1.5 per cent per annum. A similar trend was observed in the case of extension of area under HYV in case of paddy and rice. Fertilizer consumption indicated a sharp decline from 8.5 per cent annual average growth rate during the eighties to just 3.7 per cent during the nineties.

In this connection, it is relevant to consider the trend in major and minor irrigation. Major irrigation acts as a supplement to minor irrigation in keeping the water table high, while minor
irrigation provides water-security to the peasant in case of failure of rains. The slowing down of the growth rate of irrigated area under minor irrigation from 3.5 per cent during eighties to 2.3 percent during nineties is another contributing factor to slow-down of over-all agricultural growth. Economic reforms did not pay adequate attention to expansion of irrigation and this is a major sin responsible for low growth of agricultural production and productivity during the nineties.

The upshot of the entire analysis is that the major sin of economic reforms is gross neglect of agriculture— the mainstay of livelihood of over 60% of the population. This is more so in view of the fact that though India had seven good monsoon years in succession, agricultural production indicated year-to-year fluctuations. This casts a shadow on sustainability of agricultural growth, unless there is a reorientation of priorities with much greater emphasis on agriculture and rural industrialisation. The state, instead of withdrawing from investment in agriculture, irrigation and rural infrastructure, has to strengthen public sector investment in these areas.

4. Economic Reforms and Industrial Growth

Economic Reforms were mainly intended to remove the bottlenecks, which acted as obstacles in industrial production. To pursue this goal, Industrial licensing was abolished in all but 18 Industries. Later the government delicensed several others. During 1998-99, three Industries viz., (i) Coal and Lignite, (ii) Petroleum (other than crude and its distillation products), and (iii) Sugar were delicensed. Accordingly, there are only six Industries now under compulsory licensing. Two Industries, viz., Coal and lignite were taken out from the list of Industries reserved for public sector. At present, there are only four industries reserved for the public sector. Put another way, it can be stated that the reform process dismantled the system of Industrial licensing which was considered to be a main roadblock in the progress of industrial development.

Despite all this, data provided in table 9 reveals where as the eighties (1981-82 to 1990-91), general index of Industrial production recorded an annual average growth rate of 7.8 per cent, growth rate of IIP slowed down to 7.2 per cent during 1993-94 to 2009-10. In manufacturing, it increased from 7.6 per cent in the ‘80s to 7.7 per cent, and in electricity it declined from 9 per cent to 5.5 per cent and in mining & quarrying it slumped from 8.3 per cent to just 3.9 per cent. Thus, the expectations that growth of IIP would be stimulated did not materialise. Further if we break the period from 1993-94 to 2009-10 in two parts namely 1993-94 to 2000-01 and 2000-01 to 2009-10, we find that in the second period growth rate decelerated in case of electricity, while it accelerated in case of mining and quarrying. In manufacturing it remained at the same level.

Table 1 provides growth rates of Industrial production on the basis of use-based classification. The data reveal that but for intermediate goods, which recorded a slightly higher growth rate of 6.3 per cent in post-reform period as compared to 5.9 per cent in the eighties, in all the other sectors, growth rates recorded in the eighties were higher In the capital goods sector, growth rate slipped to 10.7 per cent in the post-reform period as against a robust growth rate of 11.5 per cent in the eighties.

Even in consumer durables, a decline in annual average growth rate was observed 9.2 per cent as against a much higher growth rate of about 13.9 per cent in the eighties.

From the index of growth rates of industrial production, it becomes evident that the performance of the industrial production during 1995-96 and 2009-10, which is generally identified as a period of wide-ranging reforms in the industrial sector, was not up to the mark. It failed even to equal the performance observed in the eighties, not to speak of improving the performance as a consequence of the reform process in post-reform period. The failure of the basic goods and capital goods sector really put a question mark on the success of the reform process.
### Table 1: Annual Average Growth Rate of Industrial Production
(Use-based Classification)

<table>
<thead>
<tr>
<th>Sector</th>
<th>1981-82 to 1990-91</th>
<th>1995-96 to 2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Basic Goods</td>
<td>7.0</td>
<td>5.2</td>
</tr>
<tr>
<td>b. Capital goods</td>
<td>11.5</td>
<td>10.7</td>
</tr>
<tr>
<td>c. Intermediate Goods</td>
<td>5.9</td>
<td>6.3</td>
</tr>
<tr>
<td>d. Consumer Goods</td>
<td>6.7</td>
<td>7.1</td>
</tr>
<tr>
<td>(i) Durables</td>
<td>13.9</td>
<td>9.2</td>
</tr>
<tr>
<td>(ii) Non-durables</td>
<td>5.5</td>
<td>6.4</td>
</tr>
<tr>
<td>General Index</td>
<td>7.8</td>
<td>6.7</td>
</tr>
</tbody>
</table>

**Source**: Computed from RBI, *Handbook of Statistics on Indian Economy*, (2009-10)

5. **Performance of Public Sector Enterprises**

Information about the performance of the much-maligned Central Public Enterprises, reveals that gross profit as percentage of capital employed was 11.61 per cent in 1993-94, 15.88 per cent in 1995-96 and then to 21.5 per cent in 2004-05. A similar trend was observed in net profit, which was of the order of 2.84 per cent in 1993-94 but improved to 12.1 per cent in 2005-06. Value added per unit of capital which indicates the efficiency of capital employed also showed an improvement from 0.26 in 1993-94 to 0.44 in 2001-02. Obviously, Central Public Sector Enterprises have shown better performance during the 12-year period of reform (1993-94 to 2005-06). The basic question which needs to be raised is: If the ground realities indicate better performance of the Central Public Sector Enterprises, is it desirable to undertake disinvestment of these enterprises? Would it not be better to introduce reform of public sector enterprises so that they can improve their performance still further. By 2005-06, the Government had signed Memorandum of Understanding (MOU) with 102 PSEs. Evaluation of their performance reveals that 44 were rated as excellent, 36 very good and 14 as good. If 94 PSEs out of 102 have shown an improvement, there is a case for innovating measures to improve performance of PSEs, rather than giving them a bad name and hang them.

6. **Economic Reforms and Movement of WPI and CPI**

If we leave out the first two years of the post-reform period assuming them to be teething troubles and compare the relative movement of prices for the 11-years period (1993-94 to 2004-05), then the following objective reality is indicated.

Rise of prices affects the labour classes adversely as against the capitalist classes who gain disproportionately with a rise of prices. The movement of wholesale price index (WPI) reveals that in the pre-reform period (1981-82 to 1991-92), the annual average increase in WPI was of the order of 6.9 per cent and in the post-reform period (1993-94 to 2009-10), it was of the order of 6.21 percent. Obviously, the situation in the rise of WPI improved during the post-reform period.

But a better index of measuring welfare would be to study the movement of Consumer Price Index (CPI). The data reveal that CPI for Industrial Workers (CPI-IW) indicated an annual average rise of 7.1 per cent for the period 1993-94 to 2010-11 which is higher than increase of WPI. Similarly, CPI for Agricultural labourers (CPI-AL) increased annually by 6.9 per cent in the post-reform period which also indicates a relatively higher increase than WPI.

The upshot of the analysis is that in the post-reform period (1993-94 to 2009-10), the movement of the CPI was slightly higher than the movement of WPI. This indicates that retail inflation in post-reform period was slightly higher than wholesale inflation.
7. **Trend of Growth in Infrastructure**

The analysis reveals that in case of saleable steel and cement, the growth rates were higher in the post-reform period than in the pre-reform period. In case of steel, the growth rate of production increased by 8.1 per cent during 1993-94 and 2010-11 as against only 4.9 per cent in the pre-reform period (1980-81 to 1990-91). Similarly, the growth of cement production also indicated sharp increase by 8.3 per cent during 1993-94 to 2010-2011 as compared to only 4 per cent in the pre-reform period. However, it should be pointed out that the momentum gained in the post-reform period for acceleration in the production of cement was the consequence of introduction of dual pricing in the case of cement introduced in 1982 with progressive reduction in the percentage of controlled cement to eventually freeing cement prices from state control. This led to massive increase in the cement capacity and output. Similarly, gradual easing of steel price control was accepted by the Government in 1983. But all these measures were taken in the pre-reform period, which helped to provide an environment to these industries to raise their capacity and output without any bottlenecks.

However, other infrastructure Industries - electricity, coal and petroleum did not fare well in the post-reform period. In the case of electricity, whereas in the eighties growth rate of generation was of the order of 9.1 percent, it was just 5.5 percent in the post-reform period. Likewise, coal production declined from 6.4 per cent in the eighties to just 4.0 per cent during 1993-94 to 2010-11. In case of petroleum, growth rate dipped from 12.2 per cent in the eighties to just 1.5 per cent during 1993-94 to 2010-2011. While the state withdrew from these sectors and did not undertake investment in infrastructure, the private sector - Indian as well as foreign - failed to fill the vacuum. Obviously, excessive dependence on private sector in the post-reform period did not yield the much-trumpeted and desired results.

8. **India’s Foreign Trade and Balance of Payments**

Although policies of liberalisation in foreign trade were initiated in 1985-86 but their impact though felt during the period 1986-87 to 1990-91 was slow and after 1991 the new economic reforms went in for a more rapid globalisation of the Indian economy by reducing and/or abolishing quantitative restrictions and also reducing tariff barriers which hindered trade. The main implications of reform measures were intended to boost exports as well so as to facilitate developmental imports or such imports, which were vital for increasing industrial production, may be of some raw materials. It would, therefore, be appropriate to compare trend of foreign trade in the pre-reform periods i.e. 1980-81 to 1990-91 (described as the eighties) and the period 1991-92 to 2004-2005 the post-reform period.

The Reserve Bank of India has revised the data of India’s balance of payments in dollar terms recently. It would, therefore, be appropriate to review the position of foreign trade on the basis of this updated information.

The decade has been divided into two sub-periods. During the first five years (1981-82 to 1985-86), India achieved a growth rate of 2.3 per cent in exports, but in imports, the growth rate was barely 2.0 per cent. India followed a restrictive import policy during this period. Consequently, as against the average annual exports of $ 9,514 million, average annual imports were of the order of $ 16,404 million. As a result, average trade deficit was $ 6,890 million. Since net invisibles were positive, the surplus from this head on the average was $ 3,474 million. Thus, surplus from invisibles was able to neutralize the trade deficit by 50.4 per cent. Consequently balance of payment deficit on current account could be restricted to $ 3,416 million. During this period, exports as a percentage of imports were only 58 per cent and thus, the situation was highly unsatisfactory.

9. **Foreign Investment**

Data reveal that during the 16 year period, a total of US $ 136.5 billion was invested in India in the form of foreign investment, out of which $ 72.09 billion (52.8 per cent of total) was in the form of direct investment and $ 64.44 billion (47.2 per cent) was in the form of portfolio investment. Segregated data reveal that direct investment flows remained subdued during 1991-92 to 1994-95 and in this period portfolio investment accounted for a larger share, but in the
later period 1995-96 to 2002-03, direct investment flows picked up and they accounted for quite a significant share and from 1997-98 and 1998-99, direct investment became dominant. It may also be noted that portfolio investment is of a very undependable and volatile nature. This is witnessed by the fact that portfolio investment slumped to a level of US $ 1.83 billion in 1997-98 as against 3.31 billion in 1996-97 and became negative in 1998-99. The sudden fall of portfolio investment to a negative level resulted in the total inflow declining from US $ 6.13 billion in 1996-97 to $ 2.40 billion in 1998-99. This only highlights the fact that although foreign investment is welcome, it would be more desirable to depend on inflows of foreign direct investment. The sharp decline of portfolio investment from $ 3,026 million in 1999-00 to a low level of 979 million in 2002-03 and then a sudden spurt to $ 11,377 million in 2003-04 and again a decline to $ 9,315 million in 2004-05 is indicative of its volatile and undependable nature. Portfolio investment again sharply increased to in 2005-06 to $ 12,492 million (64%) to again decline to $ 7,003 million in 2006-07 accounting for merely 24 percent of total foreign investment, and further increased to $ 27,271 million during 2007-08. But due to economic crisis if became negative SI3.855 million during 2008-09. In 2009-10 we find a record foreign investment of $ 70,139 million as portfolio investment reached its record and direct investment was also very high at $ 37,763 million. In 2010-11 provisional figures for foreign investment was put at $ 5,84,95 million.

10. Reduction of Regional Disparities

One of the major objectives of development is to reduce regional disparities. With this end in view, State policies have been patterned to help the backward regions. It was also included as a part of the devolution of funds and higher allocations were made for the backward states so that regional disparities could be narrowed down.

The reform process initiated in 1991 has been emphasising the use of the market forces, which naturally attract investment to regions more developed in infrastructure - both economic and financial. It does not pay any attention to the question of regional imbalance.

It would be, therefore, desirable to understand the impact of economic reforms on various states.

An analysis of the growth of the Net State domestic Product (at 1993-94 prices) for the post-reform period reveals that NSDP in forward states indicated an annual average growth rate of 5.6 per cent during 1990-91 and 2002-03, but as against them in the backward states, growth rate of NSDP was merely 1.7 per cent. This only underlines the stark reality that the reform process helped the forward states much more than the backward states and could be held responsible for widening regional disparities. It may also be noted that in Bihar, the per capita NSDP growth during 12-year period (1990-91 to 2002-03) was negative to the extent of (~) 0.9 per cent per annum and in Uttar Pradesh, it was barely 0.4 per cent. These two states which account for about 27 per cent of the population pulled down the average all-India growth of per capita NSDP. The ratio of maximum and minimum per capita NSDP which was 2.7 in 1990-91 increased to 4.73 in 2004-05 which also supports the fact that the reform process widened income disparities among the states. However period after 2004-05 shows some improvement in the performance of backward states and this ratio declined to 4.2 in 2008-09.

Dr. N. J. Kurian of the Planning Commission who made an extensive study of the “Widening Regional Disparities in India” has indicated that more than two-thirds of investment proposals (69.2 %) in the post-reform period were concentrated in the forward states and a similar situation prevailed in terms of financial assistance disturbed by All-India Financial Institutions as well as State Financial Corporations. The All India Financial Institutions viz., IDBI, IFCI, ICICI, UTI, LIC, GIC, IRBI and SIDBI disbursed 67.3 per cent of total financial assistance to forwards states upto 31st March 1997. Even among the 9 forward states, four states, namely Maharashtra, Gujarat, Tamil Nadu and Andhra Pradesh were able to appropriate about 51 per cent of total assistance. Even in the case of State Financial Corporations, 70 per cent of total assistance was received by forward states. This analysis underlines the fact that the reform process has favoured the forward states in terms of approval of investment proposals as well as financial assistance. Consequently, the already betteroff states can further accelerate the growth process while the backward states being unfavourably treated face a retardation in growth. This explains the growing disparities in terms of growth of NSDP — both total and per capita.
Situation seems to have worsened later. Figure of per capita state domestic product at current prices show that the ratio of per capita state domestic product of Haryana (highest per capita state domestic product of ₹ 58531) and that of Bihar (₹ 10570) was 5.5 even in 2007-08. Though rate of growth of some underdeveloped states has improved in the last few years, lot more is needed to be done to reduce regional inequalities.

11. Social Infrastructure and Human Development

Data on selected indicators of Human Development viz., life expectancy, literacy rate, infant mortality rate (IMR). If the purpose of all development is to improve the quality of life, then human development indicators are the end-products of the development process.

Wide disparities are observed among different states. Kerala and to some extent Tamil Nadu have shown that it is possible to achieve higher levels of human development even with low levels of economic development. But, by and large, better levels of per capita NSDP are associated with higher levels of human development. To achieve higher levels of human development, it is necessary that investment in educational and health infrastructure be stepped up. Among the back-ward states, Uttar Pradesh, Bihar, Rajasthan and Madhya Pradesh have very poor record in terms of literacy, especially female literacy. They have also failed in investment in health infrastructure and consequently have lower life expectancy, higher infant mortality and higher birth rate. The private sector which is the torch-bearer of economic reforms may be setting up nursing homes or elite educational institutions with higher levels of charges or fees to meet the demand of the upper middle class and affluent sections, but it does not offer anything for the welfare if the poor. Either the private sector should assume a higher social purpose or the state should invest more in education and health infrastructure.

Self-Assessment

1. Choose the correct option:

   (i) Economic reforms in India were introduced in
       (a) 1991          (b) 1978
       (c) 1985          (d) None of these

   (ii) Water seed fertilizer technology popularly known as
        (a) Growth development          (b) Green revolution
            (c) Peasant reforms            (d) None of these

   (iii) In economy CDS stands for
        (a) Combined defense services   (b) Central development services
            (c) Current daily status       (d) None of these.

4.2 Summary

• It has to be acknowledged that the reform process will not be able to achieve its socio-economic objective, because the private sector is merely concerned with profit motive. Whereas the liberalisation process has reduced the role of the public sector investment, it has failed to fill the vacuum created by the withdrawal of public sector investment in infrastructure, more especially in the backward states. Obviously, this calls of a reform of the reform process. President W. J. Clinton while speaking in Hyderabad on March 24, 2000 on the need to harness new technologies like info-tech for eradicating poverty emphasised: "Millions of Indians are connected to the internet, but millions more are not yet connected to fresh water. India accounts for 30 per cent of the world’s software engineers but also 25 per cent of the world’s malnourished. So our challenge is to turn the newest discoveries into best weapons humanity has ever had to fight poverty.” Mr. Clinton underlined the fact that while it was good that a lot of 25-year old multi-millionaires were being created and the latest Indian start-ups were shooting up the Nasdaq, “this whole enterprise cannot just be about higher profits, there must also be a higher purpose.”
Notes

• Most forthright criticism of the reform process came from the former President K R Narayanan on the eve of the Republic Day message on 25 January 2000 when he warned: “The fury of the patient and long-suffering people would be unleashed if the three-way fast lane of liberalisation, privatisation and globalisation failed to provide ‘safe pedestrian crossings’ for the unempowered in India.” This indictment of the reform process only underlines the scant care the market forces show to the poor. Mr. Narayanan has drawn attention to the tragic contradictions in our society, particularly the great regional and social inequalities in the following words:

• “We have one of the world’s largest reservoirs of technical personnel but also the world’s largest number of illiterates; the world’s largest middle class but also the largest number of people below the poverty line; and the largest number of children suffering from malnutrition. One half of our society guzzles aerated beverages while the other has to make do with palmfuls of muddied water.”

• While justifying the trajectories of modern progress such as factories, dams and satellites, Mr. Narayanan, however, cautioned against ecological and environmental devastation leading to uprooting of human settlements, especially of the tribals and the poor. He, therefore, mentioned “Ways and methods could be found for countering the harmful impact of modern technology on the lives of the populace both by the government and civil society.”

• Pointing to the regional and social inequalities accompanying the country’s economic growth, Mr. Narayanan cautioned: “Many a social upheaval can be traced to the neglect of the lowest tier of society, whose discontent moves towards the path of violence. Dalits and tribals are the most affected by all this”.

• Prime Minister Manmohan Singh also is of the view: “The challenge before us is to combine the Economics of growth with the Economics of equity and social justice. We have no option but to walk on two legs.”

4.3 Key-Words

1. Consumption : The using up of a resource.
2. Retrenchment : (i) A cutting down or back; reduction.
   (ii) A curtailment of expenses,
   (iii) Entrenchment consisting of an additional interior fortification to prolong the defense.

4.4 Review Questions

1. Discuss the economic reforms in India since 1991.
2. What is the impact on labour of economic reforms? Explain.
3. Write a short note on the Foreign Investment.

Answers: Self-Assessment

1. (i) (a) (ii) (b) (iii) (c)

4.5 Further Readings

Books

1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
Introduction

In an economy, every sector utilises natural, human and material resources and contributes to the aggregate flow of goods and services during a given time period. Each specific period may be described in terms of a year. The income earned by a country’s people, including labour and capital investment in a year is hence called national income. A variety of measures of national income and output are used in economics to estimate total economic activity in a country or region, including Gross Domestic Product (GDP), Gross National Product (GNP), and Net National Income (NNI). All are especially concerned with counting the total amount of goods and services produced within some “boundary”. The boundary is usually defined by geography or citizenship, and may also restrict the goods and services that are counted. For instance, some measures count only goods and services that are exchanged for money, excluding bartered goods, while other measures may attempt to include bartered goods by imputing monetary values to them.

5.1 Trends and Structure of National Income

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

Pre-Independence Period Estimates

Several estimates of national income were prepared in the British period. Notable among the estimators were: Dadabhai Naoroji (1868), William Digby (1899), Findlay Shirras (1911, 1922 and 1931), Shah and Kambatta (1921), V.K.R.V. Rao (1925-29 and 1931-32) and R.C. Desai (1931-40).

In the pre-independence estimates, Dadabhai Naoroji, Shah and Kambatta, Findlay Shirras, Wadia and Joshi estimated the value of the output of the agricultural sector and then added a certain percentage as the income of the non-agricultural sector. The assumptions of most of these estimators
were arbitrary and hence devoid of any scientific basis. Dr. V.K.R.V. Rao made use of a combination of census of output and census of income methods. He divided the economy of India into two categories. In the first category were included agriculture, pastures, mines, forests, fishing and hunting. Output method was to be used to evaluate the product derived from these sectors. In the second category were included industry, trade, transport, public services and administration, professions, liberal arts and domestic service. For these occupations, census of income method was used. To these two sub-totals was added the income from house property and other items which could not be covered under the above categories. From the gross aggregate income so obtained were excluded the values of goods and services consumed in the process of production. By adding the net income earned from abroad, an estimate of national income was computed.

Most of these estimates were the results of the efforts of individuals and as such they suffered from serious limitations. The arbitrary assumptions of the authors undermined the reliability of the estimates. Besides, these estimates were based on statistics from the agricultural sector which were highly undependable.

Post-Independence Period Estimates

Soon after Independence, the Government of India appointed the National Income Committee in August, 1949, so as to compile authoritative estimates of national income. The Committee consisted of Professor P.C. Mahalanobis, Professor D.R. Gadgil and Professor V.K.R.V. Rao. The final report of the National Income Committee appeared in 1954. The report was a landmark in the history of this country because for the first time, it provided comprehensive data of national income for the whole of India. The principal features of the National Income Committee report were as under:

1. During 1950-51, agriculture which also included animal husbandry, forestry and fisheries contributed nearly half of the national income.
2. Mining, manufacturing and hand trades contributed about one-sixth of the total income.
3. Commerce, transport and communications accounted for a little more than one-sixth of the total national income.
4. Other services such as professions and liberal arts, administrative services, domestic services, house property accounted for about 15 per cent of national income.
5. The share of commodity production was about two-third of the national income. The term commodity production includes material production derived from agriculture, mining, factory establishments, hand trades, etc.
6. Services accounted for about one-third of total national income. Services sector includes commerce, transport and communications, administrative services, liberal arts, domestic services etc.
7. The share of the government sector in net domestic product was 7.6 per cent in 1950-51. Along with it, the share of the government in national expenditure was 8.2 per cent.
8. The margin of error in the calculation of national income estimates worked out at about 10 per cent.

National Income Committee and C.S.O. Estimates

For the post-independence period, we have five series in national income estimates.


The conventional series divided the economy into 13 sectors. Income from six sectors i.e., agriculture, animal husbandry, forestry, fishery, mining and factory establishments is calculated by the output method and income from the remaining seven sectors, i.e., small enterprises, organised banking and insurance, commerce and transport, professions, liberal arts and domestic service, public authorities, house property and rest of the world is computed by census of income method.

Net Output Method: In agriculture, the output of each crop is estimated by multiplying the area sown by the yield per hectare. For obtaining the average yield crop cutting experiments
were conducted. From the gross value of output so obtained, deductions for the cost of seed, manures and fertilisers, market charges, repairs and depreciation are made so as to derive net value of the product from agriculture.

For animal husbandry, forestry, fishery, mining and factory establishments, estimates of production are multiplied with market price so as to obtain the gross value of the output. From the gross value of output deductions are made for cost of materials used in the process of production and depreciation charges etc. to obtain net value added of each sector.

**Net Income Method**: In order to obtain the contribution of small enterprises an estimate for the total number of workers employed in different occupations classified under small enterprises is prepared. On the basis of sample surveys, the average earnings per head are obtained. By multiplying the total number of persons employed with the average earnings per head, the contribution of small enterprises is estimated. To provide for factor payments other than wages and salaries, an addition of 20 per cent to the money earnings is made.

For Banking and Insurance the balance sheets of the firms provide the requisite information. Wages, salaries, directors’ fees and dividends (distributed and undistributed) are all added to get the net contribution of the sector.

For commerce and transport and for professions, liberal arts and domestic services, the procedure is the same as for small enterprises.

For public sector, wages, salaries, pensions, other benefits, dividends or surplus, etc., are added up to arrive at the contribution of the public sector. To this is added the contribution of government construction and this gives the total contribution of the public sector.

(2) **National Income Series at 1960-61 prices**: This series provided national income data at current prices and at 1960-61 prices for the period 1960-61 to 1975-76.

Another series was started with 1970-71 as base year instead of 1960-61.

Estimates based on different base years indicate differences in magnitudes, even when they are deflated at constant prices either at 1948-49 or 1960-61 or 1970-71 prices. This is due to the differences in weights used for the series.

The Central Statistical Organisation (CSO) brought out another Series on national income with 1980-81 as base year in place of the series with 1970-71 as the base year.

**CSO Revised National Income Series with 1999-00 as Base Year**

The Central Statistical Organisation (CSO) has revised the existing series of national accounts with 1993-94 as the base year with a new series with 1999-00 as the base year. Besides shifting the base year, the New Series incorporates improvements in terms of coverage and to the extent possible, the recommendations of the United Nations System of National Accounts, 1993 (1993 UNSNA) have been incorporated.

The improvements in terms of coverage are the following:

(a) Inclusion of production of salt through sea water evaporation and the production of betel leaf, toddy, goat, buffalo and camel milk, duck eggs and meat production from unregistered slaughtering.

(b) Expenditure made on few tree crops during the gestation period and setting up of wind energy systems are included in the estimates of output of construction sector.

(c) A new category of ‘valuables’ has been included in the gross capital formation, in line with the recommendations of 1993 UNSNA.

(d) Economic activities of other communication, renting of machinery and other equipment without operator, computer related activities in unorganized segment, coaching centres, social work with accommodation, recreational and cultural activities have been included.

**5.2 Trends in National Income Growth and Structure**

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

Figures of national and per capita income are collected at current prices. But figures of national income at current prices do not give a correct picture about the growth of the economy, for the increase in national income at current prices reflects the combined influence of two factors viz.,
(a) the increase in the production of real goods and services and (b) the rise in prices. If the increase in national income is due to the first factor, it is an indicator of real growth because it implies that more goods and services become available to the people. If it is due to the second factor, it represents an unreal inflation of national income in money terms. Consequently, national income figures are deflated at constant prices to eliminate the effect of any change of price level during the period. National income figures at constant prices, therefore, become comparable, but they conceal the population effect. To eliminate the effect of growth of population, per capita national product or per capita income is calculated. Whereas the growth of the net national product at constant prices is an index of the total productive effort on the part of the community and indicates the rate of growth of goods and services in the economy, the growth of per capita income at constant prices is an indicator of the change in the standard of living of the people.

CSO has provided a series of national income data at 1999-00 from 1950-51 to 2007-08. Although this indicates slightly different growth rates for different period, but this was inevitable because of coverage and a change is procedure.

During 2000-01 and 2004-05, NNP growth rate accelerated to 6.4 per cent and per capita NNP grew at the rate of 4.7 per cent per annum (at 1999-00 prices). During 2004-05 and 2010-11 we find further acceleration in the NNP growth rate to 8.4 percent and that of percapita income to 6.9 percent.(at 2004-05 prices).

(ii) Annual Growth Rates during the plans

During the First Plan, annual average growth rate of NNP was 4.4 per cent (at 1999-00 prices), which to declined 3.8 per cent during the Second Plan. However, during the Third Plan, annual average increase in national income slumped down to 2.6 per cent which was just sufficient to neutralize the growth of population. This is indicated by the fact that there was 0.4 rate of growth of per capita income during the Third Plan. This was largely the consequence of a serious drought in 1965-66 and thus the growth rate got depressed. This was followed by another drought year as also a business recession. After 1967-68 the economy started picking up and the growth rate showed signs of improvement. During the Fourth Plan (1969-74) period, the average annual rate of growth of national income declined to 3.1 per cent and that of real per capita income to 0.8 per cent per annum. The sharp increase in prices during 1972-73 and 1973-74 and the shortfalls in production on account of lower utilisation of capacity were the principal factors responsible for a lower growth rate during the Fourth Plan.

During the Fifth Plan (1974-79) the average annual increase in national income was of the order of 4.9 per cent and that of per capita income was barely 2.6 per cent. On the whole, the performance of the economy during the Fifth Plan can be considered very satisfactory.

During the Seventh Plan (1985-90), India’s NNP grew on the average at the rate of 5.5 % per annum and the annual growth of per capita NNP was 3.3 %. Obviously, Seventh Plan achieved its objective of 5 per cent growth rate of NNP along with 3 % targeted growth rate of per capita NNP. This was a welcome development.

(iii) Trends in distribution of national income by industrial origin

The following broad trends in the changing composition of the domestic production are revealed:

1. The share of the primary sector which includes, agriculture, forestry and fishery has gone down from 55.4 percent of GDP in 1950-51 to 38 percent in 1980-81 and further declined to 14.3 per cent in 2010-11. The main cause of the decline is a rapid fall in the share of
agriculture alone. There is also a contraction in the share of forestry from about 6 percent in 1950-51 to nearly 0.7 per cent in 2010-11. The share of fishery has remained more or less constant around 1 percent throughout the period.

(2) The share of industry which includes mining, manufacturing, electricity, gas & water supply and construction has shown a steady increase from 15 per cent in 1950-51 to 24 percent in 1980-81 and 27.9 per cent in 2010-11. Two major components of industry are manufacturing and construction. The share of manufacturing increased from 8.9 per cent in 1950-51 to 15.8 per cent in 2010-11. Similarly, the share of construction improved from 4.4 per cent in 1950-51 to 7.9 per cent in 2010-11.

(3) The share of the service sector has three components; (a) Trade, Transport, Storage and Communication, (b) Finance, Insurance, Real Estate and Business Services and (c) Community, Social and Personal Services. The share of the service sector indicated a sharp improvement from 29.6 per cent in 1950-51 to about 57.8 per cent in 2010-11. There was a significant increase in the share of trade, transport and communications from only 11.3 percent in 1950-51 to 27.0 percent in 2010-11. The expansion of transport, especially road transport and communications, during the last decade of mobile revolution has been the major contributor to this increase.

Share of Gross Domestic Product by industry of Origin (1999-00 series)

The share of finance, insurance, real estate and business services marginally declined from 7.7 percent in 1950-51 to 7.5 percent in 1980-81 and thereafter improved to 17.4 percent in 2010-11.

The process of economic development involves a rapid expansion of public administration especially a rapid expansion of economic and welfare services such as education, health and family welfare. Taking community and personal services a group, there was an improvement in its share from 10.6 percent in 1950-51 to 13.4 percent in 2010-11.

The structural change in the composition of national income by industrial origin is the consequence of the process of economic growth initiated during the plans. Since the growth process involved a rapid expansion of manufacturing in the organised sector, the share of manufacturing was bound to indicate a relatively sharp increase. However, agriculture did not indicate a fast rate of growth.

As is evident, the rate of growth of agriculture showed a decline from 3 per cent during 1950-51 and 1960-61 to 1.5 per cent during 1970-71 and 1980-81 and thereafter, it picked up to 3.4 per cent during 1980-81 and 1990-91. However, it declined to 2.6 per cent during 1990-91 and 2000-01 and then improved to 3.79 percent between 2004-05 and 2010-11.
The theory of economic growth also supports the structural change in the composition of national product. The distribution of gross domestic product in developed countries indicates a much higher share of industry and services and a relatively lower share for agriculture. The disparity in per capita incomes between developed and underdeveloped countries is largely a reflection of the disparity in the structure of their economies.

As industrialisation spreads it brings about an improvement in the share of industry and services. Indian economy is passing through this process of transition from an agricultural economy to an industrialized one. In this process, a structural change in the composition of national income is inevitable. This structural change is taking place, though at a slow pace. The main reason for the slow rate of structural change in domestic output is the slow rate of growth of the manufacturing output.

As is expected during the process of growth, India also experienced an improvement in the share of the tertiary sector. This was largely due to an expansion in transport and communication, banking and insurance and public administration. The rate of growth in all the components of the tertiary sector was 4.9 per cent per annum during 1950-51 and 1990-91 which was higher than the overall rate of growth of gross domestic product (i.e., 4.1 per cent) in the economy. During 2004-05 and 2010-11, the growth rate of tertiary sector has picked up to more than 10 per cent.

There is a sudden jump of the Indian economy to pass on to the stage of a post-industrial ‘service’ economy without completing the phase of industrialisation. This only underlines the need for strengthening the manufacturing sector by stepping up the process of industrialisation. The changing structure of national income needs to be further strengthened by stepping up the programme of industrialisation. This does not imply a neglect of agriculture, but for accelerating the growth process in agriculture, industrialisation of the economy with emphasis on agro-based industries and industries supplying inputs to agriculture is a *sine qua non*. It is only then that the process of transition of the Indian economy from a developing to a developed economy will be accomplished.

**Did you know?** India’s national income registered a growth rate of 5.4 per cent during the Sixth Plan (1980-85) with a per capita income growth rate of 3.1 per cent.

(iv) **Trends in the share of the public sector**

The share of public sector in gross domestic product was 14.9 per cent in 1970-71, it rose to 25.9 per cent in 1993-94 and then declined to 20.8 per cent in 2008-09. The gradual increase in the share of the public sector is the direct result of the expansion of the economic activities of the State, both on side of enlarging administrative services and of increasing productive activities in public enterprises during the first four decades of development. Thereafter, economic reforms initiated in 1991 stressed the need for restricting the area of operation of public enterprises. It emphasized phasing out of enterprises incurring losses and withdrawing from such sectors like consumer goods, hotels etc. which served no social purpose. The factors contributing to the increase in the share of non-departmental enterprises are the setting up of new industries, expansion of existing enterprises, nationalisation of coal mining companies, banks and insurance and the like, and merger of private electricity companies into electricity boards.

(v) **Urban and Rural Income Break-up**

National Accounts Statistics (1999) and (2006) and give a break-up of the net domestic product for the rural and urban sectors separately. The data reveal that as against 62.4 per cent of the total NDP being contributed by the rural sector in 1970-71, its share in NDP declined to 54.3 per cent in 1993-94. Consequently, during the 23 year period, the share of the urban sector in NDP improved from 37.6 per cent to 45.7 per cent. The per capita NDP for the rural sector was ₹ 529
in 1970-71 and that of the urban sector was ₹ 1,294. Thus urban-rural disparity ratio in per capita NDP was 2.45. However, this ratio declined marginally to 2.34 in 1993-94 since per capita NDP for urban sector as ₹ 13,525 as against ₹ 5,783 for the rural sector.

However, between 1993-94 and 1999-00, the first phase after the introduction of economic reforms, witnessed a further decline in the share of rural sector to NDP to about 48 per cent. Not only this, per capita NDP in 1999-00 for rural areas was ₹ 10,683 and for urban areas stood at ₹ 30,183. The urban-rural disparity ratio increased to 2.82 in 1999-00 as against 2.34 in 1993-94. This is not a healthy trend.

(vi) Changing Structure of Rural GDP

Dr. Rajesh Shukla and K.A. Siddiqui of the National Council of applied Economic Research (NCAER) have studied the changing structure of Rural GDP. The main findings of the study are:

1. Average annual growth rate of rural GDP which was 2.3 percent during 1970-80 improved to 4.8 percent during 1980-93. It rose further to 5.0 percent in 2007-08 and declined to 4.3 percent in 2008-09 - a year in which recession adversely affected the growth rate.

2. Break-up of the sectoral shares of rural GDP reveals that whereas the share of agriculture in 1970-71 was 73.8 percent and the combined share of industry and services was 26.2 percent in rural GDP, there is a continuous decline in the share of agriculture and it came down to 42 percent in 2007-08. As against it, the share of both industry and services indicated a continuous increase and their combined share was 58 percent in 2007-08.

These trends reveal that a structural transformation of the rural economy is taking place and the nonfarm sector is emerging as the major contributor to rural GDP. This is also borne out by the CSO’s Economic Census 2005, according to which, about a fifth of nonfarm rural workforce is employed in agricultural establishments, while four-fifth worked in non-agricultural establishments.

Such a transformation is a trend in the right direction and is very desirable because about 60 percent of India’s population cannot live on the 19 percent share of India’s GDP in agriculture.

(vii) Share of Organised and Unorganised Sector in NOP

Organised enterprises are defined by the CSO as all enterprises which are either registered or come under the purview of any of the Acts and/or maintain annual accounts and balance sheets. Among the Unorganised enterprises are included all unincorporated enterprises and household industries other than the Organised ones which are regulated by any of the Acts and which do not maintain annual accounts and balance sheets.

From the data given in Table 10, it is evident that the share of the organised sector has risen from 30 per cent in 1980-81 to 42.9 per cent in 2007-08. Consequently, the share of the unorganised sector declined from 70 per cent to 57.1 per cent during the same period. It may also be noted that the share of the organised sector in mining, manufacturing etc. improved from 56.8 per cent to 70.2 per cent and that in the services sector improved from about 40 per cent in 1980-81 to 46 per cent in 2007-08. On the other hand, in agriculture, forestry and fishing, the contribution of the unorganised sector slightly declined 95.2 per cent in 1980-81 to 91.2 per cent in 2007-08. The shift in the composition of NDP from the unorganised to the organised sector is a consequence of the process of development.

Limitations of National Income Estimation in India

“National income is nothing more than a simple linear aggregation of income accruing to the factors of production supplied by the normal residents of the country in question.” Thus, while making an estimate of national income millions of economic quantities have to be added up. For this purpose, some basic judgements and social criteria based on the mores and traditions of a society are to be kept in mind. “Incidentally, in the literature on the System of Material Production (SMP) used to be employed by the erstwhile centrally-planned economies, the services were divided into two parts —
Material (or productive) and non-material (or unproductive) services. Material or productive services comprised transport and communication and commerce covering wholesale and retail activities, including restaurants. Essentially all other personal and most public services were excluded from the concept of material production in the SMP, whereas in the System of National Accounts (SNA), no such distinction is made and all services are said to render production activities.” National Accounts Statistics in India include all services unlike the System of Material Production (SMP) followed in erstwhile socialist countries like Hungary and Soviet Russia. Similar controversy exists regarding the inclusion of Government administrative services. There is a difficult question for an estimator to answer: “which part of the government’s general administration is service to business firms, enters into the value of its product and hence should not be counted and which part is service to the people as individuals and consumers and should be counted . . . Likewise, in considering what is consumption in the process of production and what is net product, the estimator merely, follows the judgement of society — which views net product as what is available either for consumption of individuals, personally or collectively or for additions to capital stock.”

Besides these conceptual problems, there are a number of limitations of national income estimation which have a particular relevance in India.

(a) The output of the non-monetised sector: While calculating national output, the assumption normally made is that the bulk of the commodities and services produced are exchanged for money. India, where agriculture is carried on a subsistence basis, a considerable portion of the output does not come to the market for sale but is either consumed by the producers themselves or is bartered away with other producers in exchange for other goods and services. To ignore this portion of the output in agriculture would reduce the national output considerably. At present, there is no objective method of finding out the total output of food crops and the amount consumed at home. Hence, the difficulty that arises in India is to find out the imputed value of the produce of the non-monetised sector and add it to the value of the monetised sector.

(b) Non-availability of data about the income of small producers or household enterprises: Another limitation in India is that a very large number of producers carry on production at a family level, or run household enterprises on a very small scale. Most of these small producers or entrepreneurs are so illiterate that they have either no idea of maintaining accounts or they do not feel the necessity of keeping regular accounts. Commenting on this the National Income Committee wrote: “An element of guess-work, therefore, invariably enters into the assessment of output, especially in the large sectors of the economy which are dominated by the small producer or the household enterprise.”

(c) Absence of data on income distribution: The National Accounts Statistics do not generate any data on income distribution of households or persons. For this purpose, instead of making inquiries about household income or related variables, the National Sample Survey Organisation (NSSO) have used data on consumer expenditure and collected through a pilot survey on distribution of income, consumption and savings during 1983-84 in 5 selected states and 4 metropolitan cities. Although these surveys were questioned on the basis of the small size of their samples, it was found that household incomes (Y) based on direct enquiries were lower by 30-40 per cent than those derived indirectly as the sum of consumption and saving (C+S). Conceding that the experience was disappointing, the NSSO has suggested full-scale pilot surveys on household income, saving and consumption. There is a strong need to compile data on income distribution so that the spread effects of the growth process on low income households can be properly analysed.

(d) Unreported illegal income: Studies about black economy pertaining to India have shown that a significant part of the economy operates as hidden or subterranean economy and the income generated in it goes as unreported income. According to a study by Dr. Arun Kumar, black economy accounted for about 40 percent of total income generated (Gross National Product), in 2000-01. Obviously, national income estimates to that extent are under-estimates. It is also a fact that the size of the black economy has been growing over time and as such the magnitude of error on account of this factor alone has been becoming larger and larger.
Self-Assessment

1. Choose the correct option:

   (i) The government of India appointed the national income committee in August,........

      (a) 1949  (b) 1989  (c) 1984  (d) None of these.

   (ii) The final report of the National Committee appeared in

      (a) 1954  (b) 1960  (c) 1965  (d) None of these.

   (iii) During the perceptible improvement in growth rate during the

      (a) Seventies  (b) Eighties  (c) Nineties  (d) None of these.

   (iv) The chairman of National Statistical Commission was

      (a) V.K Rao  (b) C. Rangrajan  (c) Rajesh Shukla  (d) None of These.

5.3 Summary

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

- Several estimates of national income were prepared in the British period. Notable among the estimators were: Dadabhai Naoroji (1868), William Digby (1899), Findlay Shirras (1911, 1922 and 1931), Shah and Khambatta (1921), V.K.R.V. Rao (1925-29 and 1931-32) and R.C. Desai (1931-40).

- Soon after Independence, the Government of India appointed the National Income Committee in August, 1949, so as to compile authoritative estimates of national income. The Committee consisted of Professor P.C. Mahalanobis, Professor D.R. Gadgil and Professor V.K.R.V. Rao. The final report of the National Income Committee appeared in 1954.

- The Central Statistical Organisation (CSO) has revised the existing series of national accounts with 1993-94 as the base year with a new series with 1999-00 as the base year. Besides shifting the base year, the New Series incorporates improvements in terms of coverage and to the extent possible, the recommendations of the United Nations System of National Accounts, 1993 (1993 UNSNA) have been incorporated.

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

- Figures of national and per capita income are collected at current prices. But figures of national income at current prices do not give a correct picture about the growth of the economy, for the increase in national income at current prices reflects the combined influence of two factors viz., (a) the increase in the production of real goods and services and (b) the rise in prices.

- There was a very perceptible improvement in growth rate during the eighties. During 1980-81 and 1990-91, net national product showed a growth rate of 5.2 per cent per annum and the per capita NNP (at 1999-00 prices) improved on an average by 3.0 per cent per annum.

- The process of economic development involves a rapid expansion of public administration especially a rapid expansion of economic and welfare services such as education, health and
family welfare. Taking community and personal services a group, there was an improvement in its share from 10.6 percent in 1950-51 to 13.4 percent in 2010-11.

- The theory of economic growth also supports the structural change in the composition of national product. The distribution of gross domestic product in developed countries indicates a much higher share of industry and services and a relatively lower share for agriculture. The disparity in per capita incomes between developed and underdeveloped countries is largely a reflection of the disparity in the structure of their economies.

- National Accounts Statistics (1999) and (2006) and give a break-up of the net domestic product for the rural and urban sectors separately. The data reveal that as against 62.4 per cent of the total NDP being contributed by the rural sector in 1970-71, its share in NDP declined to 54.3 per cent in 1993-94.

- “National income is nothing more than a simple linear aggregation of income accruing to the factors of production supplied by the normal residents of the country in question.” Thus, while making an estimate, of national income millions of economic quantities have to be added up.

- The National Statistical Commission headed by Mr. C Rangarajan, former Governor of the Reserve Bank of India has drawn attention to major gaps in the Indian Statistical System due to the absence of certain key datasets at the state level. These include cost of cultivation studies for most crops, Index of Industrial Production (IIP), Wholesale Price Index (WPI) and Consumer Price Index (CPI).

- The Commission noted that the states of Karnataka and Rajasthan have recently constituted expert groups to develop State Domestic Product and to bring about improvement in the compilation of these estimates. Other states should also undertake similar exercises.

### 5.4 Key-Words

1. Disparity : The condition or fact of being unequal, as in age, rank, or degree; difference
2. Inflation : In economics, inflation is a rise in the general level of prices of goods and services in an economy over a period of time. When the general price level rises, each unit of currency buys fewer goods and services. Consequently, inflation also reflects an erosion in the purchasing power of money - a loss of real value in the internal medium of exchange and unit of account in the economy.

### 5.5 Review Questions

1. What do you mean by national income? How it estimate.
2. Examine the Trends in National Income Growth and Structure.
3. Describe the limitations National Income Estimation in India.
4. Explain the reason for the slow rate of Growth of the Indian Economy.
5. Discuss the trends and structure of national income.

#### Answers: Self-Assessment

1. (i) (a) (ii) (a) (iii) (b) (iv) (c)

### 5.6 Further Readings

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Objectives

After reading this Unit students will be able to:

• Explain about the demographic Features and Indicators of Development.
• Discuss the Nature of Population Problem in India.

Introduction

The growth in population explains the difference in the growth of national income and the per capita income since human resources have a major role in generating aggregate flow of goods and services. Thus, the demographic features and indicators of development are closely related. For instance, human resources have a two-pronged relationship with economic growth. We see that as a resource, people are available as factors of production to work in combination with other factors of production such as land, capital and enterprise. Moreover, as consumers, human beings make demand on the national product of the economy. In this way, the size of population is a significant determinant of economic growth. It may be noted that a large population may not necessarily contribute to economic growth. Thus, a large fast-rising population may find itself in a situation of over-population. We may discuss whether economic growth alone constitutes economic development and see that it is not the case. Therefore, we must know about economic development and the indicators of economic development.

6.1 Demographic Features and Indicators of Development

With the help of Indian census data, a concise demographic profile of the country can be prepared. In 1872, the country’s first all India Census was completed. Decennial censuses have been organised then on in 1881, 1891, 1901, 1911, 1921, etc. The 14th census was completed in March, 2001. It may be noted that the census in India is conducted under the Census Act, 1948, which makes it obligatory for the public to provide all answers correctly and fully for a correct analysis.

Trends in Population Growth

However, India has got only 2.4% of the total land area of the world. Thus, India has been seriously handicapped a large proportion of the world population is found jam-packed in a small area of the country. Major trends of Indian population are given as under:

1. Since 1951, the upward trend in population growth rate was maintained which got reversed during the decades 1981-2001.
2. The increase in population after the country’s independence was more rapid. Before that the census of 1931 and the following census of 1941 recorded an increase of the magnitude of about...
2.76 crore and 3.97 crore respectively. In this way, while India’s population had increased by about 12 crores during the first fifty years of the present century, i.e. during 1901-51, it increased by about 32.5 crore during the three decade period of 1951 to 1981 itself.

3. The year 1921 is known as the ‘Year of Great Divide’. Here, it may be noted that before 1921, the growth of population was very slow. A decline was caused by famines and epidemics during the 1911-21.

**Distribution of Population by States:** Different States of India have different number of inhabitants with a large gap. For instance, Uttar Pradesh has a population as large as 16.60 crore while Sikkim has barely 5.40 lakh people. Some relatively large states have a population of more than 5 crore such as Bihar, Maharashtra, West Bengal, Andhra Pradesh, Madhya Pradesh, Tamil Nadu, Gujarat, Karnataka and Rajasthan. There are other states with less than 5 crore population.

**Did you know?** According to the 2001 census, India is the second largest country in the world with the total population of 102.7 crore constituting about 16% of the total population of the world.

**Growth Rate of Population**

The change in population caused by net migration as a proportion of total population of the country is almost insignificant and, therefore, can be easily ignored. The birth and death rates in India have followed the general trends indicated in the theory of demographic transition. The following conclusions may be made for India’s population growth:

1. The natural growth rate of population picked up to reach the maximum at 22.20 per thousand or about 2.22% per annum during 1971-1981 (and 21.1% during 1981-91). The crude death rate showed a marked decline in the decade 1921-31 and ever since has been continuously declining. However, during this period lasting till the mid-1970s, there was hardly any fall in the birth rate.

2. The stage for the third phase of transition was set with the beginning with the 1970s when the birth rate registered a fall. However, this has been neutralised by declining mortality. Here, it may be noted that the growth rate of population during 1981-1991 and 1991-2001 has been less than that in 1971-1981 which is an indication of third stage of transition.

**Density of Population**

The density of population in the country is 324 (Census 2001). It is calculated as a ratio of the number of persons per sq. km. of land area. It may be noted that a country like Myanmar with a density of population of only 75 has a per capita income of only $200 as against $530 in India. However, Japan with a density of 349 has a per capita income of $34,510. In this way, the density of population helps to determine the magnitude of the burden that land is being called upon to carry and to determine the future potentials of growth in the country.

**Inter-State Variations:** Generally, the density is generally high in industrially-developed states or in those regions which have a better climate, rainfall and irrigation facilities. India is an economy where the agrarian sector dominates and hence the above factors exercise an influence on the density of population in the country.

**Life Expectancy**

The occurrence of high death rate and/or death at an early age means life expectancy will be low. However, if the death rate is low and/or death occurs at an advanced age, life expectancy will be high for a given area. It has been observed that in the last few decades, the death rate in India has recorded a perceptible fall which is reflected in the rising life expectancy. At present, life expectancy at birth is 63.87 years for males and 66.91 years for females. We see that rising life expectancy has
social implications. For instance, it creates pressure on the job market. As persons reaching retirement age remain fit to work, they seek extension of their jobs or fresh employment. Moreover, as the elderly continue to live longer, the number of joint or multi-generational families tends to increase. But we know that the average size of households has not increased significantly over the last five decades and the total number of households has risen sharply for the period.

**Age and Sex Composition:** The consequence of past trends in fertility and mortality is reflected in the age and sex composition. If high birth and death rates persist for a fairly long time it would result in a bottom-heavy age pyramid. For India, the age distribution indicates that every one person, on an average, has to earn for himself and for one dependent also. Here, the dependency ratio of the population is about 64.07%. A high dependency ratio acts as a serious drag on production and improvement of living standards of the population.

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**Notes**

The difference between the birth rate and the death rate measures the growth rate of population.

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**Literacy**

A person may be called literate if he or she can read and write with understanding in any language. In India, a substantial progress in literacy has been made during the 1951-2001. At the same time, sex differentials in literacy rates are narrowing down. For instance, in 1951, the female literacy rate as a percentage of male literacy rate was about 33 which has gone up to 71.40 in 2001.

### 6.2 Nature of the Population Problem in India

India has a large population and is densely populated. Moreover, since the 1950s, the growth rate of population has been consistently high. It is due to persistence of high fertility and declining mortality. Apart from this, persistence of high birth and death rate for fairly long time has resulted in a bottom-heavy age pyramid; the dependency ratio in the economy has been very high. Further, the country shows a rising masculinity with the proportion of women in the total population gradually falling. The rural sector dominates the economy. Finally, about one-third of the total population is illiterate.

**Effects on Economic Development:** The fast growth of population in India has caused a number of problems as given below:

1. **Coale and Hoover’s Argument:** Coale and Hoover say that the GNP per capita would be lower under higher fertility than under lower fertility. Undoubtedly, per capita product in India is lower than it would have been had population been growing more slowly, because of three reasons given below:
   - Due to the smaller number of workers, the amount of capital per worker would have been greater.
   - The labour force would have been little smaller in size in case the fertility had been lower for a longer period. However, the number of people it had to support would have been much smaller during the period.
   - If the effect of diminishing returns in agriculture was equivalent to a lower average productivity of capital, the capital itself would have been more productive.

2. **Cassen’s Argument:** According to R.H. Cassen, there are two main relationships through which population growth affects the economy: savings effect and composition of investment effect.
   - **Savings Effect:** According to this, savings are reduced by population growth because of the increase of burden of dependency. As all must consume while relatively fewer produce, consumption per head rises and savings per head falls.
(b) Composition of Investment Effect: With an increasing population, a share of investible resources has to be utilised towards reproducing for additional people ‘unproductive’ facilities of the economy.

Thus, the pressures of population growth have become progressively more intense.

Population Policy in India

The population problem in India needs a policy which aims at a rapid reduction in the birth rate of the country. The focus of the population policy should be:

1. To increase the rate of employment at a rate that it will do away with unemployment among population of working age.
2. To control the growth of population through family planning.

National Population Policy, 2000

The National Population Policy, 2000 has the following aims:

1. The immediate objective is to meet the “unmet” needs for contraception, health care infrastructure, health personnel and integrated service delivery in the country.
2. The mid-term objective is to bring the total fertility to replacement levels, that is, two children per couple.
3. The long-term objective is aimed at stabilisation of population by 2045.

In the policy, 16 promotional and motivational measures have been outlined to implement it. Some of the important are given below:

1. For couples below poverty line, with two living children, who undergo sterilisation, a health insurance cover of Rs. 5,000 has been fixed.
2. Panchayats and Zila Parishads to be rewarded for promoting small family norm.
4. Provision of funds and soft loans for providing ambulance services in rural areas.
5. Abortion facilities scheme to be strengthened.
6. Couples below poverty line, who marry after legal age, have first child after the mother reaches 21, accept small family norm and undergo sterilisation after birth of two children are to be rewarded.

Government has established a National Commission on Population, headed by the Prime Minister, to monitor the new policy measures.

Indicators of Development

National income estimates (and the corresponding per capita income estimates) are used as indicators of economic growth. There is another concept called economic development which is a broader concept than economic growth.

Economic Growth and Economic Development: An increase in real terms of the output of goods and services that is sustained over a long period of time, measured in terms of value added may be defined as economic growth. On the other hand, the concept of economic development focuses on the achievement of the following three aims:

1. Increasing the availability and widening the distribution of basic life sustaining goods.
2. Enhancing the levels of living.
3. Widening the range of economic and social choice to individuals and nations by freeing them from servitude and dependence not only in relation to other people and nation-states, but also to the forces of ignorance and human misery in society.

Keeping the above three objectives in mind, the quality of life is regarded as an important index of development. Several factors are involved in the measurement of such ‘quality’. For example, life expectancy, the level of nutrition, education and literacy rates, consumption of energy per head and
so on. While some of these factors are ‘non-monetary’, others are ‘monetary’. In this direction, at least two most important indices are Human Development Index and Economic Development Index.

**Human Development Index**: A process of enlarging people’s choices may be called Human development. The United Nations Development Programme prepares the Human Development Index (HDI) annually. In theory, the choices can be infinite and change over time.

**Computation of HDI**: There are three indicators of HDI. First, longevity, as measured by life expectancy at birth (25 years and 85 years); second, educational attainment, as measured by a combination of adult literacy (two-thirds weight) (0% and 100%) and combined primary, secondary and tertiary enrolment ratios (one-third weight) (0% and 100%); and third standard of living, as measured by real GDP per capita (PPPS) ($100 and $40,000 (PPPS)). For each of these indicators, fixed minimum and maximum values have been set in order to construct the index:

**General formula for computing individual for any component of the HDI**:

\[
\text{Index} = \frac{\text{Actual}_{xi} - \text{Minimum}_{xi}}{\text{Maximum}_{xi} - \text{Minimum}_{xi}}
\]

Accordingly, the HDI is a simple average of the life expectancy index, educational attainment index and adjusted real GDP per capita (PPPS) index. Thus, it is derived by dividing the sum of these three indices by 3. According to the Human Development Report, 2004 India ranked 127 in the group of 177 countries.

**Economic Development Index (EDI)**: National Council of Applied Economic Research (NCAER) of New Delhi has developed a new measure called EDI. We may note that the EDI develops further on the HDI and is based on three components the health attainment index, the education attainment index, and per capita GDP of the economy. NCAER’s model can analyse policy changes in Government expenditure on health and education and changes in public investment and tax rates on macro-economic variables such as output, prices and the current account balance as well as on human development in the country.

**Self-Assessment**

1. Choose the correct option:

   1. The first census was completed in
      (a) 1890  
      (b) 1872  
      (c) 1860  
      (d) None of these

   2. The year ............... is known as the ‘Year of Great Divide’.
      (a) 1921  
      (b) 1940  
      (c) 1930  
      (d) None of these.

   3. The country’s first all India census was completed in
      (a) 1880  
      (b) 1872  
      (c) 1890  
      (d) None of these.

   4. The 14th census was completed in
      (a) 2002  
      (b) 1991  
      (c) 2001  
      (d) 2010

**6.3 Summary**

- With the help of Indian census data, a concise demographic profile of the country can be prepared. In 1872, the country’s first all India Census was completed. Decennial censuses have been organised then on in 1881, 1891, 1901, 1911, 1921, etc. The 14th census was completed in March, 2001.
According to the 2001 census, India is the second largest country in the world with the total population of 102.7 crore constituting about 16% of the total population of the world.

Since 1951, the upward trend in population growth rate was maintained which got reversed during the decades 1981-2001.

Different States of India have different number of inhabitants with a large gap. For instance, Uttar Pradesh has a population as large as 16.60 crore while Sikkim has barely 5.40 lakh people.

The difference between the birth rate and the death rate measures the growth rate of population. The change in population caused by net migration as a proportion of total population of the country is almost insignificant and, therefore, can be easily ignored. The birth and death rates in India have followed the general trends indicated in the theory of demographic transition.

The density of population in the country is 324 (Census 2001). It is calculated as a ratio of the number of persons per sq. km of land area. It may be noted that a country like Myanmar with a density of population of only 75 has a per capita income of only $200 as against $530 in India. However, Japan with a density of 349 has a per capita income of $34,510. In this way, the density of population helps to determine the magnitude of the burden that land is being called upon to carry and to determine the future potentials of growth in the country.

The social health of an economy is strongly indicated by its sex ratio. Sex ratio tells a lot about the state of gender relations. In India, we find a higher ratio of males in the population and a rising tendency towards masculinity.

India has a large population and is densely populated. Moreover, since the 1950s, the growth rate of population has been consistently high. It is due to persistence of high fertility and declining mortality. The population problem in India needs a policy which aims at a rapid reduction in the birth rate of the country. Government has established a National Commission on Population, headed by the Prime Minister, to monitor the new policy measures.

6.4 Key-Words

1. Discrimination: Recognition and understanding of the difference between one thing and another.
2. Economic Development: Economic development is the increase in the standard of living in a nation’s population with sustained growth from a simple.

6.5 Review Questions

1. Examine the basic demographic Features of India. Also examine their relevance for India economic policy for development.
2. From the perspective of economic policy for growth, examine the nature of different indicators of economic development.
3. Discuss the demographic features of Development.
4. How will you measure the birth rate and death rate? Illustrate by examples.
5. Discuss the reasons for the decline in sex ratio.

Answers: Self-Assessment

1. (i) (b) (ii) (a) (iii) (b) (iv) (c)

6.6 Further Readings

1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055
2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001
Unit 7: Poverty: Concept, Cause and Government Policies

CONTENTS
Objective
Introduction
7.1 Poverty: Concept, Causes and Government Policies
7.2 Economic Reforms and Reduction of Poverty
7.3 Need for Redefining Poverty Line
7.4 Definition of Poverty and Right to Food: Emerging Issues
7.5 International Comparison of Poverty
7.6 Summary
7.7 Key-Words
7.8 Review Questions
7.9 Further Readings

Objectives
After reading this Unit students will be able to:

• Describe the Concept of Poverty.
• Explain the Causes of Poverty.
• Discuss the need for Redefining the Poverty Line.

Introduction
The Indian planning has expanded and diversified the country’s economy considerably. During the 1960s and 1970s, the Gross Domestic Product (GDP) grew at the average annual rate (compound rate) of 3.2%. In 1980s and 1990s, the economy moved to a higher growth path, that is, to 5.8% and 5.7% per annum, respectively. The first half of the first decade of 21st century more or less maintained this momentum of growth. It may be noted that the share of the agricultural sector in total GDP has declined from about 55% to about one fourth and that of the services sector has increased from about 30% to over 50% over the 50 years. This chapter deals with fact as to how much has such economic expansion and diversification led to the socio-economic well-being of the people of the country. The impact is easily discernible as about one-fourth of the Indian population of over a billion is poor and a substantial proportion of labour force remains unemployed. In India, there are gross inequalities in distribution of income which are considered while discussing the level of economic development in the country.

7.1 Poverty: Concept, Causes and Government Policies

Poverty can be defined as a social phenomenon in which a section of the society is unable to fulfil even its basic necessities of life. When a substantial segment of a society is deprived of the minimum level of living and continues at a bare subsistence level, that society is said to be plagued with mass poverty. The countries of the third world exhibit invariably the existence of mass poverty, although pockets of poverty exist even in the developed countries of Europe and America.

Attempts have been made in all societies to define Poverty, but all of them are conditioned by the vision of minimum or good life obtaining in society. For instance, the concept of poverty in the U.S.A.
would be significantly different from that in India because the average person is able to afford a much higher level of living in the United States. There is an effort in all definitions of poverty to approach the average level of living in a society and as such these definitions reflect the existence of inequalities in a society and the extent to which different societies are prepared to tolerate them. For instance, in India, the generally accepted definition of poverty emphasises minimum level of living rather than a reasonable level of living. This attitude is borne out of a realization that it would not be possible to provide even a minimum quantum of basic needs for some decades and, therefore, to talk about a reasonable level of living or good life may appear to be wishful thinking at the present stage. Thus, political considerations enter the definitions of poverty because programmes of alleviating poverty may become prohibitive as the vision of a good life widens. The upshot of the entire argument is that the absolute standard of poverty expressed in terms of minimum requirements of cereals, pulses, milk, vegetables, butter or calorie intake is conditioned by the relative levels of living prevalent in the country. The deprivation of a significant section of the society of minimum basic needs in the face of a luxurious life for the elite classes, makes poverty more glaring.

Two types of standards are common in economic literature: the absolute and the relative. In the absolute standard, minimum physical quantities of cereals, pulses, milk, butter, etc. are determined for a subsistence level and then the price quotations convert into monetary terms the physical quantities. Aggregating all the quantities included, a figure expressing per capita consumer expenditure is determined. The population whose level of income (or expenditure) is below the figure, is considered to be below the poverty line. According to the relative standard, income distribution of the population in different fractile groups is estimated and a comparison of the levels of living of the top 5 to 10 percent with the bottom 5 to 10 percent of the population reflects the relative standards of poverty. The defect of the latter approach is that it indicates the relative position of different segments of the population in the income hierarchy. Even in affluent societies, such pockets of poverty exist. But for underdeveloped countries, it is the existence of mass poverty that is the cause for concern.

7.2 Economic Reforms and Reduction of Poverty

A natural question arises: what has been the impact of economic reforms initiated since 1991 on poverty reduction? Dr. Gaurav Datt of the World Bank in his article “Has Poverty Declined since Economic Reforms?” has drawn the following conclusions:

1. While there was a marked decline in both rural and urban poverty rates between 1973-74 and 1986-87, there is no sign of anything comparable thereafter.
2. For the rural sector, for the period 1973-74 and 1990-91, headcount index of poverty declined at the annual rate of 2.7 per cent, the rate of decline since then (i.e. in the post-reform period) is not significantly different from zero.
3. For the urban sector, during 1973-74 and 1990-91, head count index of poverty declined at the annual average rate of 2.2 per cent, the same trend is continued in the post-reform period (1990-91 to 1996-97) at the annual average rate of 2.2 per cent.
4. While the urban sector seems to have continued its march of poverty reduction in the process of growth, rural poverty reduction was choked off by lack of rural growth. (Refer table 16).

Dr. Gaurav Datt has identified stagnation in rural growth as the basic cause of slowdown in poverty reduction. This naturally puts a question mark on the very nature of the reform process in terms of rural welfare.

Planning Commission’s Estimate of Poverty on the basis of 61st Round of NSS-2004-05

NSSO results on the basis of large sample survey data on household consumer expenditure (NSS 61st Round) for 2004-05 are the basis of poverty estimates. The data were collected on uniform recall period (URP) using 30-days for all items. The data was also available using 365 days for 5 frequently purchased non-food items namely, clothing, footwear, durable goods, education and institutional medical expenses and 30-days recall period for the remaining items, known as mixed recall period.
(MRP), the Planning Commission, using the Expert Group methodology has estimated poverty in 2004-05 using both the distributions.

1. Poverty estimates based on URP indicate 28.3% of rural population and 25.7% of the urban population was below the poverty line. For the country as a whole, 27.5% of total population was below the poverty line in 2004-05.

2. The corresponding figures obtained from MRP indicate 21.8% in rural areas, 21.7% in urban areas and 21.8% for the country as a whole was in poverty in 2004-05.

The Planning Commission in its Approach to the 11th Five Year Plan (December, 2006) states: “Using the methodology of the Expert Group on Estimation of Proportion and Number of Poor 1993, the percentage of population below the poverty line is provisionally estimated at 27.8% in 2004-05. Thus the average decline in percentage of population below the poverty line over the period 1993 to 2004 is 0.74 percentage points per year, much less than implied by the official 1999-2000 data. Because of the slower pace of reduction in the percentage of the poor, the estimated number of poor is now estimated be approximately 300 million in 2004-05, larger than the official estimate of 1999-2000.”

It may be recalled that the official estimate for poverty in 1999-2000 was 26.1% for the country as a whole and 260 million were estimated as poor.

Table 1 provides state level data on poverty ratios during 2004-05. The lowest poverty ratio was 5.4% for Jammu and Kashmir and highest poverty ratio was for Orissa (46.4%). States with poverty ratio of less than 15% were Jammu & Kashmir, Punjab, Haryana, Himachal Pradesh, Delhi and Andhra Pradesh. As against them, states with poverty ratio above 30% were Maharashtra, Uttar Pradesh, Bihar, Jharkhand, Madhya Pradesh, Chattisgarh, Uttarakhand and Orissa.

Five States, namely, Uttar Pradesh, Maharashtra, Bihar, West Bengal and Orissa accounted for 166 mm poor (about 55% of the total poor estimated at million). This shows the high concentration of poor these 5 states.

### Table 1: Poverty Estimates based on URP

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</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>37.3</td>
<td>28.3</td>
</tr>
<tr>
<td>Urban</td>
<td>32.4</td>
<td>25.7</td>
</tr>
<tr>
<td>Total</td>
<td>36.0</td>
<td>27.5</td>
</tr>
</tbody>
</table>

**Source:** Planning Commission, Press Release March, 2007.

**Dev and Ravi’s Study on Poverty**

S. Mahendra Dev and C. Ravi have also analyse the data of the 61st round of NSS (2004-05) and compared it with the period 1983-1993. Major finding of are study are:

1. The study has estimated the ‘very poor’ defined ‘as those who are below 75 percent of poverty line. There was a decline in the proportion of the very poor from 15.5% in 1993-94 to 10.3% in 2004-05. This implies the very poor accounted for 115 million among the total poor reckoned at about 316 million. Obviously, the share of hard core or chronic poor is quite high, around 37 percent of the total poor.

2. The data provided in Table 16 & 17 reveals that poverty continued to decline from 44.9% in 1983 to 36.0% in 1993 and further to 28.3% in 2004-05. This phenomenon was also observed in both rural and urban areas. However, it was noted that total poverty declined at the rate of 0.85 percentage points in the pre-reform period (1983-93), while the corresponding figure for the post-reform period was 0.70 percentage points per annum. From this, it can be inferred that the rate of decline in total poverty was slower in the post-reform period than in the pre-reform period. The same pattern was observed in the rural as well as, urban areas.

This implies that though the GDP growth was higher in the post-reform period, yet it failed to impact poverty reduction rate significantly and a result, a higher rate of poverty reduction than observed in the pre-reform as normally expected, did not take place.
7.3 Need for Redefining Poverty Line

The debate about redefining poverty has two schools of thought. Among the first school of thought are those economists who are of the view that attempts at upgrading poverty line from time to time have followed a wrong methodology which has resulted in developing a false notion that reduction of poverty is going at a fairly good pace and that by the year 2006-07, as targeted by the Tenth-Plan, India would be able to reduce poverty to a level of 19.34 percent for the country as whole and this implies the total number of poor at end of 2006-07 will be 220 million - about 170 million in the rural areas and 50 million in the urban areas. The Tenth Plan Approach Paper “mandated reduction in the poverty rate by 5 percentage points during the Tenth Plan and another 10 percentage points during the Eleventh Plan.” This will still leave more than 11 percent of population, or about 130 million people, below the poverty line in 2012.” Professor Utsa Patnaik has contested the methodology adopted for deriving these estimates. A second school of thought includes a group of economists who argue for redefining the poverty line. Mohan Guruswamy & R. S. Abraham have raised the question of relative poverty in India since India is expected to be a super-economic power by 2020. It would be desirable to understand the poverty scenario during the last 30 years or so.

Poverty Scenario in India

The absolute level of poverty is estimated by standardizing the minimum physical quantities of cereals, pulses, milk, butter etc. for a subsistence level and then multiplying the physical quantities by price quotations to arrive at a figure of per capita consumer expenditure. It may be noted that as prescribed by the Indian Council of Medical Research, these physical quantities should lead to the provision of 2,400 calories per capita or the rural areas and 2,100 calories per capita in urban areas. Obviously, the stipulation of per capita consumer expenditure should result in providing the recommended energy intake in the form of Required Daily Allowance (RDA). This procedure was accepted by the Planning Commission in 1969 and poverty line was fixed at ` 15 for rural areas and ` 22.5 for urban areas at 1960-61 prices. Dandekar and Rath used the criterion of ` 15 for rural areas and ` 22.5 for urban areas at 1960-61 prices.

Later, the Planning Commission appointed Expert Group under the Chairmanship of Professor Dr Lakdawala which submitted its report in 1993. The Expert Group estimated a monthly expenditure of ` 40 for rural and ` 57 for urban areas at 1973-74 prices. The Expert Group used the Consumer Price Index for Agricultural Labourers (CPIAL) for rural areas and a simply average of Consumer Price Index for Industrial Worker (CPIIW) and the Consumer Price Index for Non-Manually Employees (CPINM) for urban areas. This methodology has been used for updating poverty line.

Methodological Issue

Utsa Patnaik on the basis of National Sample Survey data on per capita monthly expenditure and calorie intake per day has challenged the poverty estimates of the Planning Commission. Patnaik criticizes the Planning Commission for only using expenditure group data to arrive at the number of persons below the poverty line, but just glosses over the caloire intake to ensure that the associated energy intake meets the calorie norm as the basic criterion for determing the lever of expenditure are at which this can be ensured. Patnaik mentions : “Thus the current data are being used selectively, with only the distribution of persons by expenditure classes being used, and the associated energy intake part being ignored completely ... For example the official price-index adjusted poverty line for 1999-00 for rural areas was ` 328 only and this has been applied to the first and last column of table 21 to read the population below this line which came to 27%. No attention was paid to the fact that at this expenditure a person could access only 1,890 calories, over 500 calories per day below the RDA (Required Daily Allowance).” However, if the norm of 2,400 calories is applied, it is reveled that 74.5 percent of population for rural areas was below the poverty line. Thus, the official method of estimation poor leaves out 47.5 per cent of total population or around 350 million persons who are actually poor.
Table 2: Percentage of Poor and Total Number of poor in India Since 1973

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of poor (%)</th>
<th>Number of poor (million)</th>
<th>Average Annual Rate of Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973-74</td>
<td>54.9</td>
<td>321</td>
<td>-0.59</td>
</tr>
<tr>
<td>1977-78</td>
<td>51.3</td>
<td>329</td>
<td>0.31</td>
</tr>
<tr>
<td>1983</td>
<td>44.5</td>
<td>323</td>
<td>0.31</td>
</tr>
<tr>
<td>1987-88</td>
<td>38.9</td>
<td>307</td>
<td>1.25</td>
</tr>
<tr>
<td>1993-94</td>
<td>36.0</td>
<td>320</td>
<td>-0.70</td>
</tr>
<tr>
<td>1999-00</td>
<td>26.1</td>
<td>260</td>
<td>3.40</td>
</tr>
<tr>
<td>2004</td>
<td>23.6</td>
<td>250</td>
<td>0.82</td>
</tr>
</tbody>
</table>

*Based on the estimated population of 2004 and poverty ratio calculated using latest NSS data in 2004.


An Estimate of the Rural Poor has been made on the basis of official estimates and MPCE (Monthly per Capita Expenditure) providing 2,400 calories. Since the norm of MPCE for 1973-74 was correctly applied, the estimate of poverty by both the methods works out to be 56.4%. But for year 1993-94 and 1999-00, the official estimates were much lower than that based on MPCE providing 2,400 calories. Utsa Patnaik concludes her critique with the following observation: “Sometime to justify the indirect method, it is argued in an illogical manner that the original consumption norm of 2,400 calories was ‘too high’. First, it is not ‘too high’ because the average intake of those below it works out to less than 1,900 calories which is lower than in any other country in the world except the least developed countries. Second, even if it is accepted for the sake of argument that it is ‘too high’, it does not justify comparing 1999-00 ‘poverty’ figures which are of all those persons below 1,890 calories intake, to those below 1,970 calories in 1993-94 and below 2,400 calories intake in 1973-74.”

Table 3: Poverty distribution of Persons by Per capita Monthly Expenditure and Calorie intake, 1999-00, All India

<table>
<thead>
<tr>
<th>Monthly Per capita Expenditure (₹) (1)</th>
<th>Calorie intake per day (2)</th>
<th>Percentage of total persons (3)</th>
<th>Cumulative percentage (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 225</td>
<td>1,383</td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td>225-255</td>
<td>1,609</td>
<td>5.0</td>
<td>10.1</td>
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<tr>
<td>255-300</td>
<td>1,733</td>
<td>10.1</td>
<td>20.2</td>
</tr>
<tr>
<td>300-340</td>
<td>1,868</td>
<td>10.0</td>
<td>30.2</td>
</tr>
<tr>
<td>340-380</td>
<td>1,957</td>
<td>10.3</td>
<td>40.5</td>
</tr>
<tr>
<td>380-420</td>
<td>2,054</td>
<td>9.7</td>
<td>50.2</td>
</tr>
<tr>
<td>420-470</td>
<td>2,173</td>
<td>10.2</td>
<td>60.4</td>
</tr>
<tr>
<td>475-525</td>
<td>2,289</td>
<td>9.3</td>
<td>69.7</td>
</tr>
<tr>
<td>525-615</td>
<td>2,403</td>
<td>10.3</td>
<td>80.0</td>
</tr>
</tbody>
</table>
### Indian Economic Policy

**Table 4: Rural Poor and Percent of Rural Population**

<table>
<thead>
<tr>
<th></th>
<th>1973-74</th>
<th>1993-94</th>
<th>1999-00</th>
<th>MPCE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applying Official Definition (Those with less than MPCE giving 2400 Calories)</td>
<td>56.4</td>
<td>74.5</td>
<td>74.5</td>
<td>49</td>
</tr>
<tr>
<td>Official Estimates</td>
<td>56.4</td>
<td>37.3</td>
<td>27.1</td>
<td>49</td>
</tr>
<tr>
<td>Corresponding Calorie Intake</td>
<td>2400</td>
<td>1970</td>
<td>1890</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Poverty Line ₹ 327.6 for Rural Areas and ₹ 454.1 for Urban Areas

**Source:** National Sample Survey Organization (1999-00), Report No. 471, *Nutritional Intake in India* for calorie intake data by expenditure groups and Report No. 454, *Household Consumer Expenditure in India* - Key Results for the distribution of persons.

Redefining Poverty Line - Basic Needs Approach

*MPCE is Monthly Per Capita Expenditure*
Mohan Guruswamy and Ronald Joseph Abrabham of the Centre for Policy Alternatives, New Delhi have highlighted the distinction between poverty and hunger. Guruswamy et.al. state: “Poverty is an economic condition. Hunger is a physical condition that arises out of severe economic condition. While the definition of hunger in terms of calories can remain constant, the definition of poverty is relative to the present levels of general prosperity.... The present official poverty line is based only on calories and hence accounts for little else but the satiation of one’s hunger. It would have been more accurate to define this as a starvation line, as that is exactly what it is.” (Emphasis Added)

The official poverty line should be renamed as ‘starvation line’ since apart from providing 650 grams of foodgrains per day, it makes very little provision for the other essentials of life, such as nutrition and balanced diet, provision for health, electricity and cooking fuels, clothing and miscellaneous expenditure pertaining to education, shelter and other minimum levels of expenditure to sustain life, such as travelling, washing and stitching of clothes, durable consumer goods, some expenditure on furniture, etc. A realistic and proper definition of poverty line should, therefore, include all the basic needs of human life so as to ensure a minimum level of quality.

Thus, the claim made by the Government that poverty ratio has declined from 54.9 percent in 1973-74 to about 25 percent in 2004 is spurious and gives a false sense of satisfaction to Indian polity. A dynamic concept of poverty line should, therefore, incorporate basic human needs approach and should not limit itself to minimum calorie intake needed for subsistence.

Guruswamy and Abraham have made the following components of basic human needs to arrive at a new poverty line for India which is claimed to be one of the fastest developing economies of the world.

1. **Nutritional Norms and Cost involved**: On the basis of the recommendations of National Institute of Nutrition (NIN) under the aegis of Indian Council Medical Research, it is highly important that balance diet be provided so as to prevent underweight children under age 5. It may be noted that as per Human Development Report (2005), 47 percent child under age 5 are underweight. Similarly, 21 percent total population is undernourished in 2000-02. It is also be observed that in China, only 10 percent child are underweight and 11 percent of total population undernourished during 2000-02. Obviously, India lagging behind China in nutritional status. Guruswamy has made an effort to determine the cost a balanced nutritious diet for an average Indian to be 573 person.

2. **Expenditure on Health**: India spends of 1.3 percent of GDP on the provision of public health, the private expenditure on health is 4.8 percent of in 2002. Since according to the Health Ministry, branch 20 percent of Indian population is covered by healthcare, the poor are forced to take recourse to private sector. The ‘Universal Insurance Scheme’ which is targeted to meet the needs of the poor to pay annual Rs 365 per person and an individual can get insured all inpatient medical-care upto a sum of `30,000. The implies that Rs 365 per annum or Rs 30 per month is cost of health expenditure for the poor in India. Guruswamy includes a sum of `30 per person per month as the legitimate expenditure for obtaining healthcare.

3. **Expenditure on Clothing**: In fact, cloths requirements of children, men and women necessitate different norms for clothing. Similarly, weather connections necessitate different norms for summer and winter. In the estimate prepared by Guruswamy, seasonal requirements have been disregarded for the sake simplicity. The clothing requirements have been calculate at `207 per person per annum or `17 per amount.

4. **Energy consumption**: A housing unit with two bedrooms, a kitchen is the basis of Guruswamy calculate energy consumption. It is assumed that house has an electric connection. On the basis of minimum needs approach, each home needs a few basic electric fittings - four bulbs and two fans. It is further assumed the ceiling fans work for 12 hours a day - 8 hours during night and 4 hours during day. On the basis of these minimum requirements, per capita monthly expenditure on electricity has been calculated as `175 per family. Assuming a norm of 5 members of the this works out to be Rs 35 per month per person.

The other component of energy consumptions is cooking fuel. National Family Planning Survey (1998-99) shows that at the all- India level nearly 74 percent of the population uses wood, crop
residues, dung cakes and coal as cooking fuels. This proportion is 91 percent for rural areas and 30 per cent for urban areas. But all these fuels cause indoor pollution and cause such diseases as arbovirus, asthma, heart diseases and respiratory disorders. But the poor cannot afford LPG which is considered as a clean cooking fuel, as this fuel is the prerogative of the middle class and the affluent sections.

Moreover, state support towards LPG has been using over time but kerosene has been witnessing a reduction in state support. Kerosene is a more affordable institute for the poor. The monthly per capita expenditure on kerosene has been calculated at \( ₹ 20 \) per capita per month. This is based on the assumption that a family gets 10 to 12 litres of kerosene per month on ration cards.

For a family of 5 person, a typical family consumes 2.2 litres per head and it is being sold at a subsidized price of \( ₹ 9 \) per litre. Assuming that all families are able to obtain their quota of kerosene on ration cards, the monthly expenditure on kerosene comes to \( ₹ 20 \) per person.

Thus, the total per capita monthly energy requirements entail an expenditure of \( ₹ 55 \) for electricity assumption \( ₹ 35 \) and for cooking fuel \( ₹ 20 \).

5. **Miscellaneous Expenditure** includes cost on travel purchase of books and stationery for school going children, expenditure on certain social ceremonies like birth, death or festivals etc, purchase of consumer goods, furniture, fixtures for family needs etc., it is expected that miscellaneous expenditure works out at Rs. 820 per family per month or \( ₹ 164 \) per capita.

These calculations are based on the basic needs approach at minimum levels. The purpose is not to provide only for subsistence, but to move towards a more humane level of life.

Summing up, the minimum costs on the assumption of basic needs approach work out to be \( ₹ 840 \) per month or \( ₹ 4,200 \) per month per family. [(i) Balanced nutritious diet Rs. 573; (ii) Health Insurance Expenditure \( ₹ 30 \); (iii) Clothing \( ₹ 17 \); (iv) Energy consumption \( ₹ 55 \) and (v) Miscellaneous Expenditure \( ₹ 164 \).]

On the basis of the holistic approach regarding the poverty line inclusive of basic needs, Mohan Guruswamy has calculated that “69% of India’s population is below the poverty line i.e. over 71 crore persons. This has to be seen against the official figure of 26 per cent persons below the poverty line i.e. nearly 2.65 times. The situation in rural India is appalling with 84% of the rural population below the more holistic poverty line; it is certainly better in urban India at a round 42 per cent”.

World Bank on the basis of the international poverty lines at the rate of $1 per day has calculated in its *World Development Report (2005)* that in India for the year 1999-00, people below this poverty line were of the order of 34.7% and if we use the norm of $2 per day, then 80% of he Indian population was below the poverty line.

### 7.4 Definition of Poverty and Right to Food: Emerging Issues

As noted above different figures are being presented by the Government about poverty. Therefore it is difficult to understand that how many people in India are poor.

<table>
<thead>
<tr>
<th>State</th>
<th>Poverty Line (₹)</th>
<th>Poverty Line (₹)</th>
<th>Poverty Line (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>244.1</td>
<td>282.0</td>
<td>48.1</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>285.1</td>
<td>297.1</td>
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</tr>
<tr>
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</tr>
<tr>
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<td>62.3</td>
</tr>
<tr>
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</tr>
<tr>
<td>Delhi</td>
<td>315.4</td>
<td>320.3</td>
<td>16.2</td>
</tr>
</tbody>
</table>

7. LOVELY PROFESSIONAL UNIVERSITY
### Notes

<table>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
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<td>Jammu &amp; Kashmir</td>
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<td>281.1</td>
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<td>63.0</td>
<td>34.5</td>
<td>59.1</td>
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<td>32.4</td>
<td>30.9</td>
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<td>342.3</td>
<td>20.3</td>
<td>27.2</td>
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</tr>
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<td>40.8</td>
<td>29.9</td>
<td>38.3</td>
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<td>362.2</td>
<td>33.0</td>
<td>20.4</td>
<td>31.8</td>
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<td>Tamilnadu</td>
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<td>51.0</td>
<td>33.7</td>
<td>44.6</td>
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<td>Tripura</td>
<td>275.8</td>
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<td>34.3</td>
<td>25.4</td>
<td>32.9</td>
</tr>
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<td>281.3</td>
<td>50.9</td>
<td>38.3</td>
<td>48.4</td>
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<td>Uttaranchal</td>
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<td>18.7</td>
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<td>42.5</td>
<td>31.2</td>
<td>39.4</td>
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<tr>
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<td>50.1</td>
<td>31.8</td>
<td>45.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The estimates of Chhattisgarh, Madhya Pradesh, Bihar, Jharkhand, Uttar Pradesh and Uttaranchal are for states as they exist after bifurcation in 2001. The estimates for 1993-94 have been calculated from the unit data using district and state boundaries of the divided states in 1993-94.


Periodically varying definitions of the poverty line tend to complicate the matter further. In the absence of an appropriate definition, efforts to remove poverty cannot be meaningful. In the past various measures have been adopted by the Government to tackle the menace of poverty in the Country. Cheap grain, other foods and kerosene through the PDS, rural and urban employment programs, free education and health facilities, etc., are some key government programmes in this direction. Government has also proposed food security legislation, according to which, for all people living below poverty line, the provision would be made for access to necessary food at affordable prices. But absence of appropriate definition is coming in way of a judicious poverty elimination programme. Recently Supreme Court has questioned the basis of defining the poverty line according to which only 36 percent of the population is living below poverty line. It may be noted that some time back Expert Group headed by Prof. Suresh D. Tendulkar, had suggested an improved definition for measuring poverty, on the lines of which formula for measuring poverty has also been suggested. The same has also been accepted by the Planning Commission. Before the report of the Expert Group, the government assessment of poverty was that in 2004-05 only 28 percent people were poor and the
same has dropped to only 20 percent in 2007. According to new definition of poverty, necessary expenditure on health and education has also been included while assessing poverty.

But Supreme Court has questioned even this ‘improved definition’ of poverty. According to Prof. Tendulkar’s definition, a person would be treated as poor, as on 2004-05, if his monthly income is less than Rs. 446.68 in rural areas and Rs. 578.8 in urban areas. Considering the data submitted by the Planning Commission, Supreme Court questioning the methodology, has asked the Planning Commission how a person would be able to consume 2400 cal rural areas and 2100 calories in urban areas than ₹ 20 a day in urban areas and less than ₹ 15 in rural areas. It may be noted that as per the definition of poverty, intake of 2100 calories in areas and 2400 for urban areas has been the drawing the poverty line in India. As per this 56 percent of population was estimated to be below poverty line in 1973-74. Before 1973-74, line was defined in such a way that the estimation poverty line was based on the requisite expenditure attain the desired quantum of calories. But estimation poverty in 1993-94 and 1999-00 were devoid of sense of proportion and statisticians at Plan Commission were able to bring down the number poor by statistical jugglery and change in definite poverty. Critics believe that as per the calorie stand had the price data been properly used poverty figure rural areas would have been 80 percent and in areas it would have been 50 percent.

Table 6 : Population below the Poverty line in Selected Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>National Poverty Line</th>
<th>International Poverty Line</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ per day (2005)*</td>
<td>Survey</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1.03</td>
<td>2000</td>
</tr>
<tr>
<td>Brazil</td>
<td>5.92</td>
<td>2002-03</td>
</tr>
<tr>
<td>China</td>
<td>0.57</td>
<td>1998</td>
</tr>
<tr>
<td>Egypt</td>
<td>1.76</td>
<td>1999-00</td>
</tr>
<tr>
<td>India</td>
<td>0.82</td>
<td>2004-05*</td>
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<tr>
<td>Indonesia</td>
<td>1.07</td>
<td>1999</td>
</tr>
<tr>
<td>Mexico</td>
<td>6.32</td>
<td>2004</td>
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<tr>
<td>Nepal</td>
<td>0.87</td>
<td>2003-04</td>
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<tr>
<td>Pakistan</td>
<td>1.67</td>
<td>1998-99</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1.49</td>
<td>1995-96</td>
</tr>
</tbody>
</table>

* Sources: Poverty line ₹ 356.0 in rural areas and ₹ 538.6 in urban areas (Per capita monthly expenditure, Planning Commission Release. March 2007)

For other countries, except India, population below poverty—national and international are taken from World Bank, World Development Report (2008)


If we accept the data presented by the Plan Commission, we find that a person getting daily in of Rs. 20 or more in urban areas and ₹ 15 or more in areas would not be called poor. If we look at internationally most commonly accepted definition poverty, it is US$ 1.25 a day. If we convert the same rupees, it would amount to ₹ 38 per day. Though this is lower than what is required for subsisted a definition which gives poverty line with an which is nearly one third of this amount seems inappropriate. If Planning Commission’s definition poverty itself calls for a minimum consumption of calories in rural areas and 2100 calories in urban and how can this be achieved with less than ₹ 20 an areas and ₹ 15 in rural areas, answer to this question, has been sought by the Supreme Court from
Some time ago, the government constituted a committee for the unorganized sector under the chairmanship of Arjun Sengupta, which reported that more than 77 percent of the countrymen are managing with less than ₹ 20 a day or less. It is easily understandable that is not possible to meet minimum requirement of a person’s food, shelter and clothing with so little. It means that more than 77 percent of the countrymen cannot even meet their basic needs, whereas poverty measured as per the mathematical method gives a figure of merely 36 Per cent. Such varying figures about the number of poor create confusions and make the task of elimination of poverty difficult. Though Tendulkar’s report has tried to correct the definition of poverty by including requisite expenditure on education and health, but even that has failed to address to the realities. To make it real poverty line, government has to take a realistic view of poverty. If the government has to implement right to food earnestly, it must correct its assessment of poverty.

The conclusion emerges from the analysis of poverty line. Firstly, the procedure of upgrading poverty line on the basis of price index needs a review and this would be accompanied by the norm of calorie intake. Secondly, the basis of poverty line was decided four decades ago in 1969. For a developing economy with an aspiration of becoming a super-economic power by 2020, it as all the more necessary to develop a basic needs approach poverty line, instead of a uni-dimensional poverty line based on calorie intake of food primarily which is only a starvation line. This will entail greater effort on the part of the state to take steps so that the of rapid economic growth reach ‘aam adami’ (common man) to use a phrase of the Congress manistio. Then, it will shake us out of our complacency about poverty in India. We have miles to go before we sleep.

7.5 International Comparison of Poverty

Since the national poverty lines vary sharply from $0.57 a day for China to 32 a day for Mexico, may be noted that China’s national poverty line has derived from $0.57 day as against that of India at $2 a day, the Chinese national poverty line at $0.57 a the Chinese figure of population below poverty states the position. This has been sought to be directed by adopting standards of $1 a day and $2 a day the uniform basis of comparison in the international poverty line on the Purchasing Power Parity criterion. It would, therefore, be useful to compare international poverty lines for a better comparison of the relative state below population poverty line in different countries.

Secondly, broadly speaking, $1 a day poverty is based on what may be described as the minimum required in terms of calories per day, which is described in Indian jargon as the ‘starvation line’, but $2 a day poverty line takes into account besides food, other items as cloth, education, health or other minimum needs for life which is described ‘basic needs line’. It may be noted that the World Development Report does not indicate any basis for both the lines used in its explanatory notes. It only mentions: “Population below $1 a day and population below $2 a day are the percentages of population living on less that $ 1.08 a day and $ 2.15 a day at 1993 international prices.” But we are treating them as ‘starvation line’ or ‘basic needs poverty line’ on the basis of estimation of scholars that ‘basic needs poverty line’ is approximately double the ‘starvation line’.

On the basis of the data provided in table 24 about 10 selected countries, on the basis of $1 a day, the performance of Brazil, China, Egypt, Indonesia and Sri Lanka is far better than that of India, Bangladesh, Nepal and Pakistan. The proportion of population below $1 a day poverty line at 34.4% for 2004-05 is really a very disappointing considering the impact on reduction of poverty programmes by over five decades of development planning. This implies that nearly 381 million persons were living below the poverty line of $1 a day in 2004-05 which is very disturbing. On the basis of $2 a day, 80.4% of our population or about 892 million do not satisfy the basic needs criterion of $2 a day. This is also in conformity with figure of 77% of Indian population who are poor and vulnerable based on consumer expenditure level of 20 per day on the basis of purchasing power parity equivalent to below nearly $2 per day as the criterion in 2004-05 by the National Commission for Enterprises in the Unorganised Sector. Making a strong indictment of the growth process, the Commission mentions: “there is no doubt that this “Shining India” has expanded in the past and is still expanding at a very high rate. But this picture is spoiled by a virtually stagnant consumption expenditure and miserable
working and living conditions of the 77 percent of out population who are poor and vulnerable... this is the other world which can be characterized as the India of the common people, constituting more than three-fourths of the population (836 million) and consisting of all those whom the growth process has, by and large, by passed.”

**Recent Revised Estimate of Poverty by the World Bank**

Martin Ravallion and Shaohua Chen of the World Bank have updated the World Bank Poverty Line of $1.08 per person per day at 1993 Purchasing Power Parity dollars with a new international poverty line of $1.25 per person per day for 2005 based on the new Purchasing Power Parity prices for 2005, replacing those for 1993. As a consequence, 41.8 percent of India’s population was below the new international poverty line in 2005. This implies that 461 million persons were living in poverty as per the revised estimate - a huge number indeed.

**Food Price Inflation and Increase in Poverty**

Food price inflation implies a sharper increase in the prices of food articles relative to that of manufactures and other non-food articles. Recent price trends indicate that while the overall rate of inflation in the Wholesale Price Index (WPI) has dropped to 8.4 percent in November 2008 from its peak of 13 percent in August 2008, but rate of inflation of food articles has gone up from 8.84 percent to 10.43 percent during the same period. However, a poor family in India spends 60-70 percent of its family income on food-related items. Higher food prices will thus impose a greater burden on the poor and may also push more persons below the poverty line. Hence, there is a need to control the increase in prices of food articles such as cereals, fruits and vegetables, eggs etc.

**Towards A Solution of The Problem of Poverty**

This requires a two-pronged strategy - (i) The expansion of sectors which promise higher labour absorption and (ii) Empowering the poor with education, skill formation and health so that they can enter sectors which require higher competence and provide better remuneration which enable the poor to cross the poverty line, the following strategy can solve the problem of poverty.

1. **Adopt a strategy of pro-poor growth instead of emphasizing liberalization and GDP growth**

   Former Prime Minister Atal Bihari Vajpayee in his Independence Day Message (15th August 2001) candidly stated: “The fruits of liberalization have not adequately reached the poor and the people living in rural areas. Inequalities have increased.” It would be, therefore, futile to pursue the failed strategy of liberalization which has a focus on only 8 percent of labour force in the organized sector. The need of the hour is to take care of the 92 percent of labour force engaged in the unorganized sector. Liberalization has driven more and more people from the organized sector to the unorganized sector. There is a need to reverse this process and more and more units in the unorganized sector are enabled to graduate and join the ranks of the organized sector”. The government should re-appraise them and give priority removal of unemployment and recognizing the right work’ as a basic human right. For this, a new development reconciling GDP growth and employment should be developed.

   In this model, emphasis should be laid on opment of irrigation and watershed development people’s participation. Similarly, degraded and lands should be developed through participatory of panchayats. Agricultural co-operatives should strengthened to undertake food processing and KVIC should assigned the task of marketing sector should be helped on the lines suggested.

   Gupta Study Group. Greater emphasis should be on housing for the poor and Economically Weaker. Rural infrastructure in the form of roads, prove of power in rural areas should be strengthened programme of social infrastructure should be taken.

   Besides, there is a need for promoting sector which is major source self-employment and sorption of casual labour.

2. **Stimulating Agricultural Growth**

   Indian Government has been fixing the target agricultural growth during the Ninth and the Tenth at 4 percent per annum, but in practice realized the 9th Plan and only 1.7% in the Tenth
Plan. To idea the causes of sluggish growth of agriculture, it approach a high power Commission under the Chairmanship M S Swaminathan, world renowned agricultural tist. The National Commission on Farmers suggest following 5-point action Plan:

1. Undertake Soil health enhancement through tegrated measures in improving organic and macro-and-micro nutrient.

2. Promote water-harvesting, conservatio and suitable use by-empowering panchayats come ‘pani panchayats.’ A sustainable harvesting system should be established in fed areas lacking assured irrigation.

3. Keeping in view, the decline in profitability farmer’s distress, the Government should duce the rate of interest on crop loans percent.

4. Bridge the growing gap between scientific how and field-level do-how both in production and post-harvest phase of farming. This accomplished by training farmers throughout agency of Krishi Vigyan Kendras (Agriculture Science Centers) in both production and harvest technologies.

5. The gap between what the rural produce and the urban consumer pays should be rowed down, as has been done in the case of by Dr. V. Kurien.

Besides, the National Commission on placing the unfinished agenda in land reform first list of five factors central to the present agrarian states “The first and foremost task of the National on Farmers should be in the area of land reform with reference to tenancy laws, distribution of ceiling surplus land, attention to common property and at wasteland resources and consolidation of holdings.... Giving access to land and homesteads not only reduces poverty but is the best way to bring dignity in the lives of today’s excluded.” (Quoted by the Approach Paper of the 11th five Year Plan, p.29).

3. Increasing the productivity and job quality of the unorganized sector

The NDA government appointed ‘Special Group on Targeting Ten Million Employment Opportunities’, under the chairmanship of Dr. S P Gupta, the then member of the Planning Commission which submitted its report in 2002. The Special Group emphasized a shift in the strategy of development by emphasizing the growth of unorganized sector as the surest method to reduce employment and poverty.

To quote: “The only answer to this situation is to increase productivity and job quality of the unorganized sector. It means that all attempts should be made to implement those policies which will release the basic town constraints and by ensuring a level playing field for this sector.... In the attempt to increase the labour productivity, more emphasis should be on the growth of sector rather than for substituting labour by capital. Further, to improve the job quality and its security, major changes in legislation will be needed regarding basic social security measures, working conditions, minimum wages and protection of labour interests.”

There is a need to immediately implement the recommendations of the special group so that reduction the rate of poverty reduction with higher GDP growth is halted and a reverse trend is generated.

Empowering the poor through provision of housing

There is a need to remove the shortage of permanent houses in the rural as well as urban areas. Not only that, an effort has to be made to provide the basic amenities of life such as drinking water, toilets and electricity. The country must launch a massive programme to provide housing and basic civic amenities.

The situation is much worse in rural areas than in urban areas. Government should subsidize housing for the poor and weaker sections of the society and recover the cost as part of rent and installments over a period of 20 years. At present, the amount of ₹ 30,000 being given for the construction of a house under Indira Aawas Yojana is too meagre in view of the rising cost of construction to provide a two roomed house, with a kitchen and toilet. This should be the minimum that is required by a family. This requires the limit of ₹ 30,000 to be revised.
Since rural areas are not offering enough employment opportunities, there is a push factor working and as a consequence, the urban population is increasing. In the urban areas, housing property has become so costly that it is beyond the reach of the majority of population. Most important is the price of land whose price has been sky-rocketing. The way out is that the government acquires land and does not add it as a charge from the poor and lower middle classes and starts a massive programme of housing. Construction cost should be charged from the people and price paid by the government to acquire land be treated as a subsidy for housing. It is only such an affordable price which can help the country to achieve the target of “housing for all” in a period of 20 years. This will also generate massive employment and thus raise the income of the poor who will be drawn to build houses. In case, this is not done, the poor will usurp some land and put up 

`jhuggies` and this will lead to further growth of slum population.

**Self-Assessment**

1. Choose the correct option:
   1. The planning commission constituted in September in
      - (a) 1989
      - (b) 1975
      - (c) 1985
      - (d) None of these
   2. The National Rural Employment Guarantee came into force in
      - (a) 2006
      - (b) 2005
      - (c) 2007
      - (d) None of these.
   3. The shortcomings of NREGA is
      - (a) Lack of adequate professional staff
      - (b) Lack of project planning
      - (c) lack of transparency
      - (d) All of the above
   4. According to the 2001 census, India is the ........ largest country in the world with the total population of 102.7 crore.
      - (a) First
      - (b) Second
      - (c) Third
      - (d) Fourth

7.6 Summary

- Poverty can be defined as a social phenomenon in which a section of the society is unable to fulfil even its basic necessities of life. When a substantial segment of a society is deprived of the minimum level of living and continues at a bare subsistence level, that society is said to be plagued with mass poverty. The countries of the third world exhibit invariably the existence of mass poverty, although pockets of poverty exist even in the developed countries of Europe and America.
- Several economists and organisations have conducted studies on the extent of poverty in India. It would be worthwhile to study some of the important estimates.
- The Planning Commission constituted in September 1989 an ‘Expert Group’ to consider methodological and computational aspects of estimation of proportion and number of poor in India.
- Gaurav Datt of the World Bank has made a study of poverty in India for the period 1951-1992 using NSS date. The poverty line is based on a nutritional norm of per capita daily intake of 2,400 calories in rural areas and 2,100 calories for urban areas.
- More recent evidence by the World Bank suppose the view that the proportion of persons below the poverty line come down from 52.4 per cent in 1970 to 42.5 cent in 1983 and further to 39.6 per cent in 1988 Gaurav Datt and Martin Ravallion also estimate that per cent below the poverty line are 43.9 per cent – 40 per cent urban and 45 per cent in rural areas.
- Two factors account for this high incidence of poverty among rural labour households. Firstly,
there is a considerable degree of unemployment and under-employment among rural labourers. It has been established that incidence of unemployment is the highest among casual labourers.

• The planning Commission has accepted the Lakdawala Expert Group estimates for poverty with minor modifications. There is very marginal difference between the estimates of the Planning Commission and the Expert Group.

• Dr. Gaurav Datt has identified stagnation in rural growth as the basic cause of slowdown in poverty reduction. This naturally puts a question mark on the very nature of the reform process in terms of rural welfare.

• As noted above different figures are being presented by the Government about poverty. Therefore it is difficult to understand that how many people in India are poor.

• This requires a two-pronged strategy - (i) The expansion of sectors which promise higher labour absorption and (ii) Empowering the poor with education, skill formation and health so that they can enter sectors which require higher competence and provide better remuneration which enable the poor to cross the poverty line, the following strategy can solve the problem of poverty.

• As a consequence of sustained growth in expenditure on education, there has been a remarkable growth in educational institutions at all levels - Primary, secondary and tertiary. The country was able to achieve a Gross Enrolment Ratio of 96% at the primary level, though the drop-out rate for class I to VIII was 51 percent which is quite high.

• In view of the increasing use of computers and Information Technology in all walks of life, the demand for skilled labour is on the increase. Since this requires access to higher education and vocational training, only those who can afford costly education and vocational training, are able to benefit from the expanding opportunities of employment.

7.7 Key-Words

1. Diversification : The act of introducing variety (especially in investments or in the variety of goods and services offered);

2. Poverty line : The estimated minimum level of income needed to secure the necessities of life.

7.8 Review Questions

1. What is the concept of poverty?
2. Discuss the causes of poverty.
3. Why do we need to redefine the poverty line? Explain.
4. How will you empower the poor through provision of housing?

Answers: Self-Assessment

1. (i) (a) (ii) (a) (iii) (d) (iv) (b)

7.9 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.

2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Unit 8: Unemployment in India: Concept, Causes and Government Policies

CONTENTS
Objective
Introduction
8.1 Concept of Unemployment in India
8.2 Causes of Unemployment in India
8.3 Government Policies for Employment
8.4 Summary
8.5 Key-Words
8.6 Review Questions
8.7 Further Readings

Objectives
After reading this Unit students will be able to:
• Explain the Concept and Causes of Unemployment.
• Describe the Government Policies for Employment.

Introduction
The total population of an area, region or country has three components: the workforce (the employed), the unemployed and the non-workers. Taken together, the workforce and the unemployed together make up the labour force. A person who participates in any economic activity is called a worker and his or her human capital endowment is utilised by the economy. In the process, he or she earns a living. Thus, all workers constitute the workforce or the employed. On the contrary, those who are not workers are called non-workers. Among the non-workers, there may be some who are looking for work or are available for work and are called the unemployed. While the worker is engaged in economic activity and produces the national product, the unemployed is available for being engaged in such activity but the economy is unable to utilise it and the non-worker is not available for utilisation in economic activity of the society. This unit explains how the three components of the population enumerated and what their proportion in the population is.

8.1 Concept of Unemployment in India

India is a developing economy, the nature of unemployment, therefore, sharply differs from the one that prevails in industrially advanced countries. Lord Keynes diagnosed unemployment in advanced economies to be the result of a deficiency of effective demand. It implied that in such economies machines become idle and demand for labour falls because the demand for the products of industry is no longer there. Thus Keynesian remedies of unemployment concentrated measures to keep the level of effective demand sufficiently high so that the economic machine does not slacken the production of goods and services.

This type of unemployment caused by economic fluctuations did arise in India during the depression in the 1930’s which caused untold misery. But with the growth of Keynesian remedies, it has been possible to mitigate cyclical unemployment. Similarly, after the Second World War, when war-time industries were being closed, there was a good deal of frictional unemployment caused by retrenchment in the army, ordnance factories, etc. These workers were to be absorbed in peacetime
industries. Similarly, the process of rationalization which started in India since 1950, also caused displacement of labour. The flexibility of an economy can be judged from the speed with which it heals frictional unemployment.

But more serious than cyclical unemployment or frictional unemployment in a developing economy like India is the prevalence of chronic under-employment or disguised unemployment in the rural sector and the existence of urban unemployment among the educated classes. It would be worthwhile to emphasize here that unemployment in developing economies like India is not the result of deficiency of effective demand in the Keynesian sense, but a consequence of shortage of capital equipment or other complementary resources.

The total number of persons requiring employment during the Eight Plan would be around 65 million. It is expected that during 1995-2000, labour force would increase by 41 million.

8.2 Causes of Unemployment in India

It is obvious that the unemployment situation is grim indeed. It has, therefore, to be tackled with appropriate measures and on an urgent basis. However, before we discussed the ways and means of removing unemployment, it is necessary that we understand the causes that given rise to it. The major causes which have been responsible for the wide spread unemployment can be spelt out as under.

(1) Rapid Population Growth

It is the leading cause of unemployment in Rural India. In India, particularly in rural areas, the population is increasing rapidly. It has adversely affected the unemployment situation largely in two ways. In the first place, the growth of population directly encouraged the unemployment by making large addition to labour force. It is because the rate of job expansion could never have been as high as population growth would have required.

It is true that the increasing labour force requires the creation of new job opportunities at an increasing rate. But in actual practice employment expansion has not been sufficient to match the growth of the labor force, and to reduce the back leg of unemployment. This leads to unemployment situation secondly; the rapid population growth indirectly affected the unemployment situation by reducing the resources for capital formation. Any rise in population, over a large absolute base as in India, implies a large absolute number.

(2) Limited land

Land is the gift of nature. It is always constant and cannot expand like population growth. Since, India population increasing rapidly, therefore, the land is not sufficient for the growing population. As a result, there is heavy pressure on the land. In rural areas, most of the people depend directly on land for their livelihood. Land is very limited in comparison to population. It creates the unemployment situation for a large number of persons who depend on agriculture in rural areas.

(3) Seasonal Agriculture

In Rural Society agriculture is the only means of employment. However, most of the rural people are engaged directly as well as indirectly in agricultural operation. But, agriculture in India is basically a seasonal affair. It provides employment facilities to the rural people only in a particular season of the year. For example, during the sowing and harvesting period, people are fully employed and the period between the post harvest and before the next sowing they remain unemployed. It has adversely affected their standard of living.
(4) Fragmentation of land
In India, due to the heavy pressure on land of large population results the fragmentation of land. It creates a great obstacle in the part of agriculture. As land is fragmented and agricultural work is being hindered the people who depend on agriculture remain unemployed. This has an adverse effect on the employment situation. It also leads to the poverty of villagers.

(5) Backward Method of Agriculture
The method of agriculture in India is very backward. Till now, the rural farmers followed the old farming methods. As a result, the farmer cannot feed properly many people by the produce of his farm and he is unable to provide his children with proper education or to engage them in any profession. It leads to unemployment problem.

(6) Decline of Cottage Industries
Employment particularly of the landless people. They depend directly on various cottage industries for their livelihood. But, now-a-days, these are adversely affected by the industrialisation process. Actually, it is found that they cannot compete with modern factories in matter or production. As a result of which the village industries suffer a serious loss and gradually closing down. Owing to this, the people who work in there remain unemployed and unable to maintain their livelihood.

(7) Defective education
The day-to-day education is very defective and is confirmed within the classroom only. Its main aim is to acquire certificated only. The present educational system is not job oriented, it is degree oriented. It is defective on the ground that is more general then the vocational. Thus, the people who have getting general education are unable to do any work. They are to be called as good for nothing in the ground that they cannot have any job here, they can find the ways of self employment. It leads to unemployment as well as underemployment.

(8) Lack of transport and communication
In India particularly in rural areas, there are no adequate facilities of transport and communication. Owing to this, the village people who are not engaged in agricultural work are remained unemployed. It is because they are unable to start any business for their livelihood and they are confined only within the limited boundary of the village. It is noted that the modern means of transport and communication are the only way to trade and commerce. Since there is lack of transport and communication in rural areas, therefore, it leads to unemployment problem among the villagers.

(9) Inadequate Employment Planning
The employment planning of the government is not adequate in comparison to population growth. In India near about two lakh people are added yearly to our existing population. But the employment opportunities did not increase according to the proportionate rate of population growth. As a consequence, a great difference is visible between the job opportunities and population growth.

On the other hand it is a very difficult task on the part of the Government to provide adequate job facilities to all the people. Besides this, the government also does not take adequate step in this direction. The faulty employment planning of the Government expedites this problem to a great extent. As a result the problem of unemployment is increasing day by day.

8.3 Government Policies for Employment
Following the publication of the Bhagwati Committee report in 1973, the Government took the following measures to provide employment and alleviate under-employment.

Rural Works Programme : The emphasis under the programme was on the construction of civil works of a permanent nature as would contribute to the mitigation, if not the total eradication, of the scarcity condition in the areas concerned.
Marginal Farmers and Agricultural Labourers: Under the scheme, families were to be assisted with subsidised credit support for agricultural and subsidiary occupations like dairy, poultry, fishery, piggery-rearing, horticultural operations, etc.

Small Farmers Development Agencies: The object of the scheme was to make available to small farmers credit to enable them to make use of the latest technology to practise intensive agriculture and diversify their activities.

Integrated Dry Land Agricultural Development: Under the scheme, permanent works like soil conservation, land development and water harnessing were undertaken. These programmes were labour-intensive and were expected to generate considerable employment opportunities.

Agro-service Centres: The schemes provided for assistance for self-employment to the unemployed graduates and diploma-holders in mechanical, agricultural and electrical engineering and allied fields and graduates in agriculture and science with experience in industry or agriculture. It aimed to help in establishing work-shops, organising agricultural machinery, repairing and hiring facilities and other technical services like supply of spare parts, inputs, etc.

Area Development Schemes: These schemes related to the development of adequate infrastructure facilities like roads, market complexes, etc. in areas commanded by ten major irrigation projects.

Crash Programme for Rural Employment: The primary objective of the scheme was to generate additional employment through a network of rural projects of various kinds which are labour-intensive and productive. The scheme had a two-fold purpose. Firstly, a project in each block was to provide employment to 100 persons on an average continuously over a working season of 10 months in a year. Secondly, each project was to produce works or assets of durable nature in consonance with the local development plans. The various types of projects included schemes relating to minor irrigation, soil conservation and afforestation, land reclamation, flood protection and anti-waterlogging, pisciculture, drinking water and construction of roads.

The various schemes under the Fourth Five-Year Plan or the Crash Plan could not succeed in removing rural unemployment and under-employment because efforts were not made to organise the army of the rural unemployed into appropriate supply camps to be shifted to places of demand at the desired minimum wage. The Auditor-General in his report to the Lok Sabha presented in August 1974 brought out the tragic fact that the various ‘crash’ and rural employment programmes on which the Central Government had spent ₹ 170 crores during the Fourth Plan had been wholly infructuous.

Employment Guarantee Scheme of Maharashtra

Maharashtra Government introduced the Employment Guarantee Scheme (EGS) in 1972-73. The scheme was the first of its kind to give recognition to the ‘right to work’ enshrined in the Constitution. It embodied a commitment by the State to provide work to a person who comes forward to offer labour.

The main objectives of the Schemes were as under:

(a) To provide gainful and productive employment to an individual in approved rural works which raise the productivity of the economy.

(b) The works undertaken should produce durable community assets in the area.

(c) Productive works of labour-intensive nature like minor irrigation, water and soil conservation, nalla bunding, canal excavation, land development, afforestation, etc. should be undertaken.

(d) The works should be implemented departmentally and not through contractors so that at least 60 per cent of the works expenditure is incurred on wages to workers and 40 per cent in the form of materials, equipment, supervisory experts and administrative services.

The scheme was intended to provide employment guarantee only in rural areas. The guarantee was restricted to the provision of unskilled manual work and was limited to adults, i.e., men and women over 18 years of age.

The scheme was particularly designed to help the economically weaker sections of rural society. It is this potential group which would demand employment under the Employment Guarantee Scheme.
A review of the progress of the scheme during the 10-year period (1972-73 to 1982-83) revealed that while the expenditure incurred on the implementation of various programmes under EGS has been increasing, the number of mandays of employment generated as a result of these programmes has declined continuously over the years. During the first seven years, the progress of the scheme was good in as much as the mandays of employment generated increased from 45 lakhs in 1972-73 to 20.54 crores in 1979-80 along with the increase in expenditure from ₹ 1.89 crores in 1972-73 to Rs. 102.2 crores in 1979-80. However, since 1980-81, the trend of mandays of employment generated declined to 12.8 crore mandays with an expenditure of ₹ 130 crores in 1982-83. As against an expenditure of ₹ 5.3 per manday of employment generated in 1979-80, this increased to ₹ 10.2 in 1982-83.

Since the average daily wage of an unskilled labourer was raised to ₹ 6 per day, part of the explanation for the reduction in mandays of employment generated could be found in it. The other part of the explanation was provided by the rise in prices. A part of the rise in expenditure per manday of employment might be also due to leakages and malpractices that have become a part of our administrative culture.

Only productive works with unskilled wage component of more than 60% were taken up under EGS. Modifications of the scheme permitted individual beneficiary schemes to be also taken up in the case of lands owned by small and marginal farmers. In such cases, 50 per cent of the expenditure was borne by the concerned cultivator/beneficiary. Besides this, a horticulture programme covering a total of 10 lakh hectares was launched during the Eighth Plan (1992-97) at Government cost on lands of SC/ST/small cultivators. On other lands, Government and the beneficiaries were to bear the expenditure on materials in the ratio of 75 : 25.

According to the Eighth Plan, “the scheme has resulted in a significant reduction in the incidence of unemployment in rural areas. Average daily unemployment rates in rural Maharashtra have declined from 7.20% in 1977-78 to 3.17% in 1987-88. It would have also contributed to some extent towards the decline in rural poverty from 60.4 per cent in 1977-78 to 36.7 per cent in 1987-88. The scheme has also helped in keeping an upward pressure on wages in rural areas. The EGS has benefitted a large number of women too, with nearly 60 per cent of the workers on EGS sites being women.”

**National Rural Employment Programme**

The Food for Work Programme was restructured and renamed as National Rural Employment Programme (NREP) from October, 1980. This was implemented as centrally sponsored programme with 50 per cent central assistance. Additional employment of the order of 300-400 million mandays per year for the unemployed and underemployed was envisaged under the NREP. Besides this, the NREP aimed to create community assets for strengthening rural infrastructure. These included drinking water wells, community irrigation wells, village tanks, minor irrigation works, rural roads, schools and Balwadi buildings, panchayat ghars etc.

A critical assessment of the projects undertaken brought out the following shortcomings:

(i) “Works implemented through NREP are often, not coordinated or integrated with the requirements of families identified for assistance under IRDP. Potentiality of NREP worked to assist newly liberated bonded labourers or to support the attempts of agricultural workers to secure minimum wages fixed under the law is also not always appreciated. Stereo-typed earth excavation works mainly relating to Kachcha village roads, reminiscent of the old famine relief works, are undertaken ignoring the fact that this programme has a crucially supportive role to play for the beneficiary oriented development programme of IRDP and other area development programmes.”

(ii) There is a tendency to go in for building construction with high material components. This runs counter to the basic objectives of NREP. The principal purpose of NREP is to utilise local resources, both in terms of materials and manpower towards the generation of more employment.

**Rural Landless Employment Guarantee Programme**

The Rural Landless Employment Guarantee Programme (RLEGP) was launched on the 15th August, 1983 with the objective of generating gainful employment, creating productive assets in rural areas and improving the overall quality of rural life.
The programme was funded by the Central Government on 100% basis. Resources were allocated to the States/Union Territories on the basis of the prescribed criteria giving 50% of weightage to number of agricultural labourers, marginal farmers and marginal workers and 50% weightage to incidence of poverty. Wages were paid to the workers under the Schedule of employment in the Minimum Wages Act. Part of the wages were required to be paid in the form of subsidized foodgrains. It was also stipulated that the wage component on a project should not be less than 50% of the total expenditure on the project. The programme included projects of social forestry, Indira Awaas Yojana and Million Wells Scheme.

The progress of RLEGP during the Seventh Plan (1985-86 to 1988-89) revealed that during the first four years, a sum of ₹2,412 crores was utilized and this helped to generate employment to the tune of 1,154 million mandays.

As a result of the RLEGP, social forestry programme 5.2 lakh hectares of land was covered and 533 million plants were planted during the 3-year period. Besides this, 4.27 lakh houses at a cost of ₹425.5 crores were constructed upto Dec. 1988. The cost per dwelling unit worked out at ₹9,954.

The Government decided to merge NREP and RLEGP. The merger was based on the premise that the objectives and implementation in the field of these two programmes were by and large similar. But it may be pointed out that merger of NREP and RLEGP is merely tinkering with the problem. A much more serious consideration should be given to develop a much tighter administration of rural employment scheme to eliminate malpractices so that real beneficiaries can be helped to cross the poverty line. Improving effectivity of implementation is the crux of the matter and not administrative reorganisation.

**IRDP, NREP, Rural Poverty — an Employment**

A multiplicity of agencies have been carrying on the task of providing rural employment. They included: Employment Guarantee Schemes, Food for Work Programme, Small Farmers Development Agency (SFDA), Marginal Farmers and Agricultural Labourers (MFAL), Drought Prone Area Programme (DPAP) and Desert Development Programme (DDP), Command Area Development Programme (CADP), etc. The Sixth Plan (1980-85) proposed that “such multiplicity of programmes for the rural poor operated through a multiplicity of agencies should be ended and replaced by one single integrated programme operative throughout the country.” This programme was named as the Integrated Rural Development Programme (IRDP).

**Philosophy behind the IRDP Programme**

A large body of economic experts have shown in their studies that whereas economic growth may be able to raise per capita incomes in developing countries, it may not be accompanied by a reduction of poverty as well as elimination of unemployment and under-employment. Rather the process of economic growth in third world countries, India being no exception, has benefitted relatively developed areas and better-off people. In other words, the percolation of benefits of economic growth to backward areas and the poor people have not taken place.

To remedy this situation, it was thought necessary that a direct attack on poverty should be made. This necessitated programmes for alleviating rural poverty by endowing the poor with productive assets or skills so that they can employ themselves usefully to earn greater incomes and thus cross the poverty line. To achieve this objective, the Sixth Plan conceived of two important programmes—IRDP and NREP. The basic strategy was to promote self-employment of the poor households through IRDP so that with the transfer of productive assets, they may earn incomes that help them to cross the poverty level. The NREP (National Rural Employment Programme) was to provide wage employment to fill in the periods of seasonal and sporadic underemployment. It was also intended to enlarge absorptive capacity of labour in rural areas in non-agricultural occupations by creating infrastructure—social and economic—which help to increase the productive capacity of the economy.

**Targets and Achievements**

The IRDP was initiated on October 2, 1980 in all the 5,011 blocks in the country. During the 5-year period (1980-85) in each block 600 poor families were to be assisted. In this way, a total of 15 million
families of about 75 million persons below the poverty line were targeted to be beneficiaries. For each block a uniform allocation of ₹ 35 lakhs was to be shared between the Centre and the States on a 50-50 basis.

The programme was based on a graded scheme of subsidies which amounted to 25 per cent of the capital cost of small farmers, 33.3 per cent for marginal farmers, agricultural labourers and rural artisans and 50 percent for tribal beneficiaries. Following the Antyodaya principle, the programme was intended to reach the poorest households first and later to reach other poor people in an ascending order.

Community works were eligible for 50 per cent subsidy. Nearly 20 percent of the outlay was to be utilised for administrative and infrastructural support and the balance of 80 percent is meant for subsidies to beneficiaries for acquisition of assets.

The major weaknesses of the programme were as under:

(i) Selection of ineligible families, though the Government claims to be below 8 per cent, is in fact larger.

(ii) Training was not imparted to majority of the beneficiaries.

(iii) In about 22% cases, no incremental income was generated.

(iv) Adequate infrastructure facilities were not available to beneficiaries. The input facility was available to barely 40% cases, marketing in 14% cases and repair facility in 5% cases.

The programme assisted a total of 108 lakh families, out of which 50% of belonged to SC/ST categories, thus achieving the target set for the plan. But the percentage of women beneficiaries was only 34%, which was below the target of 40%.

Besides this, the Government decided to introduce the Family Credit Plan by enlarging its magnitude. Under the scheme, multiple assets could be given to more than one member of the family to enable the household to cross the poverty line. The level of investment per family was targeted at ₹ 20,000-25,000 under the scheme. With a view to encourage higher levels of investment per family, security norms for IRDP were enhanced. Banks were earlier required not to obtain mortgage of land as security for loans up to ₹ 2,000. This limit was raised to ₹ 5,000. In addition, banks were not to obtain collateral security for moveable assets up to ₹ 15,000.

According to the Mid-term Appraisal of Ninth Five Year Plan (1997-2000) published in October 2000, since the inception of the programme till 1998-99, 53.50 million families have been covered under IRDP at an expenditure of ₹ 13,700 crores. During the first two years of the Ninth Plan (1997-98 and 1998-99), about 3.37 million families reported to have been covered.

The average investment per family remained at subcritical levels, too inadequate to generate income of ₹ 2,000 per family per month as the programme had envisaged. At the beginning of the Ninth Plan, an investment of ₹ 16,753 per family was not much higher in real terms as compared with ₹ 7,889 at the beginning of the Eighth Plan. Such low-level per family investment cannot finance self-employment projects to yield adequate income on a sustained basis.

Did you know? The IRDP was started in 1980-81 in all blocks of the country and continued as a major self-employment scheme till April 1, 1999. Then, it was restructured as the Swaranjayanti Gram Swarozgar Yojna (SGSY) which aimed at self-employment of the rural poor.

Jawahar Rozgar Yojana

Prime Minister Rajiv Gandhi announced on 28th April, 1989 the launching of the Jawahar Rozgar Yojana (JRY). All the existing rural wage employment programmes were merged into JRY. This implies that National Rural Employment Programme (NREP) and Rural Landless Employment Guarantee Programme (RLEG) have been merged so as to be brought under this umbrella programme referred to as Jawahar Rozgar Yojana.
Main features of the Scheme

(i) As a result of the operation of NREP and RLEG during 1980-81 to 1988-89, rural employment programmes reached only 55 per cent of the village panchayats around the country. JRY aimed at reaching every single panchayat.

(ii) The scheme will be administered by the village panchayats to implement rural employment programmes benefitting 440 lakh families living below the poverty line in India.

(iii) Whereas in the earlier rural employment programmes, Central and State assistance was provided on 50 : 50 basis, JRY has stipulated that Central assistance will finance 80 per cent and the States share will be 20 per cent.

Objectives of JRY

Primary Objective: Generation of gainful employment for the unemployed and under-employed, men and women in rural areas.

Secondary Objectives: JRY had several secondary objectives:

(i) creation of sustained employment by strengthening the rural infrastructure;
(ii) creating community and social assets;
(iii) creating assets in favour of the poor for their direct and continuing benefits;
(iv) to produce positive impact on wage levels; and
(v) to bring about over-all improvement in quality of life in rural areas.

Target Groups and Special Safeguards

JRY was specially targeted to help people below the poverty line. Preference was to be given to Scheduled Castes, the Scheduled Tribes and freed bonded labourers. At least 30 per cent of the employment was to be provided to women under the JRY.

Modification under JRY

Based on the experience gained in the implementation of the Jawahar Rozgar Yojana (JRY) and to achieve the objective of providing 90-100 days of employment per person in backward districts, JRY was modified from 1993-94 and was implemented in the following three streams:

First Stream: On the existing pattern with two sub-schemes, namely Indira Awaas Yojana (IAY) and Million Wells Scheme (MWS)

Second Stream: An intensified JRY in 120 identified backward districts with additional allocations

Third Stream: Special and innovative projects

First Stream of JRY

Under this stream of JRY, two sub-schemes, viz.: Indira Awaas Yojana (IAY) and Million Wells Scheme (MWS) were implemented. 10 per cent of the total resources of JRY were earmarked for the IAY and 30 per cent for the MWS.

Works to be undertaken under first stream of JRY

1. Social forestry works on Government and community lands belonging to panchayats etc. road side plantations, plantations along canal banks or on wastelands or on sides of railway lines etc.
2. Soil and water conservation works
3. Minor irrigation works, such as, construction of community irrigation wells, drains and field channels
4. Construction/renovation of village tanks for providing irrigation as well as drinking water
5. Construction of community sanitary latrines
6. Construction of houses for scheduled castes/scheduled tribes and freed bonded labourers
7. Construction of rural roads.
8. Land development and reclamation of waste lands or degraded lands.
9. Construction of community centres, panchayat ghars, Mahila Mandals, Market yards, dispensaries, anganwadis, balwadis etc.
10. Construction of school buildings, etc.

**Million Wells Scheme (MWS)**

The Million Wells Scheme was launched as a sub scheme of NREP/RLEG during 1988-89 to provide open irrigation wells, free of cost, to poor small and marginal farmers belonging to SCs/STs and freed bonded labourers.

Since the beginning of the programme in 1988-89, a total 10.0 lakh wells were constructed with an expenditure of ₹ 4,021 crores by 1996-97. Additional 1.9 lakh wells were constructed during 1997-98 and 1998-99 at a cost of ₹ 937 crores.

**Indira Awaas Yojana (LAY)**

Indira Awaas Yojana was aimed at providing houses, free of cost, to the members of the SC/ST, freed bonded labourers. From 1993-94, the scheme was extended to other poor categories (besides SC/ST) as well. The permissible expenditure for each house under IAY which was fixed at ₹ 14,000 was enhanced to ₹ 20,000 with effect from 1st August 1996 in view of the rise in the cost of building materials.

Under Jawahar Rozgar Yojana, during 1989-90 to March 2001, a total of 67.5 lakh houses were constructed with a total expenditure of ₹ 11,324 crores. Average cost of construction of a house was ₹ 16,776.

**Third Stream — Innovative and Special Employment Projects**

Under the third stream of JRY, special and innovative projects which aim at prevention of migration of labour, enhancing women’s employment, special programmes through voluntary organisations aiming at drought proofing as well as watershed development/wasteland development resulting in sustained employment were undertaken. Besides this, Operation Black Board was undertaken to provide assistance for construction of class rooms and school buildings. During the 5 year period (1989-90 to 1993-94), as against the target of 4,332 million mandays, the States generated employment of the order of 4,283 million mandays, nearly 97 per cent of the target. The total expenditure incurred was ₹ 14.010 crores. This implies that ₹ 32.7 per manday were spent for the purpose. This was a very encouraging achievement.

**Employment Assurance Scheme (EAS)**

On the model of the Employment Guarantee Scheme of Maharashtra, the Government introduced Employment Assurance Scheme (EAS) with effect from 2nd October 1993 in rural areas in 1,778 blocks of 261 districts. The scheme aimed at providing assured employment of 100 days of unskilled manual work to the rural poor who are in need of employment and seeking it. The assurance of 100 days extends to all men and women over 18 years and below 60 years of age. A maximum of two adults per family were to be provided employment under the scheme.

The average employment provided per person was 41.3 days in a year, as against the target of 100 days of employment. To make the scheme more enduring to enable beneficiaries to cross the poverty line, it would be more desirable to reach the target of 100 days of employment per year.

**Evaluation of Jawahar Rozgar Yojana (JRY)**

During 1992, the Government of India undertook concurrent evaluation of JRY through reputed research institutions covering all districts in the country. More concerns of the concurrent evaluation were:

**Areas of Concern** pointed out by the Report are :

(a) In majority of cases, panchayat heads were not given any training for undertaking JRY works.
(b) The workers who belonged to the category of ‘ineligibles’ also took advantage of the programme.
To sum up, Jawahar Rozgar Yojana made some headway in providing employment but the target of providing 90-100 days of employment for every registered person is a distant goal judged by the achievement made so far. The total absence of voluntary organisations in its implementation was a serious weakness of JRY. To improve the quality of construction of houses, more liberal amount per house should be provided, failing which the poor quality houses would after a few years need heavy repairs.

Under the programme, all works that can result in the creation of durable assets are taken up. Under the scheme, during 2000-01, with a Central allocation of ₹ 1,650 crores, 88.5 million mandays of employment was generated.

**Swaran Jayanti Gram Swarozgar Yojana (SGSY)** was introduced in April 1999 as a result of restructuring and combining the Integrated Rural Development Programme (IRDP) and Million Wells Scheme (MWS) into a single self-employment programme. It aimed at promoting micro-enterprises and helping the rural poor into self-help groups. It was implemented as a Centrally Sponsored Scheme on cost sharing ratio of 75 : 25 between the Centre and the States.

**Swaran Jayanti Shahari Rozgar Yojana (SJSRY) :** The Urban Self-employment Programme and Urban Wage-Employment Programmes of the Swaran Jayanti Shahari Yojana, which substituted in December 1997 various programmes operated earlier for poverty alleviation. SJSRY was funded on 75 : 25 basis between the Centre and the States. During the 3-year period (1997-98 and 1999-2000), a total of ₹ 353 crores were spent of SJSRY generating 21.8 million mandays of employment.

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**Jawahar Gram Smridhi Yojana (JGSY)** was introduced in April 1999 as a successor to Jawahar Rozgar Yojana (JRY) is being implemented as a centrally sponsored scheme on a cost sharing ratio of 75 : 25 between the Centre and the States.

### Employment Policy in the Ninth Plan

**Labour Force Growth and Employment Requirements**

Job opportunities will need to be created for 53 million persons during 1997-2002 as a consequence of labour force increase, for 58 million during 2002-07 and thereafter for 55 million during 2007-12.

#### Table 1 : Combined Incidence of Unemployment and Under-employment

<table>
<thead>
<tr>
<th>Activity Status</th>
<th>Proportion of labour force</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Labour force</td>
<td>100.00</td>
<td>Working or seeking work on usual status basis.</td>
</tr>
<tr>
<td>2. Employed</td>
<td>89.55</td>
<td>Usual status employed staying in workforce when classified by their weekly status.</td>
</tr>
<tr>
<td>3. Unemployed</td>
<td>2.02</td>
<td>Incidence of open unemployment on usual status basis.</td>
</tr>
<tr>
<td>4. Under-employed</td>
<td>8.43</td>
<td>Usual status employed going out of work when classified by their weekly status.</td>
</tr>
<tr>
<td>5. Unemployed &amp; underemployed</td>
<td>10.45</td>
<td>Open unemployment on usual status and the incidence of loss of work by the usually employed when classified by their weekly status.</td>
</tr>
</tbody>
</table>

Strategy of Employment Generation in the Ninth Plan

The basic problem, which keeps people in a state of poverty, is the poor quality of employment in terms of inadequate level of income for workers. The educational level of the workers reveals that 70 per cent of the workforce is either illiterate or educated below the primary level. In industries other than agriculture, where skill development for higher productivity necessitates a reasonable level of educational standard, 52 per cent of workforce was below the primary level of education, 26 per cent being illiterate. (Refer table 2). The Ninth Plan, therefore, as a part of its strategy intended to focus on the growth of sectors which have high employment absorption capacity of a relatively less educated labour force. It mentioned, “The focus on agriculture, trade and transport and construction reflect this imperative.”

It is really a sad commentary on our planning process that even after five decades of planned development, nearly 84 per cent of the workforce engaged in agriculture is either illiterate or with an educational level below primary. It is, therefore, vitally necessary that education and skill development programmes which are essential features of empowerment be strengthened.

**Table 2 : Percentage Distribution of Labour Force by Level of General Education (1993-94)**

<table>
<thead>
<tr>
<th></th>
<th>Illiterate</th>
<th>Literate upto primary</th>
<th>Middle and above</th>
<th>Total</th>
<th>Share in workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>60.8</td>
<td>22.8</td>
<td>16.4</td>
<td>100.0</td>
<td>56.6</td>
</tr>
<tr>
<td>Other than</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>25.8</td>
<td>26.0</td>
<td>48.2</td>
<td>100.0</td>
<td>43.4</td>
</tr>
<tr>
<td>All industries</td>
<td>45.6</td>
<td>24.2</td>
<td>30.2</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Note**: Usual status principal and subsidiary workers  
**Source**: Compiled from NSS 50th Round Data on Employment and Unemployment.

As a part of enlarging employment and increasing the quality of employment, the Ninth Plan emphasized, “It is necessary to increase public investment in agriculture especially for strengthening irrigation and other rural infrastructure in backward areas so that sustained agricultural growth, and, therefore, acceleration of employment growth is facilitated.” Besides this, the Ninth Plan intended to emphasise horticulture - an employment intensive sector.

The Ninth Plan underlined the fact that Rural Non-farm Sector has increased its share of productive employment from about 15 % in 1978 to 22 % in 1987-88 and further to 23 % in 1993-94. This sector has registered an employment growth rate of 5 per cent between 1987-88 and 1993-94, which is very heartening. This trend should be strengthened. This necessitates a decentralized pattern of industrialisation so that rural areas can undertake small business and manufacturing on an increasing scale.

An Assessment of the Employment Strategy

However, it may be mentioned that the Ninth Plan does not make employment as a central objective of the policy, though it speaks of generating it as a corollary of the growth process. The Macro Dimensions of the plan are couched in the traditional paradigm of saving, investment, GDP growth rates. In this connection, it would be relevant to heed the advice given by the Human Development Report (1996) which states that a clear political commitment to full employment is the essential condition for development. The Report mentions: “Where employment creation has been most successful, it has been the result of a deliberate strategy. Rather than assuming that employment would materialise automatically, political leaders have identified it as a central policy objective.” It further emphasises: “Employment needs to be restored to its place among the top policy concerns of
economic management. The macro-economic framework agreed to between governments and the Bretton Woods Institutions need to focus on employment — not just inflation, GDP growth, short and medium term reforms and short-term fiscal and budgetary targets. They need to set employment targets, which are essential to human development and to sustained future growth.”

Self-Assessment

1. Choose the correct option:
   (i) Consider the following statements:
      I. Bulk of employment is in rural areas.
      II. The disguised unemployment in agricultural sector is perennial
      III. Industrialisation rendered several people jobless in India
   Which of the statement given below is/are correct:
   (a) I and II    (b) I and III    (c) I and III    (d) I, II and III

2. Which is not one of the salient features of Anapurna Scheme?
   (a) It was launched by the ministry of consumer affairs, Food and public distribution in 2001-2002.
   (b) The beneficiaries of the scheme are indigent senior citizens of 65 years of age or above.
   (c) 10 kg of food grains per month are supplied free of cost to the target group.
   (d) From 2002-2003, the scheme has been transferred to state plan along with the national social assistance programme.

3. PDS means distribution of essential commodities to a large number of people through the network of fair price shops on a recurring basis. The commodities distributed under PDS are:
   I. Wheat     II. Rice
   III. Sugar    IV. Pulse
   V. Kerosene
   Select the correct option
   (a) I, II and IV    (b) I, II, III and IV    (c) I, II, III, and V    (d) all of the above

4. The central nodal agency for implementing the price support operations for commercial crops is
   (a) NAFED    (b) NABARD    (c) TRIFED    (d) FCI

8.4 Summary

- India is a developing economy, the nature of unemployment, therefore, sharply differs from the one that prevails in industrially advanced countries. Lord Keynes diagnosed unemployment in advanced economies to be the result of a deficiency of effective demand. It implied that in such economies machines become idle and demand for labour falls because the demand for the products of industry is no longer there.
- That a large number of workers are forced to remain jobless both in rural and urban areas is true beyond dispute.
- The Committee of Experts on Unemployment under the chairmanship of B. Bhagwati in its report submitted to the Government in May 1973, observed : On the basis of the data, the likely number of unemployed in 1971 may be reasonably taken at 18.7 million including 9 million
who are without any job whatsoever and 9.7 million who work for less than 14 hours per week may be treated at par with the unemployed.

- It is obvious that the unemployment situation is grim indeed. It has, therefore, to be tackled with appropriate measures and on an urgent basis. However, before we discussed the ways and means of removing unemployment, it is necessary that we understand the causes that given rise to it. The major causes which have been responsible for the wide rise to it.

- It is true that the increasing labour force requires the creation of new job opportunities at an increasing rate. But in actual practice employment expansion has not been sufficient to match the growth of the labor force, and to reduce the back leg of unemployment. This leads to unemployment situation secondly; the rapid population growth indirectly affected the unemployment situation by reducing the resources for capital formation. Any rise in population, over a large absolute base as in India, implies a large absolute number.

- The method of agriculture in India is very backward. Till now, the rural farmers followed the old farming methods. As a result, the farmer cannot feed properly many people by the produce of his farm and he is unable to provide his children with proper education or to engage them in any profession. It leads to unemployment problem.

- The various schemes under the Fourth Five-Year Plan or the Crash Plan could not succeed in removing rural unemployment and under-employment because efforts were not made to organise the army of the rural unemployed into appropriate supply camps to be shifted to places of demand at the desired minimum wage.

- Maharashtra Government introduced the, Employment Guarantee Scheme (EGS) in 1972-73. The scheme was the first of its kind to give recognition to the “right to work” enshrined in the Constitution. It embodied a commitment by the State to provide work to a person who comes forward to offer labour.

- The Food for Work Programme was restructured and renamed as National Rural Employment Programme (NREP) from October, 1980. This was implemented as centrally sponsored programme with 50 per cent central assistance. Additional employment of the order of 300-400 million mandays per year for the unemployed and underemployed was envisaged under the NREP.

- The Rural Landless Employment Guarantee Programme (RLEGP) was launched on the 15th August, 1983 with the objective of generating gainful employment, creating productive assets in rural areas and improving the overall quality of rural life.

- The progress of RLEGP during the Seventh Plan (1985-86 to 1988-89) revealed that during the first four years, a sum of ₹ 2,412 crores was utilized and this helped to generate employment to the tune of 1,154 million mandays.

- A multiplicity of agencies have been carrying on the task of providing rural employment. They included : Employment Guarantee Schemes, Food for Work Programme, Small Farmers Development Agency (SFDA), Marginal Farmers and Agricultural Labourers (MFAL), Drought Prone Area Programme (DPAP) and Desert Development Programme (DDP), Command Area Development Programme (CADP), etc.

- A large body of economic experts have shown in their studies that whereas economic growth may be able to raise per capita incomes in developing countries, it may not be accompanied by a reduction of poverty as well as elimination of unemployment and under-employment.

- Various evaluation studies about the programme were made which reveal that the actual percolation effect of the programme was much less in terms of poverty alleviation as compared with the impressive figures doled out by Government reports in terms of subsidies, bank credit and poverty line crossers.

- Prime Minister Rajiv Gandhi announced on 28th April, 1989 the launching of the Jawahar Rozgar Yojana (JRY). All the existing rural wage employment programmes were merged into JRY. This implies that National Rural Employment Programme (NREP) and Rural Landless Employment Guarantee Programme (RLEGP) have been merged so as to be brought under this umbrella programme referred to as Jawahar Rozgar Yojana.
• Indira Awaas Yojana was aimed at providing houses, free of cost, to the members of the SC/ST. freed bonded labourers. From 1993-94, the scheme was extended to other poor categories (besides SC/ST) as well. The permissible expenditure for each house under IAY which was fixed at ₹14,000 was enhanced to ₹20,000 with effect from 1st August 1996 in view of the rise in the cost of building materials.

• During 1992, the Government of India undertook concurrent evaluation of JRY through reputed research institutions covering all districts in the country. More concerns of the concurrent evaluation were:

• Job opportunities will need to be created for 53 million persons during 1997-2002 as a consequence of labour force increase, for 58 million during 2002-07 and thereafter for 55 million during 2007-12.

• The basic problem, which keeps people in a state of poverty, is the poor quality of employment in terms of inadequate level of income for workers. The educational level of the workers reveals that 70 per cent of the workforce is either illiterate or educated below the primary level.

• Regarding the service sector, Ninth Plan stated that the growth rate of employment in this sector has been of the order of 5.39 % per annum during 1987-88 to 1993-94 compared to barely 1.84 % per annum between 1983 and 1987-88. But the irony of the strategy of employment outlined in the Ninth Plan is not to compute the employment growth in education and health sector if policies of building human capital, as suggested by Nobel Laureate Amartya Sen, have to be buttressed.

8.5 Key-Words

1. Endowment mortgage: An endowment mortgage is a mortgage loan arranged on an interest-only basis where the capital is intended to be repaid by one or more (usually Low-Cost) endowment policies. The phrase endowment mortgage is used mainly in the United Kingdom by lenders and consumers to refer to this arrangement and is not a legal term. If the individual dies during the endowment mortgage period then the mortgage provider retains the property.

2. Piggery-rearing: Intensive piggeries (or hog lots) are a type of animal husbandry specialized in the raising of domestic pigs up to slaughter weight. They are also known as an AFO or CAFO in the U.S. In this system of pig production, grower pigs are housed indoors in group-housing or straw-lined sheds, whilst pregnant sows are housed in sow stalls (gestation crates) or pens and give birth in farrowing crates.

8.6 Review Questions

1. What is the concept of Unemployment? Discuss.
2. Discuss the causes of Unemployment in India.
3. Write a short note on the government policies for employment.

Answers: Self-Assessment

1. (i) (a) (ii) (a) (iii) (c) (iv) (a)

8.7 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055
Unit 9: Inflation: Nature and Extent

CONTENTS
Objective
Introduction
  9.1 Inflation: Nature and Extent
  9.2 Methods of Measuring Inflation
  9.3 Types of Inflation
  9.4 Inflation, Disinflation and Deflation
  9.5 Inflation in India: A Long-Term View
  9.6 Economic Effects of Inflation
  9.7 Summary
  9.8 Key-Words
  9.9 Review Questions
  9.10 Further Readings

Objectives

After reading this Unit students will be able to:

• Understand Inflation.
• Discuss the Nature and Extent of Inflation.
• Explain the Types of Inflation.

Introduction

The problem of inflation is as old as market system. But, a persistent, continuous and high rate of inflation—generally, 5% or more—has emerged during the post-War II period as the most intractable economic problem for both theoreticians and policy-makers all over the world. The problem of inflation has received a more serious attention since the early 1970s. A continuous rise in the general price level over a long period of time has been the most common feature of both developed and developing economies. For example, the US is currently facing the problem of rate of inflation (around 5 percent) even though the US economy is facing recession. India, a fast developing nation—growing at the rate of 9% per annum was facing a high rate of inflation—over 12% in the 2nd half of 2008 which had created economic, social and also political problems of the country. Persistent inflation is perhaps the second most serious macroeconomic problem confronting the world economy today—second only to hunger and poverty in the ‘third world.’ Some authors consider inflation as the ‘dominant economic problem’ in modern times. The persistent inflation and the problems associated with inflation have claimed more attention of the economists, policy makers and politicians than any other macroeconomic problem. This has led to a bounding increase in the literature on inflation. In this introductory Chapter, we discuss three main aspects of inflation—meaning, measurement and effects of inflation. The theories of inflation and the relationship between inflation and unemployment are discussed in two subsequent chapters.

9.1 Inflation: Nature and Extent

In a broad sense of the term, inflation means a considerable and persistent rise in the general price level over a period of time. However, there is no universally acceptable definition of inflation. The definition of inflation has been, in fact, a matter of opinion on price rise and its causes. Let us look at some widely quoted early definitions of inflation and their implications.
According to Coulborn, inflation is a situation of “too much money chasing too few goods.” According to Kemmerer, “Inflation is ... too much currency in relation to physical volume of business.” Crowther defined inflation as, “a state in which the value of money is falling, that is, prices are rising.” The general drawback of these definitions is that they tell the cause of inflation rather than telling what inflation is. The definitions of this orientation do not capture the full implications of the inflationary situation. Besides, despite being theoretically unsound, these definitions are alleged to be of little use in the formulation of anti-inflation policies, especially under modern economic conditions characterized by complexity of factors causing inflation.

Did you know? “Inflation exists when money income is expanding more than in proportion to increase in earning activity.”

Consider some recent and more appropriate definitions of inflation. According to Ackley, “Inflation is a persistent and appreciable rise in the general level or average of prices.” Harry G. Johnson defines inflation as “a sustained rise in prices.” According to Samuelson, “Inflation denotes a rise in the general level of prices.” Bronfenbrenner and Holzman have suggested a number of alternative definitions of inflation which are mostly modified versions of the earlier definitions. Their alternative definitions make things more fuzzy rather than adding clarity to the concept of inflation.

**What Rate of Price Rise is Inflation?**

If one goes by the definition of inflation given by some modern economists, any rise in the general price level is not inflation. In their opinion, only a ‘persistent’, ‘prolonged’ and ‘sustained’ and a ‘considerable’ and ‘appreciable’ rise in the general price level can be called ‘inflation’. Though the terms ‘persistent’, ‘prolonged’ and ‘sustained’ are not defined precisely, it implies that if price rise is not ‘persistent’, prolonged or sustained, it is not inflation whatever the rate of rise in the general price level. Nor do the economists specify what rate of price rise is ‘considerable’ or ‘appreciable’ - 1%, 5%, 10%, 20% or what ? They do not provide a specific answer to this question too. It may thus be concluded that modern economists do not provide a definite answer to the question as to ‘what rate of increase in price rise is inflation’.

However, if one goes by Samuelson-Nordhaus definition of inflation, ‘a rise in the general level of prices’ is inflation. It means that any rise in the general price level over and above the baseyear level is inflation. This is the concept of inflation which is generally used in the analysis of price behaviour. For instance, the rate of price rise in India during April-May 2009 was below 1% and had gone down to 0.13% in the last week of May 2009 - the lowest in 30 years. This almost zero rate of rise in the general price was called inflation in public report. This is the practice, in fact, in all other countries and adopted also by the international organizations like World Bank and IMF.

Now a question arises here : What is the desirable rate of inflation ? The economists’ point of view on this question is discussed below.

**What is Desirable Rate of Inflation?**

The question as to what is a desirable rate of inflation can be answered by linking it to the economic and social needs of the country. In general, a moderate rate of inflation is considered to be desirable and acceptable for at least three reasons.

(i) A moderate rate of inflation keeps the economic outlook optimistic, promotes economic activity and prevents economic stagnation.

(ii) It is helpful in the mobilization of resources by increasing the overall rate of savings and investment— inflationary financing has, in fact, been widely used to finance economic growth of the underdeveloped countries.
It is historically evident that, despite intermittent deflation, the general price level has exhibited a rising trend, and some increase in the general price level is inevitable in a dynamic and progressive economy.

A rate of inflation higher than the desirable rate of inflation is considered to be ‘considerable’.

Now the question arises: **What is the Moderate Rate of Inflation?** This question cannot be answered in specific percentage terms because desirability of inflation depends on the need and the absorption capacity of a country which are subject to variation from time to time. The capacity of a country to absorb inflation may be defined in terms of the limit of the price rise beyond which the economy gets overheated and macro variables like savings, investment, growth of output, BOP position, and employment get adversely affected. The absorption capacity, so defined, varies from country to country and from time to time depending on their growth potentials. Therefore, the desirable limit or the moderate limit of inflation has to be determined for each country and for different periods of time. There is no definite rule in this regard. However, based on the past experience, it is some times suggested that 1-2 percent inflation in developed countries and 4-6 percent inflation in less developed countries is the appropriate and desirable limit of moderate inflation.

As regards the desirable rate of inflation for India, the Chakravarty Committee (1985), a Committee set up by the RBI to review the monetary system of the country, considered a 4-percent rate of inflation in India socially desirable and conducive to economic growth. Some economists consider a lower rate of inflation to be desirable. “Some people who regard inflation as an economic evil believe that a price level rising at a rate of around 1.5 percent ... assists in achieving and maintaining full employment and a satisfactory rate of growth.” However, if one goes by the recent record of inflation, inflation rate of 1.5 percent appears to be too low to maintain “full employment and a satisfactory growth rate.”

To conclude, a price rise of 2-3 percent per annum in the developed economy and 4-5 percent per annum in the developing economies is generally considered as the desirable rate of inflation. Therefore, a price rise in excess of 2-3 percent in developed countries and 4-5 percent in developing countries can be regarded as ‘considerable’ and undesirable. This definition may not be theoretically defendable but it is empirically defendable. Also, it has an important policy implication, i.e., so long as (i) the general level of price rises at an annual average rate of a 2-3 percent in developed countries and 4-5 percent in less developed countries, and (ii) macrovariables are not adversely affected by the price rise, an anti-inflationary policy is not advisable as it may distort the price system and affect adversely the employment and growth process.

### 9.2 Methods of Measuring Inflation

There are two common methods of measuring inflation: (i) percentage change in Price Index Numbers (PIN), and (ii) change in GNP Deflator. The two methods of measuring inflation are discussed below.

#### Measuring Inflation by PIN

The following formula is used for measuring the rate of inflation through the change in the PIN.

$$\text{Rate of Inflation} = \frac{\text{PIN}_t - \text{PIN}_{t-1}}{\text{PIN}_{t-1}} \times 100$$

where \(\text{PIN}_t\) is the price index number in the year selected for measuring inflation and \(\text{PIN}_{t-1}\) is the price index number in the preceding year.

The two widely used PINs are Wholesale Price Index (WPI), also called Producer Price Index (PPI), and Consumer Price Index (CPI). WPI is used to measure the general rate of inflation and CPI is used to measure the change in the cost of living.

In order to illustrate the measurement of inflation, let us use price index numbers in India in the early 1990s. The WPI (1999-2000 = 100) for ‘all commodities’ increased from 134.6 in 2005-06 to 141.9 in 2006-07. The rate of inflation between 2005-06 and 2006-07 can be obtained by using the above formula as follows.
Rate of Inflation = \frac{141.9 - 134.6 \times 100}{134.6} = 5.4\ percent

The annual average rate of inflation over a period of time (say 5, 10 or 20 years) is computed by taking average of the annual rates of inflation. For example, consider the annual average rate of inflation in India during the period from 2001-02 to 2005-06 as given in Table 1. As the table shows, 5-year annual average rate of inflation in India during 2001-06 was 4.7 percent.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Inflation Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>3.6</td>
</tr>
<tr>
<td>2002-03</td>
<td>3.4</td>
</tr>
<tr>
<td>2003-04</td>
<td>5.5</td>
</tr>
<tr>
<td>2004-05</td>
<td>6.5</td>
</tr>
<tr>
<td>2005-06</td>
<td>4.4</td>
</tr>
<tr>
<td>Annual average</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Which of the two methods is better?

As discussed above, inflation rate can be measured by using WPI or GNP deflator, called also as national income deflator. A question arises here: which of the two methods is a better method? In the opinion of the economists, GNP deflator gives a more appropriate measure of inflation. The reason is that GNP takes into account all the goods and services and, therefore, GNP deflator takes into account prices of all the goods, whereas WPI is based on only wholesale prices which exclude value added at retail stage. Therefore, WPI gives only a partial measure of inflation. That is why economists consider GNP deflator as a better measure of inflation than WPI. In general however, WPI is more commonly used to measure the Inflation in India.

9.3 Types of Inflation

Inflation is generally classified on the basis of its rate and causes. While rate-based classification of inflation refers to the severity of inflation or how high or low is the rate of inflation, cause-based classification of inflation refers to the factors that cause inflation. In this section, we discuss the types of inflation classified on the basis of its rate. The types of inflation classified on the basis of its cause will be discussed in the next Chapter under the causes of inflation. On rate basis, inflation is classified as: (i) Moderate inflation, (ii) Galloping inflation, and (iii) Hyper inflation. There main feature are described below.

(i) Moderate Inflation

When the general level of price rises at a moderate rate over a long period of time, it is called moderate inflation or creeping inflation. The ‘moderate rate’ of inflation may vary from country to country. However, ‘a single digit’ rate of annual inflation is called ‘moderate inflation’ or ‘creeping inflation.’ An important feature of moderate inflation is that it is ‘predictable.’ During the period of moderate inflation, the people continue to have faith in the monetary system and confidence in ‘money as a store of value.’ Money continues to work as a medium of exchange and people continue to hold money as asset.

(ii) Galloping Inflation

The economists have different views on galloping inflation. For example, according to Baumol and Blinder, “Galloping inflation refers to an inflation that proceeds at an exceptionally high rate.” They do not specify what rate of inflation is ‘exceptionally high.’ Samuelson and Nordhaus
define ‘galloping inflation’ more precisely. According to them, “Inflation in the double- or triple-digit range of 20, 100 or 200 percent a year is labeled galloping inflation.” This definition is not less imprecise because double and triple-digit inflation ranges between 10 and 999 percent and economic effects of inflation in this range will be immensely different. A country with a 900 percent annual inflation will have devastating effects whereas a country with 20-30 percent inflation can manage without pressing the alarm bell.

However, the post-War I inflation in Germany is often cited as a classic example of galloping inflation though some would call it hyper inflation. The wholesale prices in Germany increased 140 percent in 1921 and a colossal 4100 percent in 1922. In 1923, prices increased in Germany at an average rate of 500 percent per month. In recent times, Argentina, Brazil, Mexico, Peru and Yugoslavia (former) had galloping inflation during the 1970s and 1980s. The annual average rate of inflation in these countries during 1980-91 was exceptionally high: Argentina—416.9 percent; Brazil—327.6 percent; Peru—287.3 percent; former Yugoslavia—123.0 percent; and Mexico—66.5 percent. Incidentally, these cases are also cited as the examples of hyper inflation.

(iii) Hyper Inflation

In general, a price rise at more than three-digit rate per annum is called ‘hyper inflation’. According to some economists, however, “Hyperinflation is often defined as inflation that exceeds 50 percent per month.....An inflation rate of 50 percent per month implies a more than 100-fold increase in the price level over a year” During the period of hyper inflation, paper currency becomes worthless and demand for money decreases drastically. Germany suffered from hyper inflation in 1922 and 1923 when wholesale price index shot up by “100 million percent between December 1922 and November 1923.” November 1923 was the worst period of hyper inflation in Germany — “from January 1922 to November 1923, the price index rose from 1 to 10,000,000,000.” Hungarian inflation of 1945-46 is the worst case of hyper inflation ever recorded: the “rate of inflation averaged about 20,000 percent per month for a year and in the last month prices skyrocketed 42 quadrillion percent.”

The price rise in zillion and quadrillion percentage makes the meaning of hyper inflation obscure. It goes beyond the mental vision of the number. The following anecdotes about German hyper inflation would reveal what happens during the period of hyper inflation.

- People carried basket-load of money to the market and brought goods in pocket.
- It was cheaper to burn currency notes to make tea rather than buying it in the tea-shop.
- Price of a house in pre-inflation period was just sufficient to pay a day’s rent in post-inflation period.
- At the time of entering the cafe, the price of a cup of coffee was 4,000 marks, which rose to 8000 marks before one could finish his coffee.

In the recent past, Argentina, Brazil, and Peru had hyper inflation in 1989 and 1991. The rates of inflation in these countries in 1989 and 1990 are listed in Table 2.

<table>
<thead>
<tr>
<th>Country</th>
<th>1989</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>3079.8 percent</td>
<td>2314.0 percent</td>
</tr>
<tr>
<td>Brazil</td>
<td>1287.0 percent</td>
<td>2937.8 percent</td>
</tr>
<tr>
<td>Peru</td>
<td>3398.6 percent</td>
<td>7481.7 percent</td>
</tr>
</tbody>
</table>

(Source: CMIE, World Economy & India’s Place In It, October 1993.)
More recently, according to prediction made by some economists, the inflation rate in Yugoslavia was to reach 2,50,000 percent in December 1993 (TOI, 27/12/1993). The Yugoslav treasury had issued the biggest currency notes with denomination of 500 billion dinars to facilitate transactions.

Notes

In the modern world economy open inflation is a rare phenomenon. Countries facing inflation have suppressed inflation. For example, the 7-8 percent inflation in India in 2008 was virtually a suppressed inflation.

(iv) Open and Suppressed Inflation

In the contemporary writings on the subject, one often comes across the terms ‘open inflation’ and ‘suppressed inflation.’ When there is no control on the rising prices and prices are free to find their own level, the inflation under this condition is called open inflation. In the post-War II period, control and regulation of prices by direct and indirect measures has become a common feature of economic policy of most developed and developing economies. In addition to indirect measures including monetary and fiscal control measures, direct price control measure in the form of statutory fixation of the price or fixation of a price ceiling; rationing the consumption of scarce goods, controlled distribution of goods through public distribution system; subsidization of commodities with inflation potentials, etc. are used to control the price rise. In spite of these control measures, prices do rise and inflation does take place but at a rate lower than the potential rate in the open system. This kind of inflation is called suppressed inflation.

9.4 Inflation, Disinflation and Deflation

Before we proceed to discuss further aspects of inflation, let us understand the difference between inflation and disinflation and between inflation and deflation. Inflation refers to a persistent increase in the general price level. Disinflation means decline in the rate of inflation. Deflation means fall in the general price level below the base-year level. The conceptual difference between these terms is illustrated below with hypothetical price data.

As can be seen from the above table, when PIN rises from 100 in base-year 2000-01 to 110 in year 2001-02, it means there 10% inflation. When PIN decreases from 110 in year 2001-02 to 105 in year 2002-03, inflation rate on year-to-year basis has declined from 10% to 4.5% but still remains above the base-year level. This is the situation of disinflation – the fall in the rate of inflation. When PIN declines below the base-year PIN=100, this means deflation. Thus, deflation means that the general price level has gone down below the base-year price level.

Measuring Inflation, Disinflation and Deflation

(Base year = 2000-01)

<table>
<thead>
<tr>
<th>Year</th>
<th>Price Index Number (PIN)</th>
<th>% Change in Price (Year-to-Year)</th>
<th>Nature of Price Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>100</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2001-02</td>
<td>110</td>
<td>10</td>
<td>Inflation (10%)</td>
</tr>
<tr>
<td>2002-03</td>
<td>105</td>
<td>4.5</td>
<td>Disinflation (5.5%)</td>
</tr>
<tr>
<td>2003-04</td>
<td>100</td>
<td>(-) 5.0</td>
<td>Disinflation (5.0%)</td>
</tr>
<tr>
<td>2004-05</td>
<td>100</td>
<td>0.0</td>
<td>Zero Rate of Inflation</td>
</tr>
<tr>
<td>2004-05</td>
<td>95</td>
<td>- 5.0</td>
<td>Deflation</td>
</tr>
</tbody>
</table>
Notes

**Inflation, Disinflation and Deflation in India**

Looking at the Indian data, the weekly rate of inflation (based on WPI) had shot up to 13.1% in the 2nd week of August 2008 - the highest rate of inflation during the past 16 years - and the annual inflation rate had gone up to 12.81% in 2008. This was a matter of great concern for both the MOF and the RBI. Thereafter, however, inflation rate started declining setting a disinflationary trend. In the 2nd week of September 2008 inflation rate declined to 12.14%. Over the following period of three months, inflation rate had sharply declined to 6.61% in the 2nd week of December 2008 due mainly to the recession in the economy caused by the impact of global recession. This decline in the inflation rate was, in fact, disinflation. The disinflationary trend continued and inflation rate declined to 0.13% in the last week of May 2009, i.e., inflation rate had fallen to a near-zero level. The price level continued to decline and fell to -1.61% in the first week of June 2009 and -1.31% in the last week of June. This marked a situation of deflation in India.

**9.5 Inflation in India: A Long-Term View**

The historical record of inflation in India is given in Table 3. As the table shows, India has had inflation almost continuously over a period of six decades, though the rate of inflation has been changing - sometimes low, sometimes high - and in some years there was deflation. The inflation rate during the First Plan period (1951-56) was very low (1.5%), rather insignificant. But, the price rise picked up during the Second Plan period (1955-56 to 1960-61) when prices had increased at the rate of 6.3 percent per annum. As can be seen in Table 9.4 the five-year average rate of inflation in India remained limited to one digit during most of the period of the past five decades, except, of course, in 1970s. It was only during the first half of 1970s and the first half of 1990s that the rate of inflation had crossed one-digit rate.

**Table 3: Annual Average Rate of Inflation in India: 1960-2001**

(Base: 1993-94 = 100)

<table>
<thead>
<tr>
<th>Period</th>
<th>52-week annual average</th>
<th>Point to Point (March end)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51 to 1955-56*</td>
<td>1.5</td>
<td>---</td>
</tr>
<tr>
<td>1956-56 to 1960-61</td>
<td>6.3</td>
<td>5.2</td>
</tr>
<tr>
<td>1961-62 to 1965-66</td>
<td>5.8</td>
<td>5.9</td>
</tr>
<tr>
<td>1966-67 to 1970-71</td>
<td>6.7</td>
<td>5.7</td>
</tr>
<tr>
<td>1971-72 to 1975-76</td>
<td>12.0</td>
<td>10.8</td>
</tr>
<tr>
<td>1976-77 to 1980-81</td>
<td>8.5</td>
<td>11.0</td>
</tr>
<tr>
<td>1981-82 to 1985-86</td>
<td>6.5</td>
<td>5.5</td>
</tr>
<tr>
<td>1986-87 to 1990-91</td>
<td>7.8</td>
<td>8.5</td>
</tr>
<tr>
<td>1991-92 to 1995-96</td>
<td>10.6</td>
<td>9.3</td>
</tr>
<tr>
<td>1096-97 to 2000-01</td>
<td>5.0</td>
<td>5.3</td>
</tr>
</tbody>
</table>

* Figures taken from CMIE, Basic Statistics Relating to the Indian Economy, 1994,

Table 4 presents the inflation rates in India for the period 2000-01 to 2008-09.

Table 4: Annual Inflation Rate: 2000-01-2008-09

(Year-on-year: 1999-2000 = 100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>7.2</td>
</tr>
<tr>
<td>2001-02</td>
<td>3.6</td>
</tr>
<tr>
<td>2002-03</td>
<td>3.4</td>
</tr>
<tr>
<td>2003-04</td>
<td>5.5</td>
</tr>
<tr>
<td>2004-05</td>
<td>6.5</td>
</tr>
<tr>
<td>2005-06</td>
<td>4.4</td>
</tr>
<tr>
<td>2006-07</td>
<td>5.4</td>
</tr>
<tr>
<td>2007-08</td>
<td>4.7</td>
</tr>
<tr>
<td>2008-09</td>
<td>8.4</td>
</tr>
</tbody>
</table>

**Source**: Economic Survey-2008-09, MOF, GOI, Table 4.1, p.64

**Conclusion**: From the data presented in Tables 3 and 4, it can be concluded that the Indian economy has been prone to inflation. However, in view of the fact that it is a fast growing economy, inflation rate has been within the range of moderate inflation. Besides, a comparison of inflation rates in pre-economic reform period (pre-1990 period) and post-reform period shows that the inflation rate tended to decline in the post-reform period. It may be the result of faster growth rate of the economy, i.e., 5% plus. Inflation in India will be analysed in a greater detail in the next chapter, in the light of the theories of inflation.

### 9.6 Economic Effects of Inflation

The economic effects of inflation are all pervasive. It affects all those who depend on the market for their livelihood. The effects of inflation may be favourable or unfavourable, and low or high depending on the rate of inflation. For example, a galloping and hyper inflation have devastating effect on the economy and have serious social and political implications too. In this section, however, we will discuss only economic effects of inflation on certain major aspects of the economy, viz., (i) distribution of income, (ii) distribution of wealth, (iii) different sections of the society, (iv) output and economic growth, and (v) employment of labour.

1. **Effect of Inflation on Distribution of Income**

The effect of inflation on income distribution depends on how it affects the price received and price paid by different sections of the society, especially the consumers and the producers. *Prices received are the same as incomes* defined crudely. For example, households receive their incomes in the form of factor prices—wages and salaries, rents and royalties, dividend, interest, profits and income from self-employment. Similarly, *actual prices paid represent the expenditures on consumer goods and production inputs*. Inflation changes the income-distribution-pattern only when it creates a divergence between total price received and total prices paid by different sections of the society. For example, let us consider only two major forms of incomes-wage incomes and profits. When price rise is so evenly distributed that wages increase proportionately to the rise in profit incomes, the income distribution remains generally unaffected. When output prices increase faster than input prices, profits rise faster than wage incomes, which is generally the case, incomes get redistributed in favour of the profit earners—the employers. However, if inflation is predictable and consumers are able to adjust consumption pattern and wage earners can move from low-wage jobs to high-wage jobs, then the impact of inflation on income distribution is considerably mitigated.
What happens in general, however, is that product prices increase first and at a faster rate, and input prices (especially wages) increase later and at a lower rate. It is so because, there is always a time-lag between the rise in output prices and input prices. For example, prices of goods and services increase first, in general, and wages of labour after a time gap—we know that when prices of consumer goods increase, dearness allowance is paid after a time gap. This is the general case.

As a result, wage incomes flow to producers of wage-goods first and at a faster rate than the reverse flow. Consequently, inflation cause redistribution of income in favour of the producers. Consequently, rich (firms) get richer and poor (labour) get poorer.

2. Effect of Inflation on Distribution of Wealth

From the view point of analysis here, let us look at wealth as accumulated assets. Assets can be classified as : (i) price variable assets, and (ii) fixed value assets. Price-variable assets are those whose prices change with change in the general price level. The money value of price-variable assets increases, during the period of inflation. Price-variable assets can be further classified as: (a) physical assets including land, building, automobiles, gold, jewellery, etc., and (b) financial assets including shares and stocks. The fixed-value assets, on the other hand, are those assets whose money value remains constant even if the general price level changes. Fixed-value assets include bonds, term deposits with banks and companies, loans and advances, etc. Like assets, there are liabilities also. Liabilities are mostly of fixed claim nature like house loans, car loans, bank loans, and mortgage of property. Let us assume, for the sake of simplicity in the analysis, that fixed value assets and fixed value liabilities cancel out.

Empirical Evidence: It has been argued above that inflation can, at least theoretically, affect the distribution of income and wealth under certain conditions. Let us now turn to the question whether inflation really affects income and wealth distribution. The economists have devoted a considerable effort and attention to examine the effect of inflation on the distribution of wealth. A voluminous literature is available on the subject. Empirical studies do not produce conclusive evidence on the effect of inflation on the distribution of income and wealth. To quote Samuelson and Nordhaus, “The summary wisdom of these studies indicates that the overall impact is highly unpredictable.”

3. Effects of Inflation on Different Sections of Society

As noted above, the overall impact of inflation is unpredictable. However, inflation has certain definite and predictable effect on the income of certain sections of society. These are briefly discussed below.

Wage Earners: It is a common belief that wage earners are hurt by inflation. Some authors consider this belief as a myth. In fact, whether wage earners lose or gain by inflation is again a matter of labour-market conditions. In developed countries labour is, by and large, organized and labour market is competitive. According to Baumol and Blinder “the average wage typically rises more or less in step with prices.” This contradicts the ‘popular myth’ that wage earners are, in general, losers during the period of inflation. They have used US data to show that real wage “is not systematically eroded by inflation.” They add, “The fact is that in the long-run, wages tend to outstrip prices as new capital equipment and innovation increase output per worker.”

Fixed income class: The people of the fixed-income category are the net losers during the period of inflation. The reason is that their income remains constant even during the period of inflation, but the prices of goods and services they consume increase. As a result, the purchasing power of their income gets eroded in proportion to the rate of inflation. For example, suppose that a person earns a fixed annual income of ₹ 100,000 and that the rate inflation is 10 percent. It means that if he spends his total income, he can buy goods and services worth only ₹ 90,000 at the prices in the current year. If prices continue to increase at the rate of 10 percent per annum, his purchasing power will be reduced to goods and services worth ₹ 81,000 in the second year and to worth ₹ 72,900 in the third year, and so on.
Borrowers and lenders: In general, borrowers gain and lenders lose during the period of inflation. For example, suppose a person borrows ₹ 5 million at 12 percent simple rate of interest for a period of five years to buy a house. Suppose also that escalation in property prices is such that property prices double every 5 years. After 5 years, the borrower would pay a total sum of ₹ 8 million whereas the price of house rises to ₹ 10 million. The borrower gains by ₹ 2 million. The lender loses by the same amount in the sense that had he bought the house himself, his asset value would have risen to ₹ 10 million.

The government: The government is a net gainer during the period of inflation. In order to analyze the government’s gain from inflation, let us consider the government as a taxing and spending unit and as a net borrower. As regards the effects of inflation on tax revenue, inflation increases revenue yields from both, the direct and indirect taxes. Consider first the direct taxes, viz., personal and corporate income taxes.

Inflation increases tax yields from personal income tax in at least three ways. One, inflation redistributes income generally in favour of higher income groups. This kind of income transfers enlarge the tax base for the personal income tax. As a result, the yield from the personal income tax increases. Two, inflation increases the nominal income at the rate of inflation, real income remaining the same. As a consequence, an income which was non-taxable prior to inflation becomes taxable after inflation. This also enhances the tax base and, therefore, the tax revenue. Third, with the increase in the nominal income due to inflation, incomes taxable at lower rates becomes taxable at a higher rates. This increases the yields from personal income tax.

4. Effect of Inflation on Economic Growth

The effect of inflation on economic growth can be examined at both theoretical and empirical levels. Let us first examine the issue of inflation and economic growth at theoretical level. Theoretically, the rate of economic growth depends primarily on the rate of capital formation which depends on the rate of saving and investment. Therefore, whether inflation affects economic growth positively or negatively depends on whether it affects savings and investment positively or negatively. Most economists hold the view that there is a positive relationship between inflation and saving and investment and, therefore, inflation is conducive to economic growth. Two arguments are put forward in favour of this proposition.

First, during the period of inflation, there is a time-lag between the rise in output prices and rise in input prices, particularly the wage rate. This time-lag between the rise in output prices and the wage rate is called wage-lag. When the wage-lag persists over a long period of time, it enhances the profit margin. The enhanced profits provide both incentive for a larger investment and also the investible funds to the firms. Firms plough back their profits for higher profits. This results in an increase in investment, production capacity and a higher level of output.

Second, inflation tends to redistribute incomes in favour of higher income-groups whose incomes consist mostly of profits and non-wage incomes. This kind of inflation-induced redistribution of incomes increases total savings because upper-income groups have a higher propensity to save. The increase in savings increases the supply of investible funds and lowers the rate of interest. Since investment is the function of interest rate, other factors given, a lower rate of interest increases investment. With increase in investment, production capacity of the economy increases. This causes an increase in the total output, which means economic growth.

5. Effect of Inflation on Employment

Economic growth and employment go hand in hand. It may thus be construed that inflation has promotional effect on employment. It is a widely accepted view that a moderate rate of inflation helps economic growth which creates additional employment opportunities. Since inflation affects growth variables—savings, investment and profits—favourably, it affects employment favourably too. The economists have found that the greater the rate of investment, the greater the rate of employment till the economy reaches the full employment level.

However, a very strong conflict arises between growth and employment at a high rate of inflation. While a high rate of inflation increases employment, it affects growth adversely. Besides, inflation as a means to growth and employment involves severe economic and social costs in terms of...
distortions in relative prices, malallocation of resources, and social and political unrest. Therefore, it cannot be allowed to go uncontrolled. If it is controlled, it will limit the employment and cause unemployment. The policy-makers are therefore often faced with a situation of dilemma. If inflation is allowed to go on a high rate, it will affect growth adversely, and if it is controlled, it will affect employment adversely and there may be a high rate of unemployment. The policy-makers are therefore required to find a trade-off between inflation and unemployment. This issue has received a great deal of attention in recent times.

Self-Assessment

1. Choose the correct option

(i) Which of the following statements best describes inflation:
   (a) Any increase in the price level.
   (b) An increase in price of a major industry.
   (c) An increase in the rate of upward change of the price level.
   (d) A decrease in the rate of upward change of the price level.
   (e) An increase in the rate of downward change of the price level.

(ii) The price level is the:
   (a) weighted average price of all goods
   (b) weighted average price of all goods and services
   (c) weighted average price of all services
   (d) weighted average price of exported goods and services
   (e) weighted average price of all non-agricultural products and services

(iii) Unexpected inflation:
   (a) creates less problems for an economy than expected inflation.
   (b) hurts all individuals in an economy.
   (c) helps banks and individuals who have loaned money.
   (d) helps debtors.
   (e) effects all assets equally.

(iv) Inflation always has a negative affect on:
   (a) currency
   (b) gold
   (c) debtors
   (d) wages with cost of living adjustments
   (e) gold speculators

(v) When events such as 9/11 occur the price of gold will frequently increase. The most plausible explanation of this increase in gold is:
   (a) People fear that the production of gold will decrease and sell their gold.
   (b) People expect inflation to occur and sell their gold.
   (c) People fear the loss of purchasing power and hold more paper money.
   (d) People expect deflation to occur and buy gold.
   (e) People expect inflation to occur and buy more gold

(vi) Which of the following is the best measure of how inflation affects consumers?
   (a) The increase in the price of gold
   (b) The increase in the consumer price index
   (c) The increase in the price of a single product
   (d) The decrease in the consumer price index
   (e) The increase in the purchasing power of the dollar
Given that the consumer price index for each of three years is:

Year 1 = CPI = 100
Year 2 = CPI = 180
Year 3 = CPI = 198

The inflation rate for year 2 is:
(a) 180%  (b) 80%  (c) 40%
(d) there is no inflation because deflation has occurred.
(e) cannot be calculated with the given information

9.7 Summary

- In a broad sense of the term, inflation means a considerable and persistent rise in the general price level over a period of time. However, there is no universally acceptable definition of inflation. The definition of inflation has been, in fact, a matter of opinion on price rise and its causes.

- “Inflation is a persistent and appreciable rise in the general level or average of prices.” Harry G. Johnson defines inflation as “a sustained rise in prices.”

- If one goes by the definition of inflation given by some modern economists, any rise in the general price level is not inflation. In their opinion, only a ‘persistent’, ‘prolonged’ and ‘sustained’ and a ‘considerable’ and ‘appreciable’ rise in the general price level can be called ‘inflation’.

- There are two common methods of measuring inflation: (i) percentage change in Price Index Numbers (PIN), and (ii) change in GNP Deflator.

- Inflation is generally classified on the basis of its rate and causes. While rate-based classification of inflation refers to the severity of inflation or how high or low is the rate of inflation, cause-based classification of inflation refers to the factors that cause inflation.

- Before we proceed to discuss further aspects of inflation, let us understand the difference between inflation and disinflation and between inflation and deflation. Inflation refers to a persistent increase in the general price level. Disinflation means decline in the rate of inflation.

- Looking at the Indian data, the weekly rate of inflation (based on WPI) had shot up to 13.1% in the 2nd week of August 2008 - the highest rate of inflation during the past 16 years - and the annual inflation rate had gone up to 12.81% in 2008.

- The economic effects of inflation are all pervasive. It affects all those who depend on the market for their livelihood. The effects of inflation may be favourable or unfavourable, and low or high depending on the rate of inflation.

- The effect of inflation on income distribution depends on how it affects the price received and price paid by different sections of the society, especially the consumers and the producers. Prices received are the same as incomes defined crudely.

- As noted above, the overall impact of inflation is unpredictable. However, inflation has certain definite and predictable effect on the income of certain sections of society.

- The government is a net gainer during the period of inflation. In order to analyze the government’s gain from inflation, let us consider the government as a taxing and spending unit and as a net borrower. As regards the effects of inflation on tax revenue, inflation increases revenue yields from both, the direct and indirect taxes. Consider first the direct taxes, viz., personal and corporate income taxes.

- Economic growth and employment go hand in hand. It may thus be construed that inflation has promotional effect on employment. It is a widely accepted view that a moderate rate of inflation helps economic growth which creates additional employment opportunities.

9.8 Key-Words

1. Hyperinflation: It is the most extreme inflation phenomenon, with yearly price increases of three-digits percentage points and an explosive acceleration.
Indian Economic Policy

Notes

2. Moderate inflation: It can be differently defined around the world, given the different inflation histories. As an indication only, one could consider an inflation as moderate when it ranges from 5% to 25-30%. For some countries, the higher part of this range is already "high inflation".

3. Low inflation: It can be characterized from 1-2% to 5%. Around zero there is no inflation (price stability). Below zero, a country faces deflation.

4. Hyperinflation: It is the most extreme inflation phenomenon, with yearly price increases of three-digits percentage points and an explosive acceleration.

5. Extremely high inflation: It could range anywhere between 50% and 100%. High inflation is a situation of price increase of, say, 30%-50% a year. Both kinds can be stable or dangerously accelerate to enter in a hyperinflation condition.

6. Deflation: In economics, deflation is a decrease in the general price level of goods and services. Deflation occurs when the inflation rate falls below 0% (a negative inflation rate). This should not be confused with disinflation, a slow-down in the inflation rate (i.e. when inflation declines to lower levels). Inflation reduces the real value of money over time; conversely, deflation increases the real value of money - the currency of a national or regional economy. This allows one to buy more goods with the same amount of money over time.

9.9 Review Questions

1. Define inflation. Can any price rise be called inflation? What is the acceptable or desirable limit of inflation?
2. How is inflation measured? Explain the methods of measuring inflation with examples.
3. What is meant by national income deflator? How is national income deflator used to measure inflation?
4. Why is a moderate rate of inflation considered to be desirable for the economy? What are the limits of desirable rate of inflation for the developed and developing nations?
5. What are the types of inflation? How do they differ from one another?
6. What is meant by inflation tax? Under what conditions is inflation tax used as a source of financing growth?
7. How does inflation affect economic growth? How can inflation be used to make the economy grow?
8. Explain the relationship between inflation and employment. Is achieving a high rate of employment by means of inflation always desirable?

Answers: Self-Assessment

1. (i) (c) (ii) (b) (iii) (d) (iv) (a) (v) (e) (vi) (b) (vii) (b)

9.10 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Objectives

After reading this Unit students will be able to:

• Explain the Critique of Indian Economy Policies — Pre and Post Reforms.
• Discuss need and the Process of Economic Policy.

Introduction

The economic reforms in India were ushered in 1991 before which it was a highly regulated economy. At that time, a number of sanctions had to be acquired before starting a unit of production in any industry which may take over three years. It gave way to corruption in which the principal beneficiary was the bureaucracy. Earlier, the country relied heavily on the public sector which was considered as the engine of development. However, over a period of four decades, the private sector did acquire sufficient resources to undertake heavy investment and also wanted to enter areas hitherto reserved for the public sector. There was disenchantment with the functioning of the public sector which was plagued by inefficiencies and high cost of operation. Moreover, soon after independence, to help the growth of industry, the infant industry argument was used to protect Indian industry in hitherto unknown and newly emerging areas by using various trade barriers. This resulted in the growth of sheltered markets for Indian businessmen. Therefore, every time, the Government thought of reducing trade barriers, the damage to national industrial interest’s argument was used to stall them. Finally, it was in 1991 that the Government under pressure from World Bank/IMF was forced to reduce trade barriers. The objective was to expose Indian industry to face world competition. The main aim of economic reforms was to enter an era of globalisation where there was free flow of goods and services, free flow of technology, free flow of capital, and free movement of human beings. This means economic reforms needed integrating the Indian economy with world economy. Therefore, the emphasis in economic reforms was shifted to export-led growth strategy, instead of depending on import-substitution strategy of growth. In this way, economic reforms constitute three fundamental policy changes, namely, Liberalisation, Privatisation and Globalisation (LPG) model of development in India.

10.1 Critique of Indian Economy Policies — Pre and Post Reforms

The Industrial Policy, 1991 provided the rationale of economic reforms. The major objectives of the policy are given below:
Indian Economic Policy

Notes

(i) To free the Indian industrial economy from the unnecessary bureaucratic procedures;
(ii) To liberalise the Indian economy in order to integrate it with the world economy;
(iii) To free the domestic entrepreneur from the restrictions of Monopolies and Restrictive Trade Practices (MRTP) Act and attract direct foreign investment; and
(iv) Disinvestment of public sector enterprises which were incurring losses.

Liberalisation of the Economy

Removal of Industrial Licensing: Under liberalisation, all industrial licensing was abolished. However, 18 industries sector were to continue under the reservation list which was related to security and strategic concerns, social reasons, hazardous chemicals and over-riding environmental reasons and items of elitist consumption industries reserved for the small scale. Now, only five industries need industrial licensing.

Dereservation of SSI Items: Now, even the Small-Scale Industry (SSI) has been forced to face both domestic and international competition. It is true to begin with the Government decided to continue reservation of items under the SSI sector. Subsequently, it withdrew reservation in several SSI items every year.

Withdrawing MRTP Restrictions: The process freed big business houses to undertake expansion and establishment of new undertakings and to undertake mergers, amalgamations and takeovers. The thrust of policy in future would be more on controlling unfair or restrictive business practices in the country.

Privatisation of the Economy: There are two ways to view privatisation. Broadly, it means the enlargement of the scope of the private sector in the growth of the economy. However, in a narrow sense, it means the induction of private ownership in a public sector undertaking. After 1991, the private sector is considered as the engine of growth. The new environment has assigned an increasing role for the private sector and restricted role of public sector. The scope of the public sector will now be narrowed down to providing infrastructure such railways, electricity, roads and in providing social infrastructure in health and education. Privatisation in economic sphere may include the following:

(a) Total Denationalisation: It means complete transfer of ownership of a public enterprise to private hands.

(b) Joint Venture: It is the partial induction of private ownership from 25 to 50% or even more in a public sector enterprise. There are three kinds of proposals as given below:

(i) The private sector to have 26% ownership and workers also to be included to the extent of 5% equity to be transferred to them.

(ii) 51% equity and sells with the Government and 49% equity to the private sector.

(iii) Private sector to be transferred 74% of the equity, while the Government to retain 26% with Government veto power.

The main objective of the transfer of ownership is that it will enable the joint venture to improve productivity of assets and convert them into profitable concerns. In the first variant, doubts have been raised as if it will be able to achieve the desired results since the Government continues its domination with 74% ownership. In the second variant, there is substantial transfer of ownership (49%) of the share to the private sector. Here, the private sector, being a big partner, is likely to acquire a significant role in the decision-making process. In the third variant, the basic structure of enterprise gets transformed and transfers 74% ownership to the private sector which means that decision-making power in all policy matters is transferred to the private sector. At the same time, the Government has the veto power but it cannot use it frequently. It is the private sector which will occupy a dominant position in the management and operation of the enterprise under the third variant.

(c) Workers’ Cooperative: The transfer of ownership of a loss-making concern to the workers is yet another form of privatisation. The reason for the proposal is that workers besides receiving wages for work, would also be entitled to a share in ownership dividend. It is assumed that
since workers’ personal interest is linked to the interest of the enterprise, the workers are likely to work hard to increase productivity so that they can earn more. For example, in Kamani Tubes, Central Jute and Mewar Textiles, Hoist O’ Mech and Kolkata Chemicals etc these schemes were introduced. However, this form of privatisation did not assume a significant role in reforms.

(d) **Token Privatisation**: It is also referred to as ‘deficit privatisation’ which means the sale of 5% or 10% shares of a profit-making public sector enterprise in the market with the objective of obtaining revenue to reduce budget deficit. Similarly, it has also been called ‘disinvestment’ as Finance Ministers used to set targets for disinvestment during a year.

Among the above, the most acceptable form of privatisation is the joint venture in which the share of the private sector is kept at either 49% or 74%. However, other supporting measures such as linking wages to productivity, changing promotion policy and changing the organisation culture of the enterprise are significant factors in creating a competitive environment.

**Globalisation to Integrate the Indian Economy with the World Economy**: The process of integrating the various economies of the world without creating any hindrances in the flow of goods and services, technology, capital and even labour or human capital is called globalisation. Globalisation has many meanings depending on the context and on the person who is talking about. Though the precise definition of globalisation is still unavailable a few definitions are worth viewing, Guy Brainbant: says that the process of globalisation not only includes opening up of world trade, development of advanced means of communication, internationalisation of financial markets, growing importance of MNCs, population migrations and more generally increased mobility of persons, goods, capital, data and ideas but also infections, diseases and pollution. The term globalisation refers to the integration of economies of the world through uninhibited trade and financial flows, as also through mutual exchange of technology and knowledge. Ideally, it also contains free inter-country movement of labour. In context to India, this implies opening up the economy to foreign direct investment by providing facilities to foreign companies to invest in different fields of economic activity in India, removing constraints and obstacles to the entry of MNCs in India, allowing Indian companies to enter into foreign collaborations and also encouraging them to set up joint ventures abroad; carrying out massive import Liberalisation programmes by switching over from quantitative restrictions to tariffs and import duties, therefore globalisation has been identified with the policy reforms of 1991 in India. In fact, globalisation is an extension of the process of liberalisation in the international domain.

**Role of the Public Sector**

**Redefining the Role of the Public Sector**: In order find a solution to the problems of the public sector, the Government adopted a new approach towards it. We can see the main elements of the new approach to be the following:

(i) The Government decided to progressively reduced budgetary support to public enterprises;

(ii) Market discipline for PSUs, competition from the private sector, and disinvestment of part of the equity in selected enterprises;

(iii) To avoid areas where social considerations were not paramount or to invite the private sector where it would be more efficient than PSUs;

(iv) Greater managerial autonomy to enterprises in areas where continued public sector involvement was found appropriate;

(v) Long time sick public enterprises not be allowed to incur heavy losses to the exchequer.

The following measures were taken in the light of the new approach:

(a) Chronically sick PSUs and unlikely to be redeemed referred to the Board for Industrial and Financial Reconstruction (BIFR) for rehabilitation or restructuring.

(b) Industries reserved for the public sector was reduced from 17 to 8.

(c) Disinvestment of upto 20% of Government equity in selected public enterprises.

(d) Monitoring was strengthened with primary emphasis on profitability and rate of return to the enterprise.
10.2 Need for Economic Policy in India

In order to understand the worth of economic policies in India, we should understand its need in India. This would help us to develop a perspective about economic policies and plans of the Government. It may be noted that market system is not perfect, however, and in some situations, our economic well-being can be raised by regulating it or even by side-stepping it altogether. Thus, failure of market is the most important reason that we make economic policy. The competitive markets generate a Pareto optimal solution and an economy that reaches a Pareto optimal solution is believed to be efficient. If one or more of the assumptions of Pareto optimal solution does not hold good, the market system does not give rise to an efficient outcome and the condition is called market failures. Some of the reasons for market failures are under-provision of public goods, choices through time, presence of externalities, existence of common property resources, imperfect competition, asymmetric information, etc. which need some kind of Government intervention. Such intervention is in the form of economic policies and programmes. Moreover, under Pareto optimal solution the distribution may not be equitable one. Thus, state can give a direction to the resource allocation in more efficient manner in the larger public interest through participation in the production activities. Apart from this, the Government can try to shift the economy from one Pareto optimal solution to another by redistributing purchasing power and then allowing people to trade in competitive markets. In India, the framers of the Constitution provided certain Directive Principles to solve the social and economic backwardness of the country. The directive principles says that the state shall ensure to all its citizens the right to an adequate means of livelihood; to ensure a fair distribution of the material resources of the country for the common good; and to distribute the wealth in such a way that the wealth is not concentrated in the hands of a few people. This also calls for an economic policy.

Aims of Economic Policy in India

The economic policy in a developing country like India aims to accelerate the process of economic development. This ensures swift economic development. The concept of economic development is distinct from the concept of economic growth. The objectives of economic development are as follows:

1. **Full Employment**: The economic growth of a country is directly related to the goal of full employment since it yields the individual security, which, in turn, promotes progress, contributes to human dignity and weakens non-functional discrimination in the population.

2. **Better Distribution of Income**: Inequalities in income lead to misallocation and misutilisation of resources. The market mechanism promotes inequalities which lead to a serious breach of social welfare. Thus, economic policy may provide better distribution of income and wealth in the country.

3. **Stability of Prices and Rates of Foreign Exchange**: The rate of foreign exchange keeps fluctuating and affects international trade. This causes uncertainty in the economic life for which an economic policy is needed as a powerful instrument to ensure stability in the country.

4. **Human Development and Decent Work**: Education and illiteracy rate, life expectancy, the level of nutrition, consumption of energy per head etc. are involved in the measurement of human development. This is an indicator of improvement in the quality of life and is considered an important objective of economic development. Consequently, decent work has emerged as another goal of economic development. Work and employment itself, rights at work, security, and representation and dialogue are the four dimensions of decent work.

5. **Maintenance of Fair Competition**: Effective anti-monopoly policy brings competitive conditions which are essential for welfare maximisation.

6. **Avoidance of Cyclical Fluctuations**: Free market economies are characterised by business cycles or trade cycles which an economic policy must overcome.

7. **Rapid Economic Growth**: The main aim of economic policy in a developing economy is to ensure rapid economic growth of the country.
Instruments of Economic Policy in India

The instruments of economic policy vary according to the types of economic policies. Moreover, there are two types of economic policies: macro and micro-economic policies.

1. **Macro-economic Policies**: The big aggregative macro variables, such as employment, national output, general price level, investment, rate of exchange, and saving are dealt in the macro-economic policies.

2. **Micro-economic Policies**: These are sectoral policies which direct and contribute to the growth in the individual sectors of the economy.

1. **Macro-economic Policies**: These policies include the whole spectrum of economic activity where the state has to employ different weapons to achieve the targeted goals. However, these different weapons cannot be seen in isolation.

   The main instruments of macro-economic policy are given below:

   (i) **Fiscal Policy**: It is among the main instruments and is also called the budgetary policy. It operates through the budgetary operations wherein public revenue (taxes) and public expenditure form the core constituents of budget. In addition to the taxes of different type, governments can and do raise large sums of money by way of borrowings. Subsidies, economic and social sector, etc. are the main items on the expenditure side. The items whether on the revenue side and the expenditure side have the potential to influence the course of economic activity.

   (ii) **Monetary Policy**: The volume and price of money in an economy is dealt by the monetary policy. Both excess and inadequate supply of money in the economy is bad. An inadequate quantity of money may fail to provide the required liquidity for the growing volume of transactions and an excessive supply of money may prove inflationary.

   (iii) **Commercial Policy**: Government’s attitude towards the external sector of the economy is defined by the commercial policy. It is the policy towards investment by foreign capital in the host country, policy towards inflows and outflows of foreign exchange, goods and services. There may be a total open-door policy or restrictive or a mild protection in the economy.

2. **Micro-economic Policies**: The micro-economic policies refer to individual sectors like agriculture, industry, and services of different types. Thus, the state may permit and promote certain lines of activity in agriculture, industry and services. At same time, the state may also prohibit and discourage certain lines of action. The micro-economic policies may have instruments such as export control, import control, industrial licensing, quota-permit system, competition or anti-monopoly policy, policy of buffer stocks, procurement policy and policy of minimum support prices among others.

10.3 Process of Economic Policy Formulation

People of different inclination and interest are involved in the process of formulation of economic policy in India. First, legislatures as political institutions are mainly responsible for policy-making. In the India, the political decision-making is supreme. The Government constitutes a committee or a task-force to generate policy options, makes ‘necessary political changes’ in those recommendations, and, then, announces its decision at appropriate forums either in the form of an executive order or a legislative resolution. The character of political system plays a crucial role in identifying and prioritising problems. Gradually, an environment of ‘more consultative and responsive’ process of policy formulation has evolve in India. Today, political parties are speaking about creating ‘village business hubs’. The role of mass-media and non-governmental organisations advocating new policy options got acceptance in policy-making process. The National Advisory Council (NAC) is an example of widening of consultative process. It consists of non-governmental activists and headed by chairperson...
of the ruling coalition. However, the task of detailing the policy documents still lies with the bodies consisting of specialists and bureaucrats within administration some of which are given below:

**Planning Commission of India:** The Planning Commission is an institution in the Government of India, which formulates India’s Five-Year Plans, among other functions. After India gained independence, a formal model of planning was adopted, and the planning commission, reporting directly to the Prime Minister of India was established. Accordingly, the Planning Commission was set up on 15 March 1950, with Prime Minister Jawaharlal Nehru as the Chairman. Planning Commission though is a non statutory as well extra constitutional body, i.e. has been brought by an executive order. The Commission has the responsibility of making assessment of all resources of the country, augmenting deficient resources, formulating plans for the most effective and balanced utilisation of resources and determining priorities for the country.

**Disappointing Outcomes**

India is a democratic country where the economic policies of local and national Governments set the direction and parameters for the formulation of laws, Governmental programmes and budgets. When the policy is finalised and programmes are launched, the role of bureaucracy becomes significant as it is the implementing agency. There are various reasons due to which the outcomes of policies enunciated by the Government were invariably disappointing. For instance, at formulation stage, the political interests get precedence over economic reasoning. Moreover, the failure to articulate precise and operational goals, objectives, procedures, and plans leaves enough scope for task ambiguity for implementing agencies in the country. Sometimes, the policy-makers have poor information on the effort the bureaucracy is making and have no mechanism to monitor performance of this agency. Consequently, there is under-achievement of the policy goals. Moreover, the large structure of bureaucracy also acts as a hurdle where there is enough scope for buck passing. Within administration, there is no proper system of reward for extra efforts and/or penalty for non-performance. In addition to all this, the multiplicity of similar type of schemes is another important reason responsible for failure of schemes. Thus, similar kinds of benefits compete to reach to same segment of beneficiaries and success of one programme leads other programmes to failure. For all this, the policy-makers have to develop tools and technique to check performance and suitability of implementing agencies. The ‘deviations’ should be easily and instantly observed. Finally, technical expertise of politicians on economic issues should be enhanced.

**Critique of Economic Reforms**

Liberalisation, privatisation and globalisation are means to accelerate growth process. The aims of economic development have been defined in the First and the Second Five-year Plan itself. The major aims are as follows:

(i) GDP growth – 7-8% per annum;
(ii) Increasing the employment and striving for full employment;
(iii) Reduction of poverty;
(iv) Promotion of equity or distributive justice;
(v) Reduction of regional disparities; and
(vi) Human development in terms of health and education to be improved.

Below is a critique of economic reforms based on the success of economic reforms in achieving these goals of the country.

Here, the actual growth rate achieved during the reform period, its effect on balance of trade and balance of payments, industrial growth, foreign investment, economic and social infrastructure, employment and poverty reduction, labour, agriculture, and its effect on in reducing regional disparities between states have been discussed.

**GDP Growth, Employment and Poverty:** The reform process, say the advocates of reform, has the potential of accelerating economic growth. However, if we compare the annual average growth rate during the pre-reform period (1980-81 to 1990-91) which was of the order of 5.6% per annum, then
the post-reform 12-year period (1990-91 to 2002-03) also suggests an average growth rate of 5.5%. Thus, the claim of the advocates of reforms is not borne out by facts. It means the reform process has yet to establish its distinct superiority over the pre-reform period in the country.

Economic Reforms and Reduction of Poverty: According to Dr. S.P. Gupta, former member, Planning Commission, the poverty reduction over 1983 to 1990-91 was around 3.1% per annum, but it reversed to 1% in the 1990s (1990-91 and 1997). However, the GDP growth in India between 1983 to 1990-91 was around 5.6% and between 1990-91 and 1997, this is expected to go beyond 5.7%. In this way, Dr. Gupta, showed the pro-elite bias of economic reforms. Dr. Gaurav Datt of the World Bank has also drawn similar conclusions as given below:

1. In the urban sector, index of poverty declined at the annual average rate of 2.2% during 1973-74 and 1990-91 and the same trend is continued in the post-reform period (1990-91 to 1996-97).
2. In the rural sector, headcount index of poverty declined at the annual rate of 2.7% for the period 1973-74 and 1990-91 but the rate of decline is not significantly different from zero since then.
3. In both rural and urban poverty rates, there was a marked decline in 1973-74 with no such comparison later.
4. The march of poverty reduction in the process of growth continues in the urban sector but rural poverty was choked off by lack of rural growth in the country.

According to Dr. Gaurav Datt, stagnation in rural growth is the basic cause of slowdown in poverty reduction.

GDP Growth, Employment Growth and Poverty: Although GDP growth during the 1990s (especially after 1993-94) was quite high, it did not result in a corresponding decline in poverty. This was because of slow down of employment growth. The total employment increased from 3,026 lakhs in 1983 to about 3,568 lakhs in 1990-91 and then rose further to 3,829 lakhs in 1997-98. The rate of growth of employment works out to be 2.39% per annum during 1983 and 1990-91. So far as employment is concerned, a very disappointing situation arose in the postreform period (1990-91 to 1997-98). During this period, the growth rate of employment sharply declined to a mere 1.0% per annum. The reform process concentrated at the corporate yet the growth rate of employment in organised sector was simply 0.6% which was just one-third of the growth of employment witnessed in the pre-reform period. In the unorganised sector, the growth rate of employment which was of the order of 2.41 per cent during the pre-reform period (1983 to 1990-91), also declined to 1.1 per cent in the post-reform period. Thus, the trickle down effects of growth did not benefit the poor. According to Dr S.P. Gupta, high growth in employment in India has almost always been associated with some reduction in poverty. In the 1990s, a low growth of employment is seen to be associated with an increase in poverty in the country.

Economic Reforms and Industrial Growth: Among the reforms, industrial licensing was abolished in all but 15 industries. As a result, the reform process was able to dismantle the system of industrial licensing in order to accelerate industrial production growth. However, we don’t see any sharp acceleration of industrial production. The main reason for decrease in the growth of Index of Industrial Production (IIP) was a sharp decline in electricity generation from 9.0% during the pre-reform period to 5.7% in the post-reform period. At the same time, in mining and quarrying, the index of production slumped from 8.0% to 3.8%. Thus, although the wide-ranging industrial reforms were aimed at boosting industrial growth, but the ground reality as revealed by the data only points to the failure of the reform process. Moreover, the failure was more pronounced in basic and capital goods sectors as also in consumer durables in the economy.

Performance of Public Sector Enterprises: In the PSUs, gross profit as a %age of capital employed was 11.61% in 1993-94, it improved to 15.88 per cent in 1995. This further improved to 17.5% in 2002-03. This type of trend was noticed in net profit which improved from 2.84% in 1993-94 to 7.7% in 2003-04. It shows an improvement in the performance of Central Government Enterprises. Thus, it is not considered desirable to undertake disinvestment of CPSUs. It would be far more rewarding if the Government gave them greater autonomy to undertake business decisions.

Economic Reforms, India’s Foreign Trade and Balance of Payments: Boosting exports to improve India’s balance of trade position has been one of the major objectives of India’s economic reforms.
Thus, during the five-year period (1990-91 to 1995-96), exports increased from $18,477 million in 1990-91 to $32,311 million in 1995-96, indicating a growth rate of 11.8%. Similarly, imports grew from $27,194 million in 1990-91 to $43,670 million in 1995-96, indicating a growth rate of 9.3%. It may noted that balance of payments was adverse to the extent of an annual average of $3,028 million and the situation worsened during 1996-97 and 2000-01. at the same time, trade balance was unfavourable to the extent of $15,156 million but India was able to get a favourable net invisibles balance of $10,667 million. During the period, the annual growth of exports was of the order of 6.3 per cent. However, the situation took a turn during the three-year period (2001-02 to 2003-04) and annual average growth of exports was 12.9% and that of imports was 10.5%. India had a positive balance on current account of the annual average of $5,896 million. A liberal import policy, removal of all quantitative restrictions and reduction of import tariffs has resulted, in a deepening of adverse trade deficit. It means that during the 13-year period of economic reforms, India was able to increase her exports from $18.26 billion in 1991-92 to $79.59 billion in 2004-05, but as against them, imports had shot up from $21.06 billion in 1991-92 to $106.12 billion in 2004-05. Obviously, foreigners have been able to penetrate the Indian market much more than India has been able to extend her reach to foreign markets. But, India has gained on account of net invisibles and the positive balance of net invisibles has continued its upward trend. At present, there is a sharp increase in net software exports rising to $11.75 billion in 2003-04.

Economic Reforms and Foreign Investment Inflows : Foreign investment helps to increase capital formation of the economy without creating foreign debt. Thus, raising it was a major objective of economic reforms. Foreign investment flows take two forms -foreign direct investment and portfolio investment. During the 13-year period (1991-92 to 2003-04), out of a total foreign investment of $70.98 billion, foreign direct investment accounted for $35.35 billion (49.8%) and portfolio investment was $35.63 billion (51.2%). However, China has been able to attract a much higher level of foreign investment than India. Moreover, the gap between actual flows and approvals is another problem in India. There is bound to be a gap between actual flows and approvals because it does take time to actualise a promise, but the gap is too wide in the case of India. Therefore, it must be bridged and taken care of.

Economic Reforms and Infrastructure Growth : The base year of infrastructure data for post-reform period (1993-94 to 2003-04) is 1993-94. Thus, the growth rates are not strictly comparable with the pre-reform period. In case of saleable steel and cement, growth rates in the post-reform period were higher than in the pre-reform period. Similarly, for steel, growth rate during 1993-94 to 2002-03 was 9.5% as against only 4.9% in the 1980s. Moreover, for cement, growth rate in the post-reform period was 8.2% as against 4.0% in the prereform period. In the post-reform period, the withdrawal of state control in pricing carried out in the 1980s was responsible for the uptrend. At the same time, we find that other infrastructure industries like electricity, coal and petroleum showed lower growth rates in the post-reform period than in the pre-reform period. Similarly, the sharpest decline was noticed in petroleum from 12.2% in the eighties to merely 2.2% in the post-reform period. It may be noted that the much trumpeted claim that foreign private investment could boost infrastructure growth could not be realized.

Economic Reforms and Reduction of Regional Disparities : The objective of development must include reduction of regional disparities. As such, government has been supporting the backward states with higher locations. The reform is now emphasising the use of market forces to attract Investments and it has been observed that the relatively developed regions are able to attract more resources. Thus, the issue of reducing regional disparities is sidelined. Looking at the data, we find that NSDP in forward states indicated a growth rate 6.0% per annum during the period 1990-91 to 2000-01, but as against them, it grew in backward states at merely 1.4%. Thus, the period of economic reforms has resulted in increasing regional disparities. It was found that approval of investment proposals and grant of financial assistance helped the forward states to further accelerate growth.

Economic Reforms and Human Development : Economic reforms should step up investment in education and health infrastructure for the progress of human development. There are examples of Kerala and Tamil Nadu which have achieved higher levels of human development even with relatively lower levels of economic development, yet, by and large, better levels of per capita NSDP are associated with higher levels of human development in terms of education and health. It may be noted that
most of the backward states have poor record in health indicators like infant mortality, birth and death rates. However, among the forward states, Haryana indicates a poor record in terms of infant mortality and birth rates, though it enjoys a third rank in per capita NSDP. Moreover, among the backward states Bihar, Uttar Pradesh and Rajasthan have very poor record in literacy, particularly female literacy. At the same time, the forward states—Haryana, Gujarat and Andhra Pradesh have a very poor record in female literacy per se.

Self-Assessment

1. Choose the correct option

(i) Given that the consumer price index for each of three years is:
   Year 1 = cpi = 100
   Year 2 = cpi = 180
   Year 3 = cpi = 198
   The inflation rate for year 3 is:
   (a) 198% (b) 18% (c) 9%
   (d) 10% (e) cannot be calculated with the data given

(ii) If the interest rate offered to depositors by banks in Year 1 is 7% and the banks expected the 3% inflation that occurred, the banks would experience:
   (a) A disappointing cost for deposits of 7%
   (b) A disappointing cost for deposits of 4%
   (c) An expected nominal cost for deposits of 4%
   (d) An expected real cost for deposits of 3%
   (f) An expected real cost for deposits of 4%

(iii) The purchasing power of the dollar will:
   (a) increase if there is unanticipated inflation.
   (b) increase if there is unanticipated inflation but not if there is expected inflation.
   (c) decrease if there is unanticipated inflation but not if there is expected inflation
   (d) decrease if there is unanticipated inflation or expected inflation
   (e) increase if there is anticipated inflation and decrease if there is unanticipated inflation

(iv) When rational consumers expect inflation to occur, they are more likely to
   (a) Buy expensive goods sooner
   (b) Postpone the purchase of expensive goods.
   (c) Hoard dollars.
   (d) Invest in newly issued fixed rate bonds that have not accounted for the expected inflation.
   (e) Adapt consuming habits that will discourage inflation.

(v) Which of the following entities is most likely to benefit by unexpected inflation?
   (a) A bank that has substantial loans out.
   (b) A worker who has a 5 year contract without a cola adjustment.
   (c) A government that has substantial debt.
   (d) A retired worker on a fixed income
   (e) A homeowner with an adjustable rate mortgage.

10.4 Summary

- The main aim of economic reforms was to enter an era of globalisation where there was free flow of goods and services, free flow of technology, free flow of capital, and free movement of human beings. This means economic reforms needed integrating the Indian economy with
world economy. Therefore, the emphasis in economic reforms was shifted to export-led growth strategy, instead of depending on import-substitution strategy of growth. In this way, economic reforms constitute three fundamental policy changes, namely, Liberalisation, Privatisation and Globalisation (LPG) model of development in India.

- The process of integrating the various economies of the world without creating any hindrances in the flow of goods and services, technology, capital and even labour or human capital is called globalisation. Globalisation has many meanings depending on the context and on the person who is talking about. Though the precise definition of globalisation is still unavailable a few definitions are worth viewing. Guy Brainbant says that the process of globalisation not only includes opening up of world trade, development of advanced means of communication, internationalisation of financial markets, growing importance of MNCs, population migrations and more generally increased mobility of persons, goods, capital, data and ideas but also infections, diseases and pollution. The term globalisation refers to the integration of economies of the world through uninhibited trade and financial flows, as also through mutual exchange of technology and knowledge.

- In order to understand the worth of economic policies in India, we should understand its need in India. This would help us to develop a perspective about economic policies and plans of the Government. It may be noted that market system is not perfect, however, and in some situations, our economic well-being can be raised by regulating it or even by side-stepping it altogether. Thus, failure of market is the most important reason that we make economic policy.

- The economic policy in a developing country like India aims to accelerate the process of economic development. This ensures swift economic development. The concept of economic development is distinct from the concept of economic growth.

- People of different inclination and interest are involved in the process of formulation of economic policy in India. First, legislatures as political institutions are mainly responsible for policy-making. In the India, the political decision-making is supreme. The Government constitutes a committee or a task-force to generate policy options, makes ‘necessary political changes’ in those recommendations, and, then, announces its decision at appropriate forums either in the form of an executive order or a legislative resolution.

- The reform process, say the advocates of reform, has the potential of accelerating economic growth. However, if we compare the annual average growth rate during the pre-reform period (1980-81 to 1990-91) which was of the order of 5.6% per annum, then the post-reform 12-year period (1990-91 to 2002-03) also suggests an average growth rate of 5.5%. Thus, the claim of the advocates of reforms is not borne out by facts. It means the reform process has yet to establish its distinct superiority over the pre-reform period in the country.

- Among the reforms, industrial licensing was abolished in all but 15 industries. As a result, the reform process was able to dismantle the system of industrial licensing in order to accelerate industrial production growth. However, we don’t see any sharp acceleration of industrial production. The main reason for decrease in the growth of Index of Industrial Production (IIP) was a sharp decline in electricity generation from 9.0% during the pre-reform period to 5.7% in the post-reform period.

- Economic reforms should step up investment in education and health infrastructure for the progress of human development. There are examples of Kerala and Tamil Nadu which have achieved higher levels of human development even with relatively lower levels of economic development, yet, by and large, better levels of per capita NSDP are associated with higher levels of human development in terms of education and health. It may be noted that most of the backward states have poor record in health indicators like infant mortality, birth and death rates.

### 10.5 Key-Words

1. **Hyperinflation**: It is the most extreme inflation phenomenon, with yearly price increases of three-digits percentage points and an explosive acceleration.
2. Moderate inflation: It can be differently defined around the world, given the different inflation histories. As an indication only, one could consider an inflation as moderate when it ranges from 5% to 25-30%. For some countries, the higher part of this range is already "high inflation".

3. Low inflation: It can be characterized from 1-2% to 5%. Around zero there is no inflation (price stability). Below zero, a country faces deflation.

4. Hyperinflation: It is the most extreme inflation phenomenon, with yearly price increases of three-digits percentage points and an explosive acceleration.

5. Extremely high inflation: It could range anywhere between 50% and 100%. High inflation is a situation of price increase of, say, 30%-50% a year. Both kinds can be stable or dangerously accelerate to enter in an hyperinflation condition.

6. Deflation: In economics, deflation is a decrease in the general price level of goods and services. Deflation occurs when the inflation rate falls below 0% (a negative inflation rate). This should not be confused with disinflation, a slow-down in the inflation rate (i.e. when inflation declines to lower levels). Inflation reduces the real value of money over time; conversely, deflation increases the real value of money - the currency of a national or regional economy. This allows one to buy more goods with the same amount of money over time.

10.6 Review Questions

1. Discuss the role of Public Sector.
2. Why is there a need for economic policy? Explain.
3. What do you mean by pre and post reforms

Answers: Self-Assessment

1. (i) (c) (ii) (e) (iii) (d) (iv) (d) (v) (e)

10.7 Further Readings

Books

1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
UNIT 11: SECTORAL PERFORMANCE I: AGRICULTURE:
GROWTH PRODUCTIVITY TRENDS AND CROP PATTERNS

Objectives

After reading this Unit students will be able to:

- Explain the Agriculture Growth and Productivity Trends.
- Discuss about the Crop Patterns in India.

Introduction

Agriculture in India is one of the most important sectors of its economy. It is the means of livelihood of almost two thirds of the work force in the country and according to the economic data for the financial year 2006-07, agriculture accounts for 18% of India’s GDP. About 43% of India’s geographical area is used for agricultural activity. Though the share of Indian agriculture in the GDP has steadily declined, it is still the single largest contributor to the GDP and plays a vital role in the overall socio-economic development of India. One of the biggest success stories of independent India is the rapid strides made in the field of agriculture. From a nation dependent on food imports to feed its population, India today is not only self-sufficient in grain production but also has substantial reserves. Dependence of India on agricultural imports and the crises of food shortage encountered in 1960s convinced planners that India’s growing population, as well as concerns about national independence, security, and political stability, required self-sufficiency in food production. This perception led to a programme of agricultural improvement called the Green Revolution.

Did you know?
The monsoons play a critical role in determining whether the harvest will be rich, average, or poor.

11.1 Agriculture: Growth and Productivity Trends

Agriculture has always been the backbone of the Indian economy and despite concerted industrialisation in the last six decades, agriculture still occupies a place of pride. It provides employment to around 60 per cent of the total work force in the country. The significant of agriculture in the national economy can be briefly explained by considering the role of agriculture under different heads.
(i) Share of Agriculture in the National Income

Table 1: Share of Agricultural Sector in Total Gross Domestic Product
(At 1999-00 Price)

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture (in percentage terms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>56.5</td>
</tr>
<tr>
<td>1970-71</td>
<td>45.9</td>
</tr>
<tr>
<td>1990-91</td>
<td>34.0</td>
</tr>
<tr>
<td>2000-01</td>
<td>24.7</td>
</tr>
<tr>
<td>2005-06</td>
<td>19.55</td>
</tr>
<tr>
<td>2006-07</td>
<td>18.51</td>
</tr>
<tr>
<td>2007-08</td>
<td></td>
</tr>
<tr>
<td>(2004-05 Prices)</td>
<td>17.8</td>
</tr>
<tr>
<td>2008-09</td>
<td>15.7</td>
</tr>
<tr>
<td>2009-10(QE)</td>
<td>14.6</td>
</tr>
<tr>
<td>2010-11 (RE)</td>
<td>14.4</td>
</tr>
</tbody>
</table>

Note: Agriculture includes agriculture, forestry and fishing.


Figures provided by the Central Statistic Organisation (CSO) reveal that in 1950-51, the share agriculture in GDP was around 55 per cent (Table 1). At the process of industrialisation and economic growth gathered momentum under the Five Year Plans with manufacturing and service sectors growing rapidly and agricultural sector limping along, the percentage share of agriculture in GDP declined and reached a level of 14.4 per cent in 2010-11.

Two important facts must be emphasised here:

(a) Agriculture contributed a major share of the national income in India at one time.

(b) The share of agriculture in national income however, has been decreasing continuously while the shares of the manufacturing and service sectors are increasing.

Comparison can be made between the position of agriculture in India with that in the other countries as regards the share of agriculture in national income. In the United Kingdom and United States, only 2 to 3 per cent of the working population is engaged in agriculture; in France, the proportion is about 7 per cent; and in Australia, this is about 6 per cent.

It is only in backward and less developed countries that the working population engaged in agriculture is quite high. For instance, it is 35 percent in Egypt, 59 per cent in Bangladesh, 50 per cent in Indonesia and 68 per cent in China.

(ii) Indian Agriculture and Pattern of Employment in the Country: Agriculture dominates the economy to such an extent that a very high proportion of working population in India is engaged in agriculture.
Table 2: Population and Agricultural Workers

<table>
<thead>
<tr>
<th></th>
<th>1951 (in million)</th>
<th>2001 (in million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population of India</td>
<td>361</td>
<td>1029</td>
</tr>
<tr>
<td>Total Working Population</td>
<td>140 (100)</td>
<td>401 (100)</td>
</tr>
<tr>
<td>Population employed on land of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultivators</td>
<td>70 (50%)</td>
<td>128 (32%)</td>
</tr>
<tr>
<td>Agricultural Labourers</td>
<td>28 (20%)</td>
<td>107 (27%)</td>
</tr>
</tbody>
</table>


Data provided by the Census of India reveals that in absolute terms, agriculture provided employment to 98 million persons in 1951; the number of people working on land (cultivators and agricultural labourers) increased to 235 million in 2001. In terms of percentage, however, people working on land came down from 70 to 59 during the five decades between 1951 and 2001.

The Tenth Plan (2002-07) estimates that the agricultural sector still provides employment to 57 per cent of India’s work force and is the single largest private sector occupation. It is, however, really disturbing that the proportion of agricultural labourers has increased from 20 to 27 per cent between 1951 and 2001 but that of cultivators registered a decline from 50 percent to 32 percent. This shows clearly the growing pauperisation of the rural peasantry.

(iii) Importance of Agriculture for Industrial Development: Indian agriculture has been the source of supply of raw materials to our leading industries. Cotton and jute textile industries, sugar, flour mills vanaspati and plantations—all these depend on agriculture directly. There are many other industries which depend on agriculture in an indirect manner. Many of our small-scale and cottage industries like handloom weaving, oil crushing, rice husking, etc., depend upon agriculture for their raw materials—together they account for 50 per cent of income generated in the manufacturing sector in India.

But then, in recent years, the significance of agriculture to industries is going down as many new industries have come up which are not dependent on agriculture. Under the Five-Year Plans, iron and steel industry, chemicals, machine tools and other engineering industries, automobiles, information technology etc., have come up in a big way.

However, in recent years, the importance of food processing industries is being increasingly recognised both for generation of income and for generation of employment.

(iv) Role of Agriculture in the Field of International Trade: Importance of Indian agriculture also arises from the role it plays in India’s trade. Agricultural products-tea, sugar, oilseeds, tobacco, spices, etc.—constituted the main items of exports of India. Broadly speaking, the proportion of agricultural goods which were exported came to 50 per cent of our exports, and manufactures with agricultural content (such goods as manufactured jute, cloth and sugar) contribute another 20 per cent or so; and the total comes to 70 per cent of India’s exports in 1950-51. But with diversification of exports, more especially after the introduction of agricultural exports which were 18.5% in 1990-91 rose to 20.3% in 1996-97 and thereafter indicated a continuous decline and were of the order of only 10.6% in 2009-10.
Table 3: Agricultural Exports as a percentage of Total Exports

<table>
<thead>
<tr>
<th>Year</th>
<th>Agril. Exports (1)</th>
<th>Total Exports (2)</th>
<th>(1) as % of (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-91</td>
<td>6,013</td>
<td>32,527</td>
<td>18.5</td>
</tr>
<tr>
<td>1996-97</td>
<td>24,161</td>
<td>118,817</td>
<td>20.3</td>
</tr>
<tr>
<td>2000-01</td>
<td>28,657</td>
<td>201,356</td>
<td>14.2</td>
</tr>
<tr>
<td>2005-06</td>
<td>61,194</td>
<td>456,418</td>
<td>10.8</td>
</tr>
<tr>
<td>2006-07</td>
<td>62,411</td>
<td>571,779</td>
<td>10.92</td>
</tr>
<tr>
<td>2007-08</td>
<td>79,040</td>
<td>6,55,864</td>
<td>12.05</td>
</tr>
<tr>
<td>2008-09</td>
<td>85,952</td>
<td>8,40,755</td>
<td>10.22</td>
</tr>
<tr>
<td>2009-10</td>
<td>87,523</td>
<td>8,45,125</td>
<td>10.59</td>
</tr>
</tbody>
</table>


(v) **Role of Agricultural Sector in Economic Planning**: Importance of agriculture in the national economy is indicated by many facts. For example, agriculture is the main support for India’s transport systems, secure bulk of their business from the movement of agricultural goods. Internal trade is mostly an agricultural products.

Further, good crops implying large purchasing lower with the farmers lead to greater demand for manufactures and, therefore, better prices. In other words, prosperity of the farmers is also the prosperity of industries. Likewise, bad crops lead to a depression an business. Generally, it is the failure in the agricultural front that has led to failure of economic planning in particular periods.

**Agricultural Development Essential for Economic Growth**

The significance of agriculture in India arises also from the fact that the development in agriculture is an essential condition for the development of the national economy. Ragnar Nurkse argues that the surplus pelation in agriculture should be shifted to the newly stated industries. Nurks’s thesis is that agricultural productivity will be increased on the one hand and on the other industrial units would be set up with the use of surplus labour.

The Nurksian thesis, though widely welcome one time, has been questioned recently:

(a) Industrialisation does not consist only shifting of workers from agriculture to industries requires a particular set of motives and values which agricultural economy cannot supply. A change agriculture itself is essential before such motivative and values are evolved.

(b) The marketable agricultural surplus will have to be increased considerably to feed the growing under population and to provide raw materials to industries.

(c) New uses have been discovered for foodgrain and other agricultural crops. With fossil oils become increasingly expensive, ethanol is being used as an alternative fuel. Corn, sugarcanes, beetroot and other crops increasingly converted into ethanol and alcohol.

(d) The new industries and the fast growth services sector, however fast they may develop, will be able to provide adequate employment for the even growing millions in India. There is a limit to capacity of employment in industries in the short pride. Necessarily, therefore, increased employment will have to be found in agriculture and in rural industries.

In other words, rapid economic development require rapid agricultural development either to prector to go hand in hand with it. Indian planners learnt a big lesson during the Second and Third Five-Year Plan codes and in recent years, during 2002-03, for example, when failure of the agricultural sector spelt disaster to the entire planning process.
Thus, any change in the agricultural sector positive or negative—has a multiplier effect on the entire economy. The agricultural sector acts as a bulwark maintaining food security and in the process, nation security as well. Recognising the crucial role played by agricultural sector in enabling the widest dispersal economic benefits, the Tenth Plan emphasised that agricultural development is central to rapid economic development of the country.

The unfortunate thing is that most of the economic plans failed continuously to achieve agricultural target. In fact, agricultural development has always been given lower priority at the expense of industries and service sectors.

Progress of Agriculture under the Five-year Plans

On the eve of the First Plan (1951-56), agriculture was in a hopeless and deplorable condition. Our farmers were in heavy debt to the village money-lenders. They were having small and scattered holdings. They had neither the money nor the knowledge to use proper equipment, good seeds and chemical manures. Except in certain selected irrigated areas, they were dependent upon rainfall and upon the vagaries of the monsoons. Productivity of land as well as of labour had been declining and was generally the lowest in the world. In spite of the fact that over 70 per cent of our working population was engaged in cultivation, the country was not self-sufficient in foodgrains but had to depend on imports of foodgrains. Besides, the partition of the country in 1947 worsened the agricultural situation, as India was allotted more people but less land to support them.

Objectives of Economic Planning for the Agricultural Sector

While planning to develop the agricultural sector, the Planning Commission has generally kept four broad objectives in view:

(a) Increase agricultural production: The aim has always been
   (i) to bring more land under cultivation,
   (ii) raise the per hectare yield through intensive application of such agricultural inputs as irrigation, improved seeds, fertilisers, etc. and thus
   (iii) bring about increased agricultural production.

(b) Increase employment opportunities: Apart from increase in production, the agricultural sector has to generate additional employment opportunities and provide scope for increasing the incomes of the poorer sections in our villages.

(c) Reduce the pressure of population on land: Another basic objective of planning in the agricultural sector has been to reduce the number of people working on land, on the assumption that there are too many people working on land. The surplus labour on land should be shifted to secondary and tertiary sectors, preferably in rural and semi-urban areas.

(d) Reduce inequality of incomes in the rural sector: The Government should remove the exploitation of tenants, and should distribute surplus land among small and marginal farmers in such a way that there would be some degree of equality and justice in the rural areas.

All these four objectives are generally followed in all our five year plans but in practice, agricultural planning in India has come to mean increase in agricultural production, viz., the achievement of the first objective; all other objectives have either been ignored or given lower priority.

Strategy used in the Agricultural Sector

To bring about increase in agricultural production and also increase in rural employment, the Five Year Plans use various programmes such as: setting up of community development programmes and agricultural extension services throughout the country, expansion of irrigation facilities, fertilisers, pesticides, agricultural machinery, high-yielding varieties of seeds and expansion of transportation, power, marketing and of institutional credit.
To reduce the pressure of population on land, the strategy used by the Planning Commission was rural development i.e., set up agro-based industries and handicrafts in rural areas, to promote rural transport and communications and to encourage the movement of people from agriculture to industries and service sectors.

Finally, to bring about equality and justice in rural India, the strategy used by the Planning Commission was land reforms which included the removal of intermediaries, like the Zamindars, the protection of tenants through tenancy legislation, ceiling of land holdings and distribution of surplus land among landless labourers and small and marginal farmers.

**Pattern of Investment in the Agricultural Sector**

At the outset, a word of explanation is necessary about the meaning and content of “agricultural sector”. In the first three Plans, “agricultural sector” was composed of agriculture and allied sectors (horticulture, animal husbandry and fisheries) and irrigation and flood control. In the successive Plans, “rural development” and “special area programmes, were added and “irrigation and flood control” was omitted. In Table 4, outlay on agriculture is composed of agriculture and allied sectors, special area programmes and rural development, irrigation and flood control.

It would be clear that the total outlay in each Plan had increased and, correspondingly, the outlay on agriculture allied sectors had also increased. However, the percentage of plan outlay on 31 per cent and 14.9 per cent from the First Plan to the Tenth Plan.

<table>
<thead>
<tr>
<th>Plans</th>
<th>Periods</th>
<th>Total Plan Expenditure (Actual)</th>
<th>Agriculture and allied sectors</th>
<th>% age of agriculture and allied sectors to total outlay</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Plan (Actual)</td>
<td>1951-56</td>
<td>1,960</td>
<td>600</td>
<td>31</td>
</tr>
<tr>
<td>II Plan</td>
<td>1956-61</td>
<td>4,670</td>
<td>950</td>
<td>20</td>
</tr>
<tr>
<td>III Plan</td>
<td>1961-66</td>
<td>8,580</td>
<td>1,750</td>
<td>21</td>
</tr>
<tr>
<td>IV Plan</td>
<td>1969-74</td>
<td>15,800</td>
<td>3,670</td>
<td>24</td>
</tr>
<tr>
<td>V Plan</td>
<td>1974-79</td>
<td>39,430</td>
<td>8,740</td>
<td>22</td>
</tr>
<tr>
<td>VI Plan</td>
<td>1980-85</td>
<td>1,09,300</td>
<td>26,100</td>
<td>24</td>
</tr>
<tr>
<td>VII Plan</td>
<td>1985-90</td>
<td>2,18,730</td>
<td>47,100</td>
<td>23</td>
</tr>
<tr>
<td>VIII Plan</td>
<td>1992-97</td>
<td>4,75,480</td>
<td>1,01,590</td>
<td>21</td>
</tr>
<tr>
<td>IX Plan</td>
<td>1997-02</td>
<td>8,59,200</td>
<td>1,76,217</td>
<td>20.5</td>
</tr>
<tr>
<td>X Plan</td>
<td>2002-07</td>
<td>15,25,639</td>
<td>3,05,055</td>
<td>20.0</td>
</tr>
<tr>
<td>XI Plan (Plan)</td>
<td>2007-12</td>
<td>36,44,718</td>
<td>6,74,105</td>
<td>18.5</td>
</tr>
</tbody>
</table>

*Source: Planning Commission, Various Five-Year Plan Documents.*

The Indian Planning Commission specified various programmes for increasing agricultural production such as irrigation, soil conservation, dry farming and land reclamation, supply of fertilisers and manures, improved agricultural implements, adoption of scientific practices, etc. The Government gave considerable attention to institutional changes such as the setting up of community development programme and agricultural extension services throughout the country, the use of land reforms, expansion of rural transportation, power, marketing and other basic facilities, improvement of the system of co-operative credit, etc. From the Third Plan onwards, the greatest emphasis was laid on irrigation-fertilizer-seed technology which led to the green revolution.
Actual outlay on the agricultural sector ranged between 18 and 24 per cent of the total Plan outlay (except during the first Plan, it was as high as 31 percent). During Eleventh Plan it has declined to only 18.5 percent.

We shall describe the progress made by India in the field of agriculture under the first nine plans. In the next section, we shall take up the progress of agriculture under the Tenth Plan separately.

### Agricultural Progress under the Five Year Plans

#### First three Plans (1951-61)

The First Five Plan (1951-56) aimed at solving the food crisis India was facing at that time and also ease the critical agricultural raw material situation, particularly the acute shortage of raw cotton and raw jute. Accordingly, the First Plan gave the highest priority to agriculture, specially food production, by allotting 31 per cent of the total Plan outlay on agriculture.

The production target in foodgrains during the First Plan was exceeded—for instance, as against the target of about 62 million tonnes, actual production of foodgrains came to nearly 67 million tonnes (Table 5). However, the targets fixed for sugarcane, cotton and jute were not achieved.

The Planning Commission wanted the Second Plan to lay the foundations of industrialisation. Out of total outlay of ₹ 4,600 crores during the Second Plan, a sum of ₹ 950 crores or about 20 per cent was spent on agriculture. Despite the percentage reduction in Plan outlay on agriculture, the progress on the agricultural front was significant. For example foodgrain production recorded nearly 80 million tonnes in 1960-61, as against the target of 81 million tonnes. Likewise, the production of oilseeds, sugarcane and cotton was much more in 1960-61 than in 1955-56. There was, however, a shortfall in the production of all groups of commodities, as against the target fixed, except in the case of sugarcane in which there was remarkable progress.

Experience in the Second Plan had showed clearly that the rate of growth in agricultural production was a major limiting factor in the progress of the Indian economy.

As the Government felt that the success of the agricultural sector was an essential condition for the success of the entire Plan, the Third Plan fixed ambitious targets of production for all agricultural crops.

#### Table 5 : Achievements in the Agricultural Sector in the Various Plans

<table>
<thead>
<tr>
<th></th>
<th>Foodgrains</th>
<th>Oilseeds</th>
<th>Sugarcane</th>
<th>Cotton</th>
<th>Jute</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Actual</td>
<td>Target</td>
<td>Actual</td>
<td>Target</td>
</tr>
<tr>
<td><strong>First Plan</strong></td>
<td>62</td>
<td>67</td>
<td>5.5</td>
<td>5.6</td>
<td>63</td>
</tr>
<tr>
<td><strong>Second Plan</strong></td>
<td>81</td>
<td>80</td>
<td>7.6</td>
<td>6.5</td>
<td>78</td>
</tr>
<tr>
<td><strong>Third Plan</strong></td>
<td>100</td>
<td>72</td>
<td>9.8</td>
<td>6.4</td>
<td>100</td>
</tr>
<tr>
<td><strong>Fourth Plan</strong></td>
<td>129</td>
<td>104</td>
<td>10.5</td>
<td>8.7</td>
<td>150</td>
</tr>
<tr>
<td><strong>Fifth Plan</strong></td>
<td>125</td>
<td>132</td>
<td>12.0</td>
<td>8.9</td>
<td>165</td>
</tr>
<tr>
<td><strong>Sixth Plan</strong></td>
<td>154</td>
<td>146</td>
<td>11.1</td>
<td>13.0</td>
<td>215</td>
</tr>
<tr>
<td><strong>Seventh Plan</strong></td>
<td>180</td>
<td>171</td>
<td>18.0</td>
<td>17.0</td>
<td>217</td>
</tr>
<tr>
<td><strong>Eighth Plan</strong></td>
<td>210</td>
<td>199</td>
<td>23.0</td>
<td>25.0</td>
<td>275</td>
</tr>
<tr>
<td><strong>Ninth Plan</strong></td>
<td>234</td>
<td>211</td>
<td>30.0</td>
<td>20.7</td>
<td>336</td>
</tr>
<tr>
<td><strong>Tenth Plan</strong></td>
<td>234</td>
<td>216</td>
<td>30.0</td>
<td>24.0</td>
<td>336</td>
</tr>
</tbody>
</table>

**Note:**
1. Production of foodgrains, oilseeds and sugarcane in million tonnes.
2. Production of cotton in millions of bales of 180 Kgs each.
3. Production of jute in millions of bales of 170 kgs each.

**Source:** Plan documents and Economic Surveys.
The Government introduced the new agricultural technology known as Intensive Agricultural District Programme (IADP), which was soon followed by a programme of using improved seeds, viz., High Yielding Varieties Programme (HYVP). The new agricultural technology was expected to usher in the green revolution. However, as a result of the extensive and serious drought conditions in 1965-66, agricultural production was adversely affected.

(a) None of the agricultural targets—except sugarcane—was achieved during the Third Plan period; and

(b) The actual output at the end of the Third Plan in the case of foodgrains, oilseeds and raw cotton was lower than the output at the end of the Second Plan, indicating that the Third Plan was a wash-out as far as agriculture was concerned.

As a consequence of the shortfall in food production and serious famine conditions in many parts of the country, the Government was forced to import foodgrains extensively during the last year of the Third Plan. Besides, for the first time, the public lost interest in the planning process and the Government adopted “plan holiday” for three years.

The experience of the Third Plan made the Planning Commission realise the bitter fact that economic planning would be a failure unless agricultural production was increased rapidly. Accordingly, the Planning Commission assigned high priority to agriculture in the successive plans.

Progress from the Fourth Plan Onwards

The approach paper to the Fourth Plan emphasised the necessity to create favourable economic conditions for the promotion of agriculture and a systematic effort to extend the application of science and technology to improve agricultural practices. Ambitious targets were fixed for the Fourth Plan.

Table 5, however, reveals clearly that none of the targets fixed in agriculture in the Fourth Plan was realised. For example, the target for foodgrains was 129 million tonnes for 1973-74 but the actual production in that year was only 104 million tonnes—the highest level of production during the Fourth Plan was 108 million in 1970-71.

Consider further the targets fixed and actual production of oilseeds, sugarcane, cotton and jute during the Fourth Plan. It would be clear that the Fourth Plan failed to achieve the agricultural targets.

The Fifth Plan (1974-1979) was prepared with great care, with total Plan outlay at ₹ 39,430 crores out of which outlay on agriculture and allied sectors would be ₹ 8,740 crores (which was 24 per cent of the total Plan outlay). The targets for production of various crops and the necessary inputs to achieve these targets were also clearly set out. Unfortunately, all the financial calculations went wrong because of the serious inflationary situation during 1973-74. However, after the declaration of emergency (1975) agricultural progress was steady and plan targets were almost realized.

The Janata Party which came to power in 1997, however, suspended the Fifth Plan midway – rather foolishly - and started preparing the Sixth Plan. It will be clear from Table 4 that the actual production of foodgrains in the last year (1978-79) of the Fifth Plan was 132 million tonnes, as against the target of 125 million tonnes. In fact, apart from the First Plan the Fifth Plan was the only period when the actual production of foodgrains exceeded the targeted production.

Progress since the Sixth Plan

Of all the Plans, the Sixth Plan (1980-85) was hailed as a great success, particularly because of the success on the agricultural front. As against the annual growth rate of 3.8 per cent for agriculture, the actual growth rate was 4.3 per cent. The production of foodgrains in 1983-84 was 152 million tonnes (against the target of 154 million tonnes) and was hailed by the Indian Government as the Second Green Revolution. While the First Green Revolution from 1967-68 arose from the introduction of new high yielding varieties of Mexican wheat and dwarf rice varieties, the Second Green Revolution from 1983-84 was said to be from expansion in supplies of inputs and services to farmers, agricultural extension and better management.

While the First Green Revolution was confined mainly to Punjab, Haryana and Western U.P., the Second Green Revolution had spread to eastern and central states including West Bengal, Bihar,
Notes

Orissa, Madhya Pradesh and eastern U.P. These states had made tremendous progress in recent years.

However, it is important to emphasise the fact that, despite all the great claims of the Government, none of the targets (except in oilseeds) of agricultural production was achieved during the Sixth Plan. The Seventh Plan (1985-90), the Eighth Plan (1992-97) and the Ninth Plan (1997-2002) targeted 4 per cent annual rate of growth and laid emphasis on specific projects in the field of agriculture. They included a special rice production programme in the eastern region, national watershed programme for rainfed agriculture, national oilseeds development project, social forestry, etc.

The Seventh Plan was not successful in the sense that the targets fixed for various sectors (except cotton) were not achieved. However, the level of production at the end of the Seventh Plan was much higher than at the beginning of the Seventh Plan.

The Eighth Plan (1992-97) was basically sound in its approach in the strategy of development and in the targets of agricultural crops. Fortunately, weather and climate conditions were favourable and broadly many of the targets could be fulfilled. For instance, the actual outputs in 1996-97 (the last year of the Eighth Plan) of oilseeds, of sugar cane, of cotton and of jute were higher than the targets for these crops in the Eighth Plan. The only exception was foodgrains - the Eighth Plan target was 210 million tonnes but the actual production was 199 million tonnes. In fact, the production of foodgrains at 199 million tonnes was the highest output registered by India till then.

The Ninth Plan (1997-2002) was not much a success, as far as the agricultural targets were concerned. For instance, the Ninth Plan fixed the target foodgrain production at 234 million tonnes in 2001-02 but the actual production was only 211 million tonne. The same story of under-achievement was to be note in other sectors of agriculture also. One is again inclined to ask the question: why should the planners unrealistic and unrealisable targets?

Agriculture Sector Under the Tenth Plan

Growth Projection in the Tenth Plan

The Tenth Plan adopted the prescriptions of the National Agricultural Policy, 2000 (NAP, 2000). The Tenth Plan, particularly, emphasised the following types of growth envisaged by NAP, 2000.

(i) growth that was based on efficient use of resources and conservation the soil, water and bio-diversity of the country;
(ii) growth with equity i.e. growth which was widespread across regions and covered all farmers.
(iii) growth that was demand driven and cater to domestic markets as well as maximised benefits from exports of agricultural products in the face of the challenges arising from economic liberalisation and globalisation; and
(iv) growth that was sustainable technologically environmentally and economically.

The NAP, 2000 envisaged a growth rate exceeding 4 percent per annum in the agricultural sector. The Tenth Plan also targeted a 4 per cent rate of growth. Towards this purpose, the Tenth Plan visualised:

(a) the estimated foodgrains requirement at the end of the Tenth Plan: 230 million tonnes.
(b) the estimated supply position is expected to be between 225 and 243 million tonnes.

The Tenth Plan planned to achieve this volume of production of foodgrains through

(i) adequate thrust on maize cultivation which has good scope for increasing production of mine cereals to 43 to 48 million tonnes; and
(ii) thrust on commercialisation of hybrid rice of a large scale and improved technologies in wheat.

Pattern of Outlay on Agriculture in the Tenth Plan

The Tenth Plan targeted 8 per cent rate of growth in GDP and accordingly, estimated the required level of investment (at 2001-02 prices) of ₹ 15,92,300 crores in the public sector - this was 67 per cent
increase over the Ninth Plan outlay. As regards agriculture, the Tenth Plan set a target growth rate of 4 per cent per annum during the Plan period, and raised Plan allocations on agriculture and allied sectors, rural development, special area programmes and irrigation and flood control.

The public sector outlay on agriculture and allied activities, irrigation and flood control, rural development and special area programme which was of the order of ₹1,76,217 crores in the Ninth Plan, increased to ₹3,05,055 crores in the Tenth Plan which was 20 percent of the total.

Table 6: Tenth Plan Allocation on Agriculture

<table>
<thead>
<tr>
<th></th>
<th>Ninth Plan</th>
<th>Tenth Plan</th>
<th>Eleventh Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount (₹ crores)</td>
<td>%</td>
<td>Amount (₹ crores)</td>
</tr>
<tr>
<td>1. Agriculture and allied activities, rural development, special area Irrigation and flood control</td>
<td>1,76,217m</td>
<td>20.5</td>
<td>3,05,055</td>
</tr>
<tr>
<td>2. Total Plan outlay</td>
<td>8,59,200</td>
<td>100.0</td>
<td>15,25,639</td>
</tr>
</tbody>
</table>


Note: Tenth and Eleventh Plan figures are at 2006-07 prices.

Plan outlay; this was almost the same as that in the Ninth Plan. In fact, as emphasised earlier, public sector outlay on agriculture irrigation and others has ranged between around 20 and 24 per cent of the total outlay in all the Plans. It may be noted that if we take agriculture and allied activities alone, public sector outlay has been handly 4.9 percent of total outlay in ninth plan, 3.9 percent in tenth plan proposed expenditure an agriculture and allied activities in merely 3.7 percent of total plan outlay in 11th plan.

Targets of Crop Production in the Tenth Plan

The Tenth Plan was the first Plan which did not fix targets of crop production.

For every Plan, the Planning Commission used to fix

(a) the rate of growth in the agricultural sector as a whole,

(b) the planned target growth of production in each major crop viz., cereals, pulses, oilseeds, sugarcane, cotton, jute and so on.

(c) the targets of production of major inputs such as seeds, fertilisers, irrigation etc., and

(d) the strategy to be adopted to achieve the targets of crop production in general and the rate of growth in agriculture in particular.

The Tenth Plan was a clear departure from this traditional presentation. It described the achievement/non-achievement of the Ninth Plan (Table 7).

The Planning Commission must have been clearly ashamed of its target projections in the Ninth Plan. It is clear from Table 6 that the actual production of foodgrain for the year 2001-02 (final year of the Ninth Plan) was 212 million tonnes, as against the planned target of 234 million tonnes—a huge shortfall of 22 million tonnes. In the case of oilseeds the actual output in 2001-02 was 21 million tonnes as against the targeted figure of 30 million tonnes. This was also the case of sugarcane and cotton.

What was really pathetic was that the act production of oilseeds and cotton during the Ninth Plan was not only less than the target production but less than the base level (1996-97) output. This was define negative rate of growth. It is unfortunate that we could achieve Ninth plan targets even at the end of Tenth Plan.

Table 7 gives agricultural achievement during and 10th Plans. During the Tenth Plan period(2002-07 foodgrain production had increased to 216 million tonnes - it may be mentioned that the target of foodgrain production was fixed at 234 million tonnes for the Ninth Plan period (2001-02).
however, clear growth in oilseeds, sugarcane and cotton. In general, it is estimate that the annual rate of growth in agriculture was 2.3 per cent, as against the targeted 4 per cent.

**Agriculture in the Eleventh Plan (2007-12)**

During the 11th Plan also, the Planning Commission has fixed the target of 4 per cent, rate of growth in agriculture, as if this is the first time such a “high” rate of growth has been fixed. The Planning Commission has appointed a special Agricultural Commission to monitor this rate of growth.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All foodgrains ( (m.) tonnes)</td>
<td>199</td>
<td>234</td>
<td>213</td>
<td>216</td>
</tr>
<tr>
<td>Oilseeds ( (m.) tonnes)</td>
<td>24</td>
<td>30</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>Sugarcane ( (m.) tonnes)</td>
<td>278</td>
<td>336</td>
<td>297</td>
<td>345</td>
</tr>
<tr>
<td>Cotton ( (m.) bales of 170 kg)</td>
<td>14</td>
<td>16</td>
<td>10</td>
<td>23</td>
</tr>
</tbody>
</table>

**Source:** Five Year Plan documents and Economic Survey, 2008-09 and Ministry of Agriculture.

*3rd Advance Estimates

**Table 8: Some key Indicators of Agriculture Progress**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Foodgrains ( (m.) tonnes)</td>
<td>4.27</td>
<td>4.24</td>
<td>13.5</td>
<td>5.0</td>
<td>8.00</td>
<td>3.67</td>
<td>9.67@</td>
</tr>
<tr>
<td>Rice</td>
<td>51</td>
<td>89</td>
<td>176</td>
<td>216</td>
<td>231</td>
<td>234</td>
<td>218</td>
</tr>
<tr>
<td>Wheat</td>
<td>6</td>
<td>12</td>
<td>55</td>
<td>75</td>
<td>78</td>
<td>81</td>
<td>81</td>
</tr>
<tr>
<td>Oilseeds</td>
<td>5</td>
<td>9</td>
<td>19</td>
<td>24</td>
<td>29</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>57</td>
<td>122</td>
<td>241</td>
<td>345</td>
<td>341</td>
<td>274</td>
<td>278</td>
</tr>
<tr>
<td>Cotton ( (m.) bales)</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>23</td>
<td>25</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Jute &amp; mesta</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Potato</td>
<td>3</td>
<td>4</td>
<td>15</td>
<td>24</td>
<td>n.a</td>
<td>29</td>
<td>n.a</td>
</tr>
</tbody>
</table>

**Source:** Economic Survey, 2009-10. Note: * Cotton : million bales of : 170 kg @ for 2008-09 Agricultural Statistics At a Glance, 2010 ** Jute : million bales of : 180 kg

The corporate sector is actively encouraged to go for contract farming in fruits, vegetables and other crops. It is encouraged to provide seeds, fertilisers and assured marketing. At the same time, the Government is encouraging the setting up of Special Economic Zones (SEZ) by buying large tracts of agricultural land for setting up industries and service sectors. There is considerable confusion in the agricultural sector in India.

The volatile variation in crop production from year to year shows that there is very little planning in Indian agriculture. The old saying that “Indian agriculture is a gamble in the rains” holds good even today, after nearly six decades of planning. In simple terms, agricultural planning has been a failure.

The data pertaining to 2007-08 reveals that renewed efforts to boost agricultural production has shown concrete results. Total foodgrains production will be of the order of 231 million tonnes - a
record up to this time. Rice production touches 96 m. tonnes, wheat 78 m. tonnes, coarse cereals 41 m tonnes and pulse 15 m. tonnes. Oil seeds and cotton have also yielded higher production. It appears that agriculture is turning the corner. There is a need to strengthen this process further.

After showing improvement in production of different crops, crops failure in different crops affected all crops except rice in 2008-09.

**International Comparison of Agricultural Productivity**

It will be useful to make a comparison of year per hectare of some selected crops in India with in other countries of the world so as to show much India lags behind the other countries of the world.

Table 10 shows:

(a) the actual yield per hectare of major food non-food crops in India in the year 1999;
(b) the actual yield in the country which is largest producer of each specific crop; and
(c) the highest yield per hectare in the world.

In the case of rice, the highest yield in the world nearly 94 quintals per hectare recorded by Egypt. In case of wheat, the highest yield is recorded by England over 78 quintals per hectare. China which is the single largest producer both rice and wheat in the world records with average yields of 60 quintals and 39 quintals respectively.

Now, compare with average annual yield in India – only 30.0 quintals of rice and 26.2 quintals of wheat. Rice is India’s major crop but the annual yield is only one-third of that of Egypt and a little less than one-half of the annual yield of China.

Even in the case of wheat – the crop which has recorded the highest increase in India in the last 50 years – India’s average annual yield is much lower as compared to the U.K. (world’s highest yield in wheat) and China (world’s largest producer of wheat).

In fact, when we compare carefully the average annual yield of every crop mentioned in Table 9, we find that the average yield in India generally ranges between 30 and 50 per cent only of the highest average yield in the world — this shows the enormous scope for, as well as challenge to, India to increase its annual yield. This fact demonstrates clearly that the increase in yield recorded by India under the green revolution and the introduction of modern technologies are not particularly unique to India; in fact, it is much less in India than the increase recorded by other developing countries like China.

For instance, against the actual yield of 30.0 quintals per hectare in rice, India has the potential to produce between 40 and 58 quintals of rice per hectare. In the case of wheat, India can produce up to 60 to 68 quintals, but the average yield is around 26 quintals per hectare. Even if we assume that India could register the minimum of the potential yield, the total output of rice in India should be 168 million tonnes per year (42 million hectares x 40 quintals or 4 tonnes per hectare); but the actual production of rice ranged between 82 and 93 million tonnes in between 1997 and 2007. Likewise, the total output of wheat in India should be 156 million tonnes (26 million hectares x 60 quintals or 6 tonnes per hectare); however, the actual production of wheat ranged between 69 and 75 million tonnes between 1997 and 2007.

It would thus be clear that if India could achieve the **minimum of potential yield** of only these two cereals, the total production would be around 324 million tonnes. It may be mentioned here that the total production of all cereals and pulses came to 199 million tonnes in 1996-97 and 213 million tonnes in 2006-07. The gap between the actual yield and potential yield in all our crops and the gap between the average yield in India and the average yield in many other countries of the world — these pose a challenge and an opportunity for India — vast scope for second and third green revolution.

Some agricultural economists have expressed their doubts about the possibility of India ever reaching the levels of yield attained in cold countries. There is no doubt that some scope of increasing yield exists, but to hope that it can be raised to 3 to 5 times is not feasible due to the fact that the semi-dwarf HYV varieties of wheat in India have a duration of 140 days, while in the cold countries long duration wheat crop of 10 months duration helps to obtain higher yields.
There is another point to remember here. In the span of a year, the Indian farmers can grow another rice crop or a crop of potato or legume or short-duration vegetables. Thus the farmer in India, by shifting from a mono-cropping to a multi-cropping system, is more concerned with the over-all yield from all crops during a year, rather than in terms of productivity per hectare of individual crops. Dr. M.S. Swaminathan, the eminent agricultural scientist, responsible for green revolution in India asserts: “It is unscientific to make comparisons purely on the basis of individual crops, but it would be more scientific to compare the cropping system as a whole.” Obviously, the sharp differences shown in Table 10 do not take into account these factors.

Present Status of Indian Agriculture: Looming Agricultural Crisis

During the last 56 years of planning, India’s agricultural development — more commonly called the Green Revolution — has been applauded the world over and many developing countries have started considering India their role model. Initially, India remained a food deficit country for almost two decades since Independence. But with the Green Revolution, India became not only self-sufficient in foodgrains but accumulated a huge food surplus - about 58 million tonnes in January 2002.

The agricultural situation started improving after the middle of 1960s with the introduction of high-yielding varieties (HYVs) of crops and the development of agriculture infrastructure for irrigation, credit, other input supply, storage and marketing. The high production potential, input-responsive HYVs motivated Indian farmers to adopt improved and modern technologies. The Government came out with minimum support prices (MSP) and procurement of agricultural commodities and expanded the storage, marketing and distribution of foodgrains at the national level.

The major factors for the all-round success of agriculture were: increase in the net area sown, expansion of irrigation facilities, land reforms, specially consolidation of land holdings — this was the first phase (1947-65) of agricultural development since Independence; development and introduction of high-yielding seeds, extensive use of chemical fertilisers, pesticides and improved crop production technologies — this was the second phase (1965-85) of development in the agriculture sector; price policy based on MSP and procurement operations, infrastructure for storage/cold storage, increase in investments — this could be broadly called the third phase of agricultural development in India.

In spite of the spectacular achievements, various constraints and disturbing trends have always continued to hamper the requisite growth of the agricultural sector:

(i) Agriculture, Still a Gamble in the Monsoons: Despite almost 6 decades of planning, agriculture in India has continued to be a gamble in the monsoons: failure of rainfall in some parts of the country and excessive rains and consequent floods in certain other areas of the country. It appears that the Planning Commission should have devoted more attention and more resources to the control of the vagaries of the monsoons. During the first decade of planning (1951-61) the main emphasis on extension of irrigation and in fact, even in the successive decades, considerable importance was given to the cumulative increase in the area brought under irrigation. In none of the Plans, however, the irrigation targets had been fulfilled. Besides, even the irrigation potential created during a plan was not fully utilised for various reasons.

(ii) Limited Use of New Agricultural Technology: Since 1961, the emphasis shifted to the use of seed-fertiliser-water technology, known as the new agricultural strategy. But the new strategy succeeded only in wheat and to a small extent in rice; other food and nonfood crops did not show perceptible improvement in production. Dry land cultivation was not touched at all by the new agricultural strategy.

(iii) Decline in Investment in Agriculture: We have generally been given to understand that government investment was significant in boosting growth in agriculture. Besides, the role of the Government was not only to raise investment but also induce private investment in agriculture. The figures published by the Government in the Economic Survey are quite revealing.

In the early stages of technology breakthrough and green revolution, there was some improvement in private investment in farm assets like irrigation pumps, wells, tractors etc. Thereafter, private investment declined. Since 1980-81 however, there has been some buoyancy
in private investment in agriculture — from 70% to 82%. The rising trend in private investment probably reflects the improved incentives for agriculture and favourable change in the trade policy.

Table 9: Gross Investment in Agriculture

<table>
<thead>
<tr>
<th>Year</th>
<th>Public</th>
<th>Private</th>
<th>Total</th>
<th>% Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Public</td>
</tr>
<tr>
<td>1960-61</td>
<td>590</td>
<td>1,080</td>
<td>1,670</td>
<td>35</td>
</tr>
<tr>
<td>1970-71</td>
<td>790</td>
<td>1,970</td>
<td>2,760</td>
<td>29</td>
</tr>
<tr>
<td>1980-81</td>
<td>1,800</td>
<td>2,840</td>
<td>4,640</td>
<td>39</td>
</tr>
<tr>
<td>1990-91</td>
<td>4,400</td>
<td>10,440</td>
<td>14,840</td>
<td>30</td>
</tr>
<tr>
<td>1999-00</td>
<td>6,670</td>
<td>41,480</td>
<td>50,150</td>
<td>17</td>
</tr>
<tr>
<td>2004-05</td>
<td>23,039</td>
<td>86,967</td>
<td>1,10,006</td>
<td>20</td>
</tr>
<tr>
<td>2008-09</td>
<td>24,452</td>
<td>1,14,145</td>
<td>1,38,597</td>
<td>18</td>
</tr>
<tr>
<td>2009-10</td>
<td>NA</td>
<td>NA</td>
<td>1,33,377</td>
<td>NA</td>
</tr>
</tbody>
</table>

Note: 1. The figures for 2004-05 onwards are based 2004-05 prices.
2. The figures given by the Government of India are based on 1980-81 prices. Figures for 1990 and subsequent years are based on 1993-94. Hence, these figures are not really comparable.


The worrying aspect is that private investment in agriculture is almost completely concentrated in northern regions particularly Punjab, Haryana and Western Uttar Pradesh and almost completely absent in out parts of the country.

Public investment, on the other hand, is a disappointment. After showing an uptrend in the seventies, public investment in real terms (i.e. in 1980 prices) has generally declined — probably due to division of resources from investment to current expenditure in the form of increased inputs and input subsidies.

The share of agricultural sector’s capital formation in GDP declined from 1.92 percent in the early 1990 to 1.28 per cent in the early 2000s. This was really disturbing. This decline was really due to decline stagnation in public investment in agriculture since the middle 1990s. This has improved to 2.12% in 2006.

(iv) Failure of Land Reforms: Till the middle of land the 1970s the Government hoped to implement reforms, specially tenancy legislation and ceiling on land holdings. The Government failed to implement the land reform measures and there was very little of and redistribution in favour of marginal farmers and landlords labourers or protection of tenants from exploitation from eviction. The Government reconciled itself to failure to push forth progressive land reforms and shift the emphasis to technological changes. Since the Seven Plan, for instance, there is no mention of land reforms. The bitter conflict between landlords and the landless Bihar, Andhra Pradesh and other states - the rape expansion of the Naxalite movement—is in the result the failure to implement land reforms.

(v) Growing Exploitation of the Tenants: From the very beginning, the growth prospects of Indian agriculture were vitally dependent on the role of public investment in irrigation, drainage and flood control, in land shaping and land consolidation, in prevention of soil erosion and salinity, in the development of a widespread research and extension network and in rural electrification and provision of institutional credit. But technological change is not a substitute for institutional
change in agriculture. It is only a fusion of technological and institutional changes that can optimise the process of agricultural growth from the point of view of maximising production as well as distributive justice. However, this fusion has not taken place yet. As a result, the technological progress in the agricultural sector has been accompanied by growing inequality. Although as a consequence of rapid agricultural growth, the wages of agricultural labourers have risen in the green revolution areas of Punjab and Haryana. It has also been observed that land is being treated by the rich farmers as a very valuable asset. Exploitation of tenants has not declined and consequently, the fruits of agricultural progress are being pocketed by the rich peasantry. This is the paradox of growing agricultural production and growing inequalities and injustices.

(vi) Failure to control growth of rural population: The Government failed to arrest the rapid growth of population in rural areas and also to create non-agricultural employment in the rural sector so that those who could not be provided land in the programme of land redistribution could be provided non-agricultural employment to eke out a living. A programme of enlarging non-agricultural employment, if it could grow faster than the increase in total labour force, could, after a period of time, help to reduce the excessive pressure of population on land. Basically, the Planning Commission failed to appreciate the fact that the process of agricultural transformation should emphasise not only higher growth rate in agriculture but should also stress the need for a decentralised industrial pattern of growth with greater emphasis on labour-intensive technology.

(vii) Unbalanced agricultural development: Bulk of the increase in output, particularly foodgrains had been concentrated in a few progressive regions which were already enjoying high levels of consumption of foodgrains. As a result, the marketable surplus of foodgrains had been rising at a high rate in these states resulting in the accumulation of large stocks with the Government with the attendant problems of storage and distribution and the cost of storage and distribution. Many regions had continued to be poor and backward, indicating the necessity for a balanced growth of agriculture as between different regions. Crop yields were low in these areas and, therefore, the use of modern inputs in these areas would raise agricultural productivity considerably.

Likewise, a breakthrough in dry-land farming would help to raise the output of millets, pulses and oilseeds and thus help to correct inter-crop imbalance. Small and marginal farmers predominate in the dry-land farming regions and naturally, they will benefit most through watershed programmes and national pulse and oilseed development programmes.

The various weaknesses of the agricultural sector mentioned above indicate the main concerns and thrusts of the successive Five Year Plans. Outlining the strategies of agricultural development during the Seventh Plan, the Planning Commission wrote: “Broadening the base of agricultural growth and modernisation through infrastructure development e.g. irrigation, drainage, roads, markets and credit institutions in the less developed regions, extension of new technology, particularly break-through in dry-land farming, afforestation and appropriate price and procurement policies for crops are essential for accelerating the growth of agricultural output, reducing annual fluctuations in output and for correcting inter-regional, inter-crop and inter-class disparities. Such a pattern of growth can also provide the necessary impetus to rural development through the dispersal of agro-industries. This is how agriculture can contribute more effectively to the fulfilment of the national objectives of self-reliance, removal of poverty, increase in productivity and eco-preservation.”

11.2 Crop Patterns in India Since Independence

Crop Pattern Before Independence

By cropping pattern is meant the proportion of area under different crops at a point of time. A change in cropping pattern implies a change in the proportion of area under different crops. At the beginning of the century, more than 83 per cent of land was put under food crops and about 17 per cent under
non-food crops. By 1950-51, area under food crops had come down to 74 per cent and area under non-food crops had increased to 26 per cent. This shift in crops from foodgrains to non-foodgrains was mainly due to the higher price of non-foodgrains, commonly known as cash crops. It reflected a change from subsistence cropping to commercial cropping.

Table 10 shows the share of different categories of crops in the total area sown. The acreage figures from 1960-61 show a reversal of the above trend, and a definite shift from non-foodgrains to foodgrains. By 1970-71, the ratio of foodgrains to non-foodgrains was 74 : 26 and by 2006-07, the share of foodgrains has further declined and stand at 64 : 36. Two important reasons may be given to explain this shift in favour of foodgrains.

(a) Prices of foodgrains have been rising quite fast and the farmers have started growing foodgrains for the market, in the same way they grow oilseeds, cotton and other commercial crops. In other words, the traditional classification between food crops and commercial crops is losing its significance.

(b) The cultivation of foodgrains has become highly remunerative and productive under the impact of the new technology.

Table 10 : Nature of Crop Distribution of Area Since 1951

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) All Crops</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>(b) Foodgrains</td>
<td>75</td>
<td>74</td>
<td>64</td>
</tr>
<tr>
<td>(c) Non-foodgrains</td>
<td>26</td>
<td>26</td>
<td>36</td>
</tr>
</tbody>
</table>


Among foodgrains, the largest increase in area has been recorded by wheat, with an increase of 150 per cent. While the increase in the case of rice has been quite modest (36%), coarse cereals have recorded only marginal increase, indicating a positive shift from minor to major crops. Increase in acreage under pulses has been modest.

The traditional commercial crops, viz., oilseeds, cotton, jute, sugarcane, etc., have made impressive increases in acreage, much more than food crops (with the exception of wheat). Of these, the most spectacular was the increase in acreage under potato, viz., by over 300 per cent between 1951 and 2005. By 2004-05, the ratio of foodgrains to non-foodgrains was 64 : 36.

Factors Affecting Cropping Pattern in India

At one time many believed that cropping pattern in India could not be changed. S.N. Sinha, for instance, gave expression to such an opinion when he wrote : “In a tradition-ridden country with a very low-level of knowledge, the peasants are unwilling to make experiments. They accept everything with a spirit of resignation and a sense of fatalism. For them, agriculture is a way of life rather than a commercial proposition. ...In an agricultural community where the members are illiterate and tradition-ridden, there is hardly any possibility of crop shifts.” This opinion is not correct any more as is clear from the change in cropping pattern in Punjab. It is widely agreed that the crop pattern of a country like India can be changed and should be changed.

1. Physical and Technical Factors and Cropping Pattern

Cropping pattern of any region depends upon physical characteristics as soil, climate, weather, rainfall, etc. For instance, in a dry area where the rainfall is scanty and where there is high uncertainty of monsoons, there will be a greater dependence on jowar and bajra, as these crops can be managed with a small quantity of rainfall. Water-logging in parts of Ludhiana and Sangrur districts in Punjab has led to an increase in area under rice; for rice can stand the extra water better than other crops. In the newly reclaimed lands of Madhya Pradesh, millets are grown for a few years after which rice is cultivated.
Apart from soil and climatic conditions, the cropping pattern of a region will depend upon the nature and availability of irrigation facilities. Wherever water is available, not only can a different crop be grown, but even double or triple cropping will be possible. When new irrigation facilities are provided, the whole method of cultivation may change. A superior crop can be grown; a new rotation of crops where there was none, or a better rotation over what prevailed may be possible. One of the important factors responsible for increase in the cultivation of sugarcane, tobacco, etc., is the extension of irrigation facilities. It is possible that because of lack of capital, agricultural prerequisites, better implements, improved seeds and finance for getting fertilisers, it might not have been the right crop that was being grown; but given these facilities, the cropping pattern may change.

2. Economic Factors and Cropping Pattern

Economic motivations are the most important in determining the cropping pattern in a country. Whatever may have been the position in India in the past there are very clear indications that Indian farmers are being clearly influenced by economic factors now. Among economic factors affecting crop pattern, the following are important:

(i) **Price and income maximisation** : According to a study of inter-crop price parities undertaken by the Ministry of Food and Agriculture, “It seems that prices influence the acreage under the crops in two ways. One is that the variations in the inter-crop price parities led to shifts in acreage as between the crops. Another is that the maintenance of a stable level of prices for a crop ... provides a better incentive to the producer to increase the output” Fixed procurement price of wheat and rice and other Government controls have induced farmers to shift to cash crops like sugarcane. According to some authorities, income maximisation pull has greater influence in changing the crop pattern, that is, the farmer would choose that combination of crops which would give him maximum of income. Dr. Raj Krishna, however, argues that relative profitability per acre is the main consideration which influences the crop pattern.

(ii) **Farm Size** : There is a relationship between farm size and the cropping pattern. The small farmers are first interested in producing foodgrains for their requirements. They would go in for cash crops only after they have met their requirements of foodgrains. Small holders, therefore, devote relatively small acreage to cash crops than large holders. This point has been brought out in many empirical studies. But a of Deoria district of Uttar Pradesh brings out clearly fact that almost all farmers, big and small, try to some cash crops. In fact, in recent years it is the small farmers who have been increasing their sugarcane and more than large farmers.

It is true that the need for subsistence traditionally dominated the cropping pattern of the small farmer. But his need for money income cannot be less than that of the large farmer. And, as economy grows, we should expect the small farmers to make very significant adjustments in his crop pattern in order to maximise his income.

(iii) **Insurance against risk** : The need minimise the risk of crop failures not only explain diversification but also some specific features of patterns. For instance, the persistence of millets many regions which puzzles many economists can understood mainly as insurance against bad seasons dry areas.

(iv) **Availability of Inputs** : As already indicated, crop pattern is also dependent upon the availability of such inputs as seeds, fertilisers, water storage an marketing, transport, etc. Of the additional facilities most rewarding would be irrigation. The availability groundnut seed was one of the important factors which induced many farmers to increase the area under the crop in Madhya Pradesh. Another reason why farmers prefer groundnut to cotton is that the former is quit yielding, while cotton is on the field for a long time and does not easily satisfy the need for quick cash.

(v) **Tenure** : Under the crop sharing system, the landlord has a dominant voice in the choice of the cropping pattern and this helps in the adoption of income-maximising crop adjustments.

3. Government Action and Crop Pattern

Government can influence crop pattern through legislative and administrative measures. Steps may be taken by the Government to ease or subsidise the supplies of the farm inputs and
knowledge. The provision of irrigation facilities or the supply of seeds and fertilisers, etc., may be related to the adoption of a given crop pattern by the farmers.

Apart from the personal prejudices, and inadequate financial and other resources of the farmers there may be factors like recurrent drought or pest infestation that prevent them from opting for a more remunerative set of crops. In those situations if more of irrigation, institutional credit fertilizers pesticides etc. are made available, it would be possible for them to change the crop-structure and so earn larger returns from their land. To the extent it is not possible for a farmer to acquire all these by himself, the Government could come to his help and procure these for him.

To other possibilities of helping the farmer to improve the cropping pattern are building of new roads which will improve the flow of commodities to the market where they will fetch better prices and help to stabilish industries or townships nearer to their land.

Self-Assessment

1. Choose the correct option
   
   (i) Where did crop circles first appear?
   
   (a) Peru (b) England
   (c) Russia (d) Zambia

   (ii) Who or what was discovered to have created those early crop circles?

   (a) Ball lightning (b) Wind vortices
   (c) Pranksters (d) Aliens

   (iii) What is the science of studying crop circles called?

   (a) Cereology (b) Agronomy
   (c) Terralogy (d) Anomology

   (iv) Wiltshire County, England, is the center of the crop circle phenomenon. What else is Wiltshire home to?

   (a) Tower of London (b) Canterbury Cathedral
   (c) Windsor Castle (d) Stonehenge

   (v) What form have some crop circle artists included in their work to prove the designs are not natural occurrences?

   (a) Triangle (b) Straight line
   (c) Perfect circle (d) Zigzag

11.3 Summary

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

- Indian agriculture has been the source of supply of raw materials to our leading industries. Cotton and jute textile industries, sugar, flour mills vanaspati and plantations—all these depend on agriculture directly.

- Importance of Indian agriculture also arises from the role it plays in India’s trade. Agricultural products-tea, sugar, oilseeds, tobacco, spices, etc.—constituted the main items of exports of India.

- The significance of agriculture in India arises also from the fact that the development in agriculture is an essential condition for the development of the national economy. Ragnar Nurkse argues that the surplus pelation in agriculture should be shifted to the newly stated industries. Nurkse’s thesis is that agricultural productivity will be increased on the one hand and on the other industrial units would be set up with the use of surplus labour.
Notes

- The First Five Plan (1951-56) aimed at solving the food crisis India was facing at that time and also ease the critical agricultural raw material situation, particularly the acute shortage of raw cotton and raw jute.
- The Government introduced the new agricultural technology known as Intensive Agricultural District Programme (IADP), which was soon followed by a programme of using improved seeds, viz., High Yielding Varieties Programme (HYVP). The new agricultural technology was expected to usher in the green revolution.
- The Tenth Plan targeted 8 per cent rate of growth in GDP and accordingly, estimated the required level of investment (at 2001-02 prices) of ₹ 15,92, 300 crores in the public sector - this was 67 per cent increase over the Ninth Plan outlay.
- So, far we have explained agricultural progress under reach Five Year Plan. We shall give the progress of agriculture as a whole during the last 58 years. The progress of the agricultural sector, summarised in Table 8, brings out the tremendous progress the country has achieved since the First Plan, even though, the targets fixed in each Plan might not have been fully met.
- It will be useful to make a comparison of year per hectare of some selected crops in India with in other countries of the world so as to show much India lags behind the other countries of the world.
- By cropping pattern is meant the proportion of area under different crops at a point of time. A change in cropping pattern implies a change in the proportion of area under different crops. At the begining of the century, more than 83 per cent of land was put under food crops and about 17 per cent under non-food crops.
- The traditional commercial crops, viz., oilseeds, cotton, jute, sugarcane, etc., have made impressive increases in acreage, much more than food crops (with the exception of wheat). Of these, the most spectacular was the increase in acreage under potato, viz., by over 300 per cent between 1951 and 2005. By 2004-05, the ratio of foodgrains to non-foodgrains was 64 : 36.
- The most important consideration affecting cropping pattern is the economic consideration. Even in a country like India which is dominated by farmers steeped in poverty and conservatism and where farmers hold tiny bits of land, cropping pattern can be changed through appropriate change in economic motive.

11.4 Key-Words

1. Domestic product : The total market value of all the goods and services produced within the borders of a nation during a specified period
2. Crop production : The produce of cultivated plants, esp. cereals, vegetables, and fruit

11.5 Review Questions

1. What is the importance of agriculture in the Indian economy.
2. Do you consider the agricultural sector in India as the backbone of the economy.
3. Trace the growth of production in the agricultural sector in India.
4. What are the main features of cropping pattern in India?

Answers: Self-Assessment

1. (i) (b) (ii) (c) (iii) (a) (iv) (d) (v) (b)

11.6 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Objectives

After reading this Unit students will be able to:

• Understand the Green Revolution.
• Discuss the new thrust areas in agriculture.
• Explain Green Revolution and its Future Prospects.

Introduction

Productivity in agriculture is the key to its efflorescence. And how productive is our agriculture is the basic point of contention. Improved productivity per capita and per hectare is the key to any agricultural revolution anywhere in the Third World. This, on a national average, is very low in India due to heterogeneous factors.

12.1 Green Revolution

Since the mid-1960’s, the traditional agricultural practices are gradually being replaced by modern technology and farm practices in India and a veritable revolution is taking place in our country. Initially, the new technology was tried in 1960-61 as a pilot project in seven districts and was called Intensive Agricultural District Programme (IADP). Later, the High-Yielding Varieties Programme (HYVP) was also added and the strategy was extended to cover the entire country. This strategy has been called by various names: modern agricultural technology, seed-fertiliser-water technology, or simply green revolution.

As a result of the new agricultural strategy, area under improved seeds has gone up since 1966. The new varieties are of a short-term duration and consequently, instead of growing one crop, two crops and sometimes, even three crops are grown. In the case of wheat, unprecedented enthusiasm has prevailed among farmers in Punjab, Haryana, Delhi, Rajasthan and Western U.P. for the new Mexican varieties like Lerma Rojo, Sonara-64, Kalyan and P.V. 18 and a situation developed in which the demand for seeds by the farmers exceeded the supply.

Traditional agriculture relies heavily on indigenous inputs such as the use of organic manures, seeds, simple ploughs and other primitive agricultural tools, bullocks, etc. Modern technology, on the other hand, consists of chemical fertilisers, pesticides, improved varieties of seeds including hybrid seeds, agricultural machinery, extensive irrigation, use of diesel and electric power, etc. Since 1966, the use of modern agricultural inputs has increased at a compound rate of 10 per cent per annum in contrast to the traditional inputs rising at the rate of only one per cent per annum during the same period.
The new agricultural technology uses such resources like fertilisers, pesticides, agricultural machinery, etc., which are produced outside the agricultural sector. As a result, industries supplying the modern farm inputs are growing at a rapid rate. Massive programmes of farm mechanisation and irrigation have also led to an increase in the consumption of electricity and diesel in rural areas.

**Achievements of the New Agricultural Strategy**

(i) **Boost to the production of cereals**: The major achievement of the new strategy is to boost the production of major cereals, viz., wheat and rice. Table 1 gives the production of the principal food crops during the last 50 years. A close look at the table reveals the increase in rice production from 35 million tonnes in 1960-61 to 99 million tonnes in 2008-09, signifying a break-through in this major crop of India. (Due to bad monsoon rice production declined in 2009-10). The yield per hectare has also recorded an improvement from a little more than 11 quintals in 1960-61 to nearly 22 quintals now.

**Table 1 : Progress in Foodgrain Production**

<table>
<thead>
<tr>
<th></th>
<th>1960-61</th>
<th>1990-91</th>
<th>2008-09</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>35</td>
<td>75</td>
<td>99</td>
<td>89</td>
</tr>
<tr>
<td>Wheat</td>
<td>11</td>
<td>55</td>
<td>81</td>
<td>80.8</td>
</tr>
<tr>
<td>Coarse cereals</td>
<td>23</td>
<td>32</td>
<td>40.0</td>
<td>33.6</td>
</tr>
<tr>
<td>(a) Total Cereals</td>
<td>69</td>
<td>162</td>
<td>220</td>
<td>203.4</td>
</tr>
<tr>
<td>(b) Total Pulses</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>14.7</td>
</tr>
<tr>
<td>(c) Total foodgrains (a + b)</td>
<td>82</td>
<td>176</td>
<td>235</td>
<td>218.1</td>
</tr>
</tbody>
</table>


The production of wheat, which stood at 11 million tonnes in 1960-61, rose to 81 million tonnes in 2008-2009. Part of the increase in wheat production can be attributed to an extension of the area, but the yield per hectare rose from 8.5 quintals to 28.06 quintals per hectare, signifying 3.5 times rise in the last 50 years.

It is interesting to observe that the ratio of wheat to rice (Table 2) has steadily increased from one-third in 1960-61 to 84 per cent in 1999-2000. This means that, even though rice continues to be the most important cereal in the country, wheat is catching up fast.

**Table 2 : Production of Rice and Wheat**

<table>
<thead>
<tr>
<th>Year</th>
<th>Rice (million tonnes)</th>
<th>Wheat (million tonnes)</th>
<th>Percentage of wheat to rice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-61</td>
<td>35</td>
<td>11</td>
<td>31</td>
</tr>
<tr>
<td>1980-81</td>
<td>54</td>
<td>36</td>
<td>67</td>
</tr>
<tr>
<td>1999-00</td>
<td>90</td>
<td>76</td>
<td>84</td>
</tr>
<tr>
<td>2006-07</td>
<td>93</td>
<td>75</td>
<td>81</td>
</tr>
<tr>
<td>2007-08</td>
<td>96</td>
<td>78</td>
<td>81</td>
</tr>
<tr>
<td>2008-09</td>
<td>99</td>
<td>81</td>
<td>82</td>
</tr>
<tr>
<td>2009-10</td>
<td>89</td>
<td>81</td>
<td>91</td>
</tr>
</tbody>
</table>

Green revolution did not cover coarse cereals like maize, jowar, barley, ragi, and minor-millets. The green revolution did not cover pulses. The output of pulses fluctuated violently from year to year till it declined to an all time low of 8 million tonnes in 1979-80. From 13 million tonnes in 1960-61. Even now the production of pulses fluctuates between 13 and 15 million tonnes per year.

The green revolution was thus confined only to High Yielding Varieties (HYV) cereals, mainly rice, wheat, maize and jowar.

While rice output increased at a relatively slower rate, the singular crop which showed a continuously rising trend was wheat. This was true of potatoes. The very fact that the cash crops in general and pulses in particular have not so far been brought within the ambit of new technology forces the conclusion that quite a substantial part of the agricultural output has not even been touched by the green revolution.

(ii) Increase in the production of commercial crops: The green revolution was mainly directed to increase the production of foodgrains. It did not affect initially the production of commercial crops or cash crops such as sugarcane, cotton, jute, oilseeds and potatoes; these crops did not record any significant improvement initially. However, significant improvement in the output of sugarcane took place after 1973-74. Likewise, there was considerable improvement in the production of other cash crops such as oilseeds, potatoes etc. (Table 3).

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oilseeds (m. tonnes)</td>
<td>7</td>
<td>19</td>
<td>21</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>Sugarcane (m. tonnes)</td>
<td>110</td>
<td>254</td>
<td>299</td>
<td>341</td>
<td>285</td>
</tr>
<tr>
<td>Cotton (m. bales)</td>
<td>6</td>
<td>10</td>
<td>12</td>
<td>26</td>
<td>22.3</td>
</tr>
<tr>
<td>Jute (m. bales)</td>
<td>4</td>
<td>8</td>
<td>11</td>
<td>11</td>
<td>10.4</td>
</tr>
<tr>
<td>Potatoes (m. tonnes)</td>
<td>3</td>
<td>15</td>
<td>25</td>
<td>28.5</td>
<td>29</td>
</tr>
</tbody>
</table>


(iii) Significant changes in crop pattern: As a result of the green revolution, the crop pattern in India has undergone two significant changes. Firstly, the output of cereals has risen at the rate of 3 to 4 per cent per annum but the output of pulses has remained stagnant or even declined. This has resulted in a decline in the importance of pulses in foodgrain output from 16 per cent in 1960-61 to 6 per cent in 2008-09. Cereals, on the other hand, have risen in importance from 84 per cent to 94 per cent during the same period. The stagnant production of pulses and the consequent rise in prices of pulses has a disastrous effect on the health of the poor who have generally given up the use of pulses - a major source of protein.

Secondly, among cereals, the proportion of rice in total cereal output has come down from 48 per cent to 44 percent between 1950-51 and 2009-2010. During the same period, however, the importance of wheat has more than doubled, i.e., from 15 per cent to 40 per cent (Table 4). The share of coarse grains has gone down from 37 per cent to 16 per cent of total cereals. The rising output of wheat indicates a substitution of coarse grains with wheat, on the side of production as well as consumption. This trend had begun even before the green revolution ushered in, but it has now strengthened.
Table 4: Percentage distribution of cereals output

<table>
<thead>
<tr>
<th>Year</th>
<th>Rice</th>
<th>Wheat</th>
<th>Coarse grains</th>
<th>Total cereals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>48</td>
<td>15</td>
<td>37</td>
<td>100</td>
</tr>
<tr>
<td>1960-61</td>
<td>50</td>
<td>16</td>
<td>34</td>
<td>100</td>
</tr>
<tr>
<td>1990-91</td>
<td>46</td>
<td>34</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>2006-07</td>
<td>46</td>
<td>37</td>
<td>17</td>
<td>100</td>
</tr>
<tr>
<td>2007-08</td>
<td>45</td>
<td>36</td>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td>2008-09</td>
<td>45</td>
<td>37</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>2009-10</td>
<td>44</td>
<td>40</td>
<td>16</td>
<td>100</td>
</tr>
</tbody>
</table>


(iv) **Boost to agricultural production and employment**: The successful adoption of the new agricultural technology has led to continuous expansion in area under crops, increase in total production and rise in agricultural productivity. Impressive results have been achieved in wheat, rice, maize, potatoes, etc. The adoption of new technology has also given a boost to agricultural employment because of diverse job opportunities created by multiple cropping and shift towards hired workers. At the same time, there has been displacement of agricultural labour by the extensive use of agricultural machinery.

(v) **Forward and backward linkages strengthened**: The new technology and modernisation of agriculture have strengthened the linkages between agriculture and industry. Even under traditional agriculture, the forward linkage of agriculture with industry was always strong, since agriculture supplied many of the inputs of industry; but backward linkage of agriculture to industry — the former using the finished products of the latter was weak. Now, however, agricultural modernisation has created a larger demand for inputs produced and supplied by industries to agriculture and thus the backward linkage has also become quite strong. In this way, the linkage between agriculture and industry has got strengthened.

Weaknesses of the New Strategy

The new agricultural technology has made the farmer market-oriented. The farmers are largely dependent on the market for the supply of inputs and for the demand for their output. At the same time, the demand for agricultural credit has also increased as the new technology has increased the cash requirements of the farmer. Besides, modern technology has definitely proved its superiority over the traditional technology only in those areas where appropriate conditions prevail. But as mentioned above, these conditions prevail only in certain selected areas and the rest of the country is not yet suitable for advanced technology. What is, therefore, wanted is the evolution of a low-cost technology which can be adopted by all small farmers and which can use and exploit the local resources.

(I) **Indian Agriculture is still a gamble in the monsoons**: When the new agricultural strategy was introduced in the early 1960’s, it was hoped that the trend of rising output of foodgrains would continue (Table 4). The then record achievement of 108 million tonnes of foodgrains in 1970-71 was hailed that green revolution had materialised and imports were immediately stopped. The euphoria was cut short in 1972-73 when production of foodgrains slumped to 95 million tonnes. Sharp fluctuations in foodgrain output were observed in the later years too. From a low level of about 100 million tonnes in 1974-75, foodgrains output rose gradually to 132 million tonnes in 1978-79. There was a steep decline in production just next year due to adverse weather conditions; foodgrains output in that year was 109 million tonnes in 1979-80 which was almost the same as 1970-71 output.

After many fluctuations, the output of foodgrains rose to 176 million tonnes in 1990-91 and touched 213 million tonnes in 2001-02. On account of extensive drought conditions, the output of foodgrains declined steeply to 174 million tonnes during 2002-03 (decline of 38 million tonnes...
in one year). It is only in 2008-09, that the trend has been reversed and foodgrain output touch
a record level of 235 million tonnes. But in the next year it again plunged to 218 million tonnes.

Table 5 : Trend in the production of foodgrains in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Production</th>
<th>Year</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-71</td>
<td>108</td>
<td>2002-03</td>
<td>174</td>
</tr>
<tr>
<td>1978-79</td>
<td>132</td>
<td>2003-04</td>
<td>212</td>
</tr>
<tr>
<td>1990-91</td>
<td>176</td>
<td>2006-07</td>
<td>216</td>
</tr>
<tr>
<td>2001-02</td>
<td>213</td>
<td>2007-08</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2008-09</td>
<td>235</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2009-10</td>
<td>218</td>
</tr>
</tbody>
</table>


Two conclusions can be drawn from the sharp fluctuations of output of cereals in India since
the introduction of new agricultural strategy.
(a) Output of cereals (as well as other agricultural products) is still subject to weather
conditions as in the past; and
(b) The maximum and minimum total outputs, however, are now much higher than in the
past.

(2) Growth of Capitalistic Farming in Indian Agriculture: The new agricultural strategy consisting
of IADP and HYVP necessitated heavy investment in seeds, fertilisers, pesticides and water.
These heavy investments are beyond the capacity of small and medium farmers. In India, there
are about 81 million farm households but just 6 per cent of the big farmers account for 40 per
cent of all cultivated land; they alone are making heavy investment in the installation of tubewells.
pumping sets, use of fertilisers and agricultural machinery required for the purpose.
Consequently, the new agricultural strategy has helped the growth of capitalist farming in
India and has led to concentration of wealth in the hands of the top 6 per cent of the rural
population. The poor and marginal peasants have not directly benefited from green revolution.
A recent study of Punjab by Ashok Rudra and others revealed evidence of the growth of
gentlemen farmers, comprising ex-servicemen, retired civil servants, and urban-based
businessmen deriving their income from industry and commerce and who have recently taken
up agriculture as an industry. In Punjab, they constitute about 3 per cent of the total number of
farmers, command 8.5 per cent of the total number of farms and cover 27 per cent of the total
cultivated area. It is this group of farmers called as “progressive farmers” and “gentlemen
farmers” who are able to make huge investments in the form of tractors, tubewells and pumping
sets and other equipment.
The vast majority of rural households with little or no land, with poor finances and poor
creditworthiness have not gone in for the new technology in a big way and have benefited the
least from the green revolution. Regions which have been well endowed with resources (like
Punjab, Haryana and Western U.P.) have benefited the most from the use of modern technology
and have prospered. Other regions have remained backward and underdeveloped. Regional
disparities have thus increased.

(3) Sidetracking the need for institutional reforms in Indian agriculture: The new agricultural
strategy does not recognise the need for institutional reforms in agriculture. The bulk of
the peasant population does not enjoy ownership rights. Large-scale evictions have already taken
place. As a result, the tenants are being forced to accept the position of sharecroppers. Minhas
and Srinivasan studied the effects of crop sharing arrangements in fertiliser use. Their basic
assumption was that the cost of fertilizers was met by the cultivator by borrowing, and interest
charges amounted to 10 per cent of the cost. Basing their judgement on the capitalist principle
of profit maximisation, the owner-farmers reaped a profit of 180 per cent on irrigated lands in the case of wheat and 183 per cent in the case of rice. Against this, the tenant cultivators on a 50 per cent basis reaped a profit of only 65 per cent in wheat and 67 per cent in rice. The return was further reduced to a level of 42 per cent in the case of share-cropping on a 40 per cent basis. Profit maximisation criterion clearly indicates that larger dosages of fertilisers will be absorbed by owner farmers than by tenants. Thus, the conclusion is inescapable that tenancy cultivation poses itself as a big obstruction in the way of fertilizer use.

(4) Widening disparities in income: Technological changes in agriculture have had adverse effects on the distribution of income in rural areas. From his study of technological changes and distribution of gains in Indian agriculture, C.H. Hanumantha Rao concluded: “Technological changes have contributed to widening the disparities in income between different regions, between small and large farms and between landowners on the one hand and landless labourers and tenants on the other. In absolute terms, however, the gains from technological change have been shared by all sections. This is indicated by the rise in real wages and employment and in incomes of small farmers in regions experiencing technological change.”

(5) New Strategy and Socio-economic relations in rural areas: Francine Franknel, USAID expert, undertook a study of the impact of the new strategy on the socio-economic relations of the peasantry. The main conclusions of this study are:

(a) Overwhelming majority of the cultivators having uneconomic holdings of 2-3 acres have managed to increase per acre yield from the application of small doses of fertilisers, but aggregate gains in output have been insufficient to create surplus capital for investment in land development.

(b) Often small and marginal farmers are forced to take some land on lease; in some cases, they are pure tenants. Rising rentals in recent years (in response to the sharp spurt in land values), and/or the tendency of landowner to resume land for personal cultivation (with the introduction of more profitable techniques), has actually led to an absolute deterioration in the economic condition of the small owner-cum-tenant cultivator class.

(c) Only the small minority of cultivators with holdings of ten acres or more have been in a position to mobilize surplus capital for investment in land development, especially minor irrigation, as an essential precondition for the efficient utilisation of modern inputs. Moreover, this class has prided its gains by using increased profits to buy more land, improve land already under cultivation, and purchase modern equipment.

(d) Farmers with twenty acres or more have made the greatest gains, partly by mechanising farm operations to take up double or multiple cropping, and partly by diversifying their cropping pattern to include more profitable commercial crops.

(6) Problems of labour displacement: Very few studies are available to assess the impact of the mechanisation introduced under the garb of green revolution in terms of displacement of labour. Uma K. Srivastava, Robert W. Crown and Earl O. Heady have examined the effects of two types of technological innovations introduced under the Green Revolution — (i) biological and (ii) mechanical.

The term ‘biological innovations’ refers to the changes in inputs that increase productivity of land. The introduction of high yielding seed varieties and use of fertilisers, fall in this category. In this sense, green revolution is described as transformation of seed-fertiliser technology. The mechanical innovations refer to the introduction of new appliances which displace human or bullock labour. Thus, whereas biological innovations are labour-absorbing, mechanical innovations are labour-saving. It is therefore appropriate to describe the green revolution as a biological-mechanical revolution. It is the net effect of the labour-absorbing and labour-saving innovations which will determine the extent to which mechanisation need be introduced to check further displacement of labour. The study concludes: “Since mechanisation may dampen the increase in labour demand, resulting from the expanding factor of seed-fertilisers, the policies that encourage premature mechanisation in surplus labour economies, such as India’s, do not seem conducive to solving the problem of growing unemployment.”
12.2 New Thrust Areas in Agriculture

As a consequence of the new agricultural technology, India has achieved relative self-sufficiency in foodgrains and its imports became negligible. India is also able to accumulate large buffer stock of rice and wheat so that she could face any eventuality resulting from drought in a particular year or successively in two or three years.

But the achievements in agriculture cannot and should not make the Government complacent, because there are still many thrust areas in which we must orient our agricultural policies in the interests of agricultural growth with emphasis on sustainability and equity. Major thrust areas are the following:

(i) **Output and area under coarse cereals has shown negligible improvement**: Neither area nor production of coarse cereals showed any significant improvement. Sufficient attention was not paid so far to develop better HYV strains of these crops. Since major inputs were directed towards wheat and rice, coarse cereals remained neglected and to improve their production should be a major thrust area now.

(ii) **Stagnation in the output of pulses**: The production of pulses in 1970-71 was around 12 million tonnes. In 1990-91, the peak year of foodgrains production, production of pulses was 14 million tonnes. After 16 years in 2006-07 too the production of pulses is still 14 million tonnes. In most years, however, production has been stagnant around 13 to 14 million tonnes. The per capita consumption of pulses, which was 69 gm per day in 1971, has come down to 36 to 37 gm now. This sharp decrease in the consumption of pulses is a cause of serious concern, more so for the poor for whom pulses are the major source of protein.

Pulses are mostly grown under unirrigated conditions on poor soils and with low inputs. Out of about 23 million hectares of area under pulses, only 2 to 3 million hectares are irrigated. Pulses do not require large doses of fertilizers and pesticides. The development of short duration varieties and improved dry farming technology has raised new hopes of raising the production of pulses. Researches over the last decade have produced new varieties of pigeon-pea (Arhar) which is ideally suited for poor farmers and it is possible to produce 2 to 3 tonnes per hectare of pulse besides 6 to 8 tonnes per hectare of dry stalks for fuel. Similarly, the productivity of Chickpea (Bengal gram), the dominant pulse crop, can also be increased by improved deep black soil management technology. Both Arhar and gram taken together account for 60 per cent of total production of pulses and if efforts are concentrated in improving their productivity, in the coming years, there is considerable scope for making a break-through in the productivity of pulses.

(iii) **Another thrust area is to boost the production of edible oils**: India is not self-reliant in the production of edible oils. The major oil seeds grown in India are groundnut, rape-seed, mustard, sesame, safflower, sunflower, and soyabean. The principal problem in oilseeds production is low productivity. Not only India is way behind the developed countries, its productivity per hectare does not compare favourably even with respect to that of China and other developing countries. Imports of edible oils were barely of the order of ₹23 crores in 1970-71 but with increasing domestic demand and our failure to meet it with domestic production, imports of edible oils had gone up from ₹700 crores to ₹1,000 crores a year during the 1980s and exceeded ₹11,680 crores in 2003-04 but declined thereafter.

The Government of India set up the Technology Mission on Oilseeds which has proposed the target of raising production of oilseeds to 16 to 18 million tonnes by 1989-90 and raising it further to 26 million tonnes, by the year 2000-01.

These targets were to be achieved by (a) bringing additional oilseed areas under irrigation, (b) modern crop technology, (c) crop substitutions, (d) better dry farming and (e) promoting oil palm cultivation in 6,00,000 hectares.

The short term target for oilseed production (i.e. 16 to 18 million tonnes by 1989-90) was fulfilled. The long range target (of 26 million tonnes by 2000 A.D.) was, however, achieved in 2004-05. Between these two years, production oilseeds ranged between 21 million tonnes and 16 million tonnes, forcing the Indian Government to resort to large import of oilseeds. Production of Safflower and Soyabean, however, has been the most promising.
Notes

(iv) **New Strategies of Irrigation and Water Management**: The total foodgrains production from a gross area of 163 to 165 million hectares was around 212 million tonnes in 2001-02 (as against the Ninth Plan target of 234 million tonnes for that year. Our average foodgrains production is about 1.3 tonne (or 13 quintals) per hectare. As against this, China produces 4 tonnes or 40 quintals of foodgrains per hectare. If India is to meet the needs of its growing population of over 1,000 million people it must produce 240 to 250 million tonnes of foodgrains per year. This will necessitate the adoption of new strategies of irrigation.

The total available water reserves is of the order of 100 million hectare metres (m³) during the next 12 to 15 years. Since water is a scarce resource, it is vitally necessary that emphasis be shifted on its more efficient use. As things stand today, 90 per cent of water available is allocated to irrigation. This is, according to experts, wasteful use of water. It would, therefore, be useful to develop irrigation strategies which economise water use. The target should be to reduce water use for irrigation to 77 per cent of total available water in the next 10 to 12 years, so as to meet the rising demand for water for industrial and municipal needs. The new strategy of irrigation should be directed towards the following:

(i) control and proper method of irrigation in canal and tank command areas, specifically for paddy;
(ii) repair and maintain the traditional system of water harvesting and recharge of surface water;
(iii) conjunctive use of surface and ground water;
(iv) using sprinkler irrigation in canal/tank command areas;
(v) introducing drip irrigation in well irrigated areas;
(vi) Biwall irrigation for closely spaced crops like sugarcane, vegetables and cotton; and
(vii) training farmers and extension officers in water management.

In major irrigation projects, there is frequently over-irrigation, with its adverse effects on production. For instance, farmers use 1,500—3,000 mm of water for paddy, as against the requirement of only 800 mm. Moreover, absence of proper channels to take water to various fields leads to water logging and makes the land saline or alkaline.

Use of sprinkler irrigation can bring about 30-35 per cent of saving in water use. This should be used in all closely spaced crops like millets, groundnuts, pulses and wheat.

Drip irrigation is suitable for row crops and can result in a water saving of 50-70 per cent, simultaneously raising yield by 60-70 per cent in various crops. It helps in economic use of water and is specially suitable for irrigation by wells.

Biwall irrigation is being recently experimented in Maharashtra. In this system, water is delivered from the main chamber with a distribution chamber through evenly spaced supply orifices provided by lazer beams. It is then slowly released through the emission orifice.

The education of the farmers and the extension workers is vital in this thrust area of water management. For this, demonstrations, group discussions, seminars of farmers and other mass media be pressed into service. This is a thrust area which promises much better results with marginal addition of costs.

During the first eight Five Year Plans, much greater emphasis was laid on major and medium irrigation works. It is now being increasingly realised that this obsession with major irrigation works or big projects has raised the irrigation costs per hectare to prohibitive levels (₹ 60,000 per hectare on an average). Because of its cheapness and quick benefits the new thrust should be in favour of minor irrigation works.

(v) **The use of bio-fertilizers has to be expanded**: Recent researches in bio-technology and genetic engineering have demonstrated that certain micro-organisms such as bacteria and blue green algae can act as nitrogen fixers and provide nutrient to crop plants. The most commonly used bio-fertilizer is *Rhizobium* which colonizes the roots of specific legumes to form root nodules. These nodules act as factors of ammonia production. The *Rhizobiums* legume association can fix 100-300 kg of nitrogen per hectare in one crop season and even leave substantial quantities.
of nitrogen for the next crop. The great break-through in nitrogen generation by micro-organisms, for which the bill is paid by nature, is a great advance in agricultural research that promises a second green revolution.

With new bio-technology, for algae, the cost of inoculant at the rate of 10 kg./ha. is around ₹ 20 and its nitrogen contribution in terms of fertilizer is ₹ 200-400 per hectare. If agricultural production is encouraged on these lines, it has the potential to generate income to the farmers of the order of ₹ 5,000—7,500 from one hectare of land through sale of the produce. The new bio-technology is, therefore, the answer to the problems of the small farmers in cutting down their costs of fertilizer use.

Whereas bio-technology in fertilizers has been successfully exploited in developed countries, several factors have hampered its use and propagation in India. They are : lack of trained personnel, lack of appreciation of the benefits of inoculation and absence of industrial support. The Ministry of Agriculture of the Government of India is sponsoring national projects on these subjects. This should give a major thrust in agricultural development in future.

(vi) **Emphasis should shift to dry farming:** Out of total cultivated area of 163 million hectares in India, dry farming is carried on in 100 million hectares i.e. in 60 per cent of the total arable land. But the contribution of dry land farming to agricultural production is less than 30 per cent. There is no doubt that irrigation has brought about national self-sufficiency in foodgrains, but the gap between the rich and the poor farmers has widened because of the use of irrigation. About two-thirds of dryland farmers own less than two hectares and even this is available in scattered and fragmented holdings. Since the country has to carry on with dryland farming for many years to come, it is vitally necessary that dry-farming technology be developed, so that the possibilities of raising the potential output of vast dry-land areas be exploited. For this purpose, problems of different dryland areas have to be studied and region-specific technology have to be developed. Moderate use of fertilizers, improved seeds and better conservation of rain water and its judicious use can contribute to 40 to 50 per cent increase in yields in rain-fed areas.

### 12.3 Green Revolution—The Future Prospects

Green Revolution initiated in the 1960’s centered around the use of semi-dwarf high yielding varieties responsive to irrigation and chemical fertilizers yielded good results in giving a big boost to the production of wheat in the first stage and the production of rice in the next stage. But more recently, it has been felt that high-yielding varieties have reached a plateau and the scope for future increase in production appears to be very limited. In other words, the seed-water-fertilizer technology has probably exhausted its potential and is now at a point of diminishing returns.

The Planning Commission set a target of foodgrains production of the order of 300 million tonnes by 2007-08 but the actual production was 216 million tonnes. The question raised is : What are the prospects of realising this target?

Some like Harish Damodaran do not subscribe to the view that agricultural production has reached a plateau.

#### Table 6 : Average Foodgrain Yield

<table>
<thead>
<tr>
<th></th>
<th>1960s</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foodgrains</td>
<td>719</td>
<td>894</td>
<td>1,156</td>
<td>1,490</td>
</tr>
<tr>
<td>Wheat</td>
<td>950</td>
<td>1,382</td>
<td>1,921</td>
<td>2,449</td>
</tr>
<tr>
<td>Rice</td>
<td>1,000</td>
<td>1,158</td>
<td>1,470</td>
<td>1,827</td>
</tr>
</tbody>
</table>

* Advanced estimates for 2008-09.


Data given in Table 6 indicates that food yield has continued to increase from 719 Kgs. in to 1,490 Kgs. during 1990’s and to 1,798 in 2009-10 increase in yield has been more pronounced in the of wheat from 950 Kgs. in 1960s to about 2,450 Kgs. 1990s and 2,830 in 2009-10, although in rice too has gone up from 1,000 Kgs. in 1960s to 2130 Kgs. 2009-10. While bringing more areas under High Yield Varieties, highest yield rates may have shown signs of stagnation.

It would, therefore, be necessary to understand theoretically obtainable maximum yield and the and realisable maximum. It may be noted that the first Green Revolution variety Sharbati Sonora had demonstrate yield potential of about 3.4 tonnes per hectare. The jump in yield variety came from Kalyansona in 1970 4.2 tonnes. For a major breakthrough, the country wait till 1994 when new rust-resistant varieties UP2338 jacked up yields to 5.1 tonnes and PBW 343 1995 to boost it further to 5.4 tonnes per hectare.

However, in rice, the picture has not been very encouraging. Consequently, the skeptics believe the traditional Green Revolution breeding techniques have come to a dead end. Whatever success has been achieved in rice is the consequence of extending the pioneering varieties to more and more areas so that the country can realise the potential.

But this does not signify that we have exhausted all the latent potential of the existing HYV varieties. Field trials in Punjab confirm the demonstrated potential of 5.5 tonnes per hectare, but actual mean yields are around 4.25 tonnes per hectare. Obviously, one tonne of unharvested yield potential exists in Punjab. Similarly, the situation in other wheat growing states indicates the gap between attainable and actual yields to rise to over two tonnes per hectare. Mr. Harish Damodaran, therefore, concludes: “Even with the current high yielding varieties, it is possible for farmers in the Indo-Gangetic plain, which accounts for 18 million hectares out of 26 million hectares under wheat to produce an additional 25 million tonnes of wheat by adopting improved crop management practices and ensuring timely supply of inputs, attractive prices and so on. A half-a-tonne increase in average per hectare rice yield can similarly generate an additional 20 million tonnes from the country’s 42 million-odd hectares area planted under paddy.”

A Point often made by critics that as against average yield of 4 to 4.5 tonnes of wheat in Punjab, the farmers in cold countries like Netherlands raise about 8 tonnes per hectare, but this comparison ignores one important difference in the cropping systems of the two countries.

The eminent agricultural scientist Dr. M.S. Swaminathan emphasises that it is unscientific to make comparisons purely on the basis of individual crops, but it would be more scientific to compare the cropping system as a whole. For instance, a farmer in Punjab may obtain only 4 to 4.5 tonnes per hectare yield on spring wheat of 140 days duration, but his counterpart in Netherlands obtains 8 tonnes per hectare on a 10-month winter wheat crop. The difference is made up by the Punjab farmer by raising a rice crop during the same year providing a yield of 3 to 3.5 tonnes per hectare. He may also be raising a crop of potato or legume or some short-duration vegetable. Obviously, for the Indian farmer, the more important consideration is the total yield during the year, rather than simply yield per crop. Thus, the transformation from monocropping to multi-cropping system has enabled the development of rice or wheat varieties of different maturities, which have been integrated in the phenomenon described as the Green Revolution. Obviously, the success of the Green Revolution should be judged in terms of the over-all yield (income) generated by the farmers per hectare in a year rather than in terms of productivity per hectare of a single crop.

### 12.4 The National Commission on Farmers and Second Green Revolution

The UPA Government, after coming to power in 2004, appointed the National Commission on Farmers under the chairmanship of Dr. M.S. Swaminathan, eminent agricultural scientist. The Commission has made recommendations which promise to rejuvenate agriculture and thereby improve the lot of millions of farmers.

For the purpose of suggesting policy measures, the term “Farmer” includes landless agricultural labourers, sharecroppers, tenants, small, marginal and sub-marginal cultivators, farmers with larger holdings, fishermen and women, dairy, sheep, poultry and other farmers involved in animal husbandry, pastoralists, as well as those rural and tribal families engaged in a wide variety of farming related occupations such as sericulture, vermiculture, production of bio-fertilizers and bio-pesticides, and agro-processing.”
The term also includes tribal families sometimes engaged in shifting cultivation, and in the collection and use of non-timber forest products. In all cases, both men and women should receive equal attention.

Statement of the Problem of Farmers

Farmers have to face the fury of nature in the form of drought, unseasonal and heavy rain which causes extensive damage to crops.

Institutional support to small farmers is weak. Even now in many parts of India, paddy is spread on the roads for drying. The loss due to lack of proper storage and maintenance due to spoilage is as heavy as 30 per cent in the case of fruits and vegetables.

The cost of production is invariably higher than the minimum support price, due to ever-increasing price of diesel and other inputs.

Capital formation in agriculture and allied sectors as percentage of Gross Domestic Product (GDP) started declining in the 80’s and is only now being reversed. This has adversely affected irrigation and rural infrastructure. As a consequence, small farm families commit suicides and the number of suicides has been growing in India during the last five years. The situation is particularly alarming in Vidarbha region of Maharashtra. The government has identified 31 districts where farmer suicides have been reported. These are spread over Maharashtra, Andhra Pradesh, Karhataka and Kerala.

The Prime Minister felt so much disturbed that he undertook a visit of Vidarbha and declared a package of Rs 4,000 crores to improve the lot of farmers and to alleviate their pathetic condition decided to waive off heavy loans undertaken by them. The Government agreed to provide a subsidy to banks and co-operative credit institutions to enable them to accommodate the impact of loan waiver by making a provision in the budget. The loan waiver cannot be restricted to one state only, but will have to be provided to all states affected by farmers’ distress.

Since the cost-risk structure of farming is becoming adverse, indebtedness is growing among farmers. According to NSS Survey - 59th round, 55 percent of the farm households are in debt in 2003. The average per capita monthly consumption expenditure of farm households across India was ₹ 503 in 2003.

Endemic hunger (i.e. chronic malnutrition) is high both in families without assets like land or livestock, as well as those with small land holdings without access to irrigation.

Only 10 per cent of farmers are covered by crop insurance. Farm families are also not covered by health insurance.

Women, by and large, have been denied the benefit of Kisan Credit Card System.

Strategy to Improve the Economic Condition of Farmers

Outlining the basic philosophy of the National Commission on Farmers, the recommendations emphasize the need to increase farm productivity and profitability in perpetuity without ecological harm. If the co-adopts this strategy, the present agricultural crisis then be converted in an opportunity for not only rever the decline, but for taking our agricultural evolve forward. For this purpose, it would be essential to be the gap between potential and actual yields in agriculture. This will require the intensive introduction of muti reinforcing packages of technology, services and public policies.

This Agricultural Renewal Action Plan has components which include the following:

1. **Soil health enhancement** : Agricultural versities, research institutes, Krishi Vigyan Kend fertilizer companies, states department of agriculture farmers’ associations should aim at increasing the productivity potential of the soils by paying adequate attend to the chemistry and physics of soils (macro and nutrients) and microbiology. Dry farming areas receive special attention.

2. **Irrigation Water Supply Augmentation Demand Management** : National Commission on Farmers made a very forthcoming declaration: Water is a good and a social resource and not private property privatization of its distribution is fraught with and could lead to water wars in local comunit Improving supply through rainwater harvesting and charge of aquifers should become mandatory.
10 million hectares of new area under irrigation should be developed under Bharat Nirman. All existing wells and ponds should be renovation. Sea water farming should be promoted in areas through the cultivation of mangroves, salicons casuarinair and appropriate halophytic plants. Demand management through improved irrigated practices, including sprinkler and drip irrigations show receive priority attention.

(3) **Credit and Insurance**: The National Commission on Farmers considers: “Credit reform is the primary pathway to enhancing small farm productivity and ending farmer suicides.” Firstly, the difference between lending and deposit interest rate is high in India by international standard. This needs to be reduced. Keeping in view, the decline in profitability and the farmers’ distress, it would be deshable for the government to reduce the rate of interest on crop loans to 4 per cent.

On account of droughts and floods and the high interest on farm loans, the farmers become defaulters and thus the credit system pushes them out of its network. To meet natural calamities, the Central and Stale governments must step in to create an Agriculture Risk Fund to provide relief. This may be in the form of full/part waiver of the loan and interest.

(4) **Technology**: Agriculture scientists should state the performance of new varieties and technologies in terms of net income per hectare, and not just in terms of yield per hectare. Moreover, there is a need for proper integration of production and post-harvest technologies. For this purpose the Commission suggests that a post-harvest technology wing should be added to Krishi Vigyan Kendras. Also, lab-to-land demonstrations should be organized in dry farming areas where millets, pulses, oilseeds and cotton are grown. Value addition to biomass will help to generate skilled jobs in the non-farm sector.

Rice covers the largest area in the country and there are opportunities for creating more jobs and income by establishing rice bio-parks. Similarly, eco-boards can be produced from cotton stalks as a replacement for plywood from timber. Acadre of Rural Farm Science Managers should be developed by training some members in every panchayat to manage these new technologies. It would be necessary to establish a professional National Biotechnology Regulatory Authority without further delay.

(5) **Market**: Ultimately, it is only opportunities for assured and remunerative marketing that will determine the economic viability of farming both as a way of life and as a means to livelihood. Market reform should begin with production planning, so that every link in the cultivation-consumption-commerce chain receives aqualte and timely attention.

A Land Use Advisory Service is needed so that informed decisions are taken with ecological, meteorological marketing factors being kept in view.

**National Commission on Farmers and Second Green Revolution**

Dr. M.S. Swaminathan, the architect of India’s first green revolution listed five components of Agricultural Renewal in his report as Chairman of the National Commission on Farmers. These five components suggested by the Commission are: Soil health enhancement; water harvesting and sustainable and equitable use of water; access to affordable credit and crop and life insurance reform; development and dissemination of appropriate technologies and improved opportunities; infrastructure and regulation for marketing of agricultural produce.

Inaugurating the 93rd Indian Science Congress on June 3, 2006, Prime Minister Manmohan Singh added two more components: (a) application of science and biotechnology to the improvement of seeds and utilization of herbal and other plants; and (b) application of science to animal husbandry to improve productivity of livestock and poultry. It may, however, be mentioned that these two components were already covered by the National Commission on Farmers. For instance, Dr. Swaminathan mentions: “Had we adopted a pro-small farmer biotechnology strategy, we would by now have had Bt-cotton varieties whose seeds farmers could keep and replant, unlike in the case of
the hybrids marketed by private companies.” NCF has, therefore, made a categorical case for vesting in the Indian farmers the right to use their own seeds developed by them, rather than remain dependent on private companies and multinationals to get them patented and then deny this right of use to Indian farmers.

Although, Prime Minister Manmohan Singh has given a call for a “Second Green Revolution,” it would be of interest to understand why the first green revolution has run out of steam. Two reasons were ascribed by the Prime Minister: First, it did not benefit dryland farming. Second, it was not scale-neutral and had thus benefited only large farms and big farmers. This implies that 62 percent of marginal holdings accounting for 17 percent of operated area and 31 percent of small holdings of size 1 to 4 hectares accounting for 55 percent of area operated were bypassed by the first green revolution. Although, production of foodgrains and other crops substantially improved in India but the spread of green revolution in reducing poverty remained rather limited. It is due to this reason that it is now being argued and rightly so by the Prime Minister that he Second Green Revolution should concentrate on the small and marginal farmers.

Self-Assessment

1. Choose the correct option
   
   (i) Green Revolution resulted in significant increase of agricultural productivity due to
   
   (a) High yielding variety of grains  (b) Use of pesticides
   (c) Improved management techniques  (d) All the three
   
   (ii) The region, once hailed, home of Green Revolution in India, was
   
   (a) Punjab  (b) Gujarat
   (c) Haryana  (d) Bihar

3. Of all the high yielding crops, which grain produced the best result?

   (a) Wheat  (b) Maize
   (c) Rice  (d) Corn

4. The major results of the benefits of Green Revolution were experienced mainly in North and Northwestern India between the years

   (a) 1960-1965  (b) 1970-1985
   (c) 1965-1980  (d) 1975-1988

12.5 Summary

• Since the mid-1960’s, the traditional agricultural practices are gradually being replaced by modern technology and farm practices in India and a veritable revolution is taking place in our country.

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

• The new agricultural technology uses such resources like fertilisers, pesticides, agricultural machinery, etc., which are produced outside the agricultural sector.

• The advocates of the new strategy considered the intensive approach as the only means of making a breakthrough in Indian agriculture in the shortest possible time.

• The new agricultural technology has made the farmer market-oriented. The farmers are largely dependent on the market for the supply of inputs and for the demand for their output. At the same time, the demand for agricultural credit has also increased as the new technology has increased the cash requirements of the farmer.

• The green revolution caused by the new strategy was initially limited to wheat, maize and bajra only. The major crop of India, i.e., rice, responded to the impact of the high-yielding varieties much later.
Dr. M.S. Swaminathan, the eminent agricultural scientist, analysing the success of green revolution in Punjab stated: “The Green Revolution in Punjab is not a miracle.

As a consequence of the new agricultural technology, India achieved relative self-sufficiency in foodgrains and its imports became negligible. India is also able to accumulate large buffer stock of rice and wheat so that she could face any eventuality resulting from drought in a particular year or successively in two or three years.

The annual rate of growth in foodgrains output during nineties was just about 1.7 per cent, which is much lower than 3.5 percent annual growth recorded in the eighties. The yield rates have more or less plateaued in major wheat and rice growing areas.

Green Revolution initiated in the 1960’s centered around the use of semi-dwarf high yielding varieties responsive to irrigation and chemical fertilizers yielded good results in giving a big boost to the production of wheat in the first stage and the production of rice in the next stage.

Scientists in India have been making efforts to develop hybrid varieties of rice and wheat so that the yield barrier operating at present can be broken. In the case of rice, on-farm-trials of hybrid rice in Andhra Pradesh Tamil Nadu and Karnataka have been found to yield an average of 6.8 tonnes per hectare as against 5.2 tonnes obtained from conventional pure-line rice varieties.

India should make an effort to bring down the seed costs by standardizing hybrid rice seed production techniques. The Government should also provide hybrid rice seed at subsidised rates to farmers.

The UPA Government, after coming to power in 2004, appointed the National Commission on Farmers under the chairmanship of Dr. M.S. Swaminathan, eminent agricultural scientist. Farmers have to face the fury of nature in the form of drought, unseasonal and heavy rain which causes extensive damage to crops.

Capital formation in agriculture and allied sectors as percentage of Gross Domestic Product (GDP) started declining in the 80’s and is only now being reversed. This has adversely affected irrigation and rural infrastructure.

Outlining the basic philosophy of the National Commission on Farmers, the recommendations emphasize the need to increase farm productivity and profitability in perpetuity without ecological harm. If the co-adopts this strategy, the present agricultural crisis then be converted in an opportunity for not only rever the decline, but for taking our agricultural evolve forward.

12.6 Key-Words

1. Green revolution : A large increase in crop production in developing countries achieved by the use of fertilizers, pesticides, and high-yield crop varieties.
2. Indebtedness : The state of being indebted.

12.7 Review Questions

1. Discuss the new strategy implemented to improve agricultural sector.
2. What do you mean by Green Revolution? Discuss.

Answers: Self-Assessment

1. (i) (d) (ii) (a) (iii) (a) (iv) (b)

12.8 Further Readings

1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
Unit 13: Recent Issues in Indian Agriculture

CONTENTS
Objective
Introduction
13.1 Recent Issues in Indian Agriculture
13.2 Agricultural Challenges in India
13.3 Opportunities in the Challenges
13.4 Summary
13.5 Key-Words
13.6 Review Questions
13.7 Further Readings

Objectives

After reading this Unit students will be able to:
• Describe the Recent Issues in Indian Agriculture.
• Understand Agricultural challenges in India.
• Discuss the opportunities in the challenges.

Introduction

The contribution of rapid growth in productivity in ensuring a sustained growth of production is important as has been discussed in previous chapter. Here, the discussion would be on the issues and concerns relating not only to sustained growth of production but also those relating to an institutional and organisational support system. This support system helps in generating impulses of sustained agricultural growth and in weeding out forces that tend to inhibit such growth. The knowledge of the issues and concerns will enable us to clearly understand their significance in relation to the agricultural sector. Their impact would also be our focus and we would draw inferences related to the desirable nature and extent of change for the benefit of the sector. The following issues and concerns will be discussed in this chapter: shrinking land base and declining access to land; irrigation system, credit system, availability of inputs like fertilisers, seeds and pesticides; prices, costs and profitability; marketing system; agreement on agriculture under WTO; and investment in agriculture.

13.1 Recent Issues in Indian Agriculture

“Agriculture development is central to our growth strategy. Measures taken during the current year have started attracting private investment in agriculture and agro-processing activities. This process has to be deepened further.”

With nearly 12 percent of the world’s arable land, India is the world’s third-largest producer of food grains, the second-largest producer of fruits and vegetables and the largest producer of milk; it also has the largest number of livestock. Add to that a range of agro climatic regions and agri-produce, extremely industrious farmers, a country that is fundamentally strong in science and technology, a government committed to Indian agriculture and an economy that is on the verge of double-digit growth, and you should have the makings of a bumper harvest.

Yet the comprehensive outlook for Indian agriculture is far more complex than those statistics might suggest. The sector supports an estimated 70 percent of the Indian population, but is also the most sluggish, having just extricated itself from a period of negative growth - of -0.1 percent in 2008-2009-to
rise to an unspectacular 0.4 percent in 2009-2010 with around 5.4 percent expected for 2010-11. Adjusted for inflation, even this 5.4 percent growth looks unexciting when compared to the growth rates in services and manufacturing. Today, agriculture accounts for 14.2 percent of the country’s gross domestic product, compared to 51 percent in the 1950s. Worse, India is amongst the world’s largest wasters of food and faces a potential challenge to provide food security to its growing population in light of increasing global food prices and the declining rate of response of crops to added fertilizers.

### Table 1: Agriculture Sector: Key Indicators

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Item</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11 (Advance Estimates)</th>
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<tbody>
<tr>
<td>1</td>
<td>GDP—Share and Growth (at 2004-05 prices)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Growth in GDP in agriculture &amp; allied sectors</td>
<td>-0.1</td>
<td>0.4</td>
<td>5.4</td>
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<td></td>
<td>Share in GDP—Agriculture and allied sectors</td>
<td>15.7</td>
<td>14.6</td>
<td>14.2</td>
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<tr>
<td></td>
<td>Agriculture</td>
<td>13.3</td>
<td>12.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Forestry and logging</td>
<td>1.6</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fishing</td>
<td>0.8</td>
<td>0.8</td>
<td></td>
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<tr>
<td>2</td>
<td>Share in Total Gross Capital Formation in the Country (at 2004-05 prices)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Share of Agriculture &amp; Allied Sectors in total</td>
<td>8.3</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gross Capital Formation</td>
<td>7.7</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agriculture</td>
<td>7.7</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Forestry and logging</td>
<td>0.07</td>
<td>0.06</td>
<td></td>
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<td></td>
<td>Fisheries</td>
<td>0.56</td>
<td>0.54</td>
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<tr>
<td>3</td>
<td>Agricultural Imports &amp; Exports (at current prices)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Agricultural Imports to national imports</td>
<td>2.71</td>
<td>4.38</td>
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<td></td>
<td>Agricultural exports to national exports</td>
<td>10.22</td>
<td>10.59</td>
<td></td>
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<tr>
<td>4</td>
<td>Employment in the agriculture sector as share of total workers as per census 2001</td>
<td>58.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Central Statistics Office and Department of Agriculture and Cooperation.

The root causes of a poorly-performing agriculture sector that continues to be the primary engine for sustaining the largest segment of the Indian people are primarily two-fold: (a) India’s economic growth trends are not inclusive in character and are being driven more by services and manufacturing; and (b) something has gone terribly awry with Indian planning for agriculture.

Conversely, for technology companies, those with the wherewithal to “green” Indian agriculture or those who wish to engage at the grassroots either from a business or CR perspective, it is in agriculture’s myriad problems that opportunities exist.

From the point of view of international investors some of the longer-term opportunities arise on account of a number of factors including,

- India’s large land mass
- A multi-product basket with enormous export potential
- Year-round cropping
• 70 percent of the population dedicated to farming and allied activities
• Excellent domestic demand
• Global game-changers operating in this space
• Enormous funding commitments from the government
• Considered policy support from the government: four-pronged strategy covering agricultural production, reduction in wastage of produce, credit support to farmers, and a thrust to the food-processing sector

Nevertheless, the challenges cannot be wished away. In the following sections, eight of the key challenges that face Indian agriculture are discussed. Later, some ideas on innovative opportunities for investors which fit well with what India requires are explored.

### 13.2 Agricultural Challenges in India

The story of Indian agriculture today is one of farmers at the grassroots stymied for money, advice, basic technology, energy and water. The government, on the other hand, is more focused on the larger though very real issues around food processing, warehousing and logistics.

The main issue is that India faces food insecurity even as it wastes large amounts of food. The problem may broadly be examined under the following eight headings and solutions sought under them.

#### Fertilizer Abuse

What was traditionally the food bowl of India - the Punjab-Haryana belt - has been devastated by fertilizer abuse and consequent soil degradation that has made agriculture an unprofitable business. Fertilizer use has jumped up from merely 0.58 kg per hectare in the early 1950s to 7 kg at the onset of the Green Revolution in 1966-1967 with the adoption of high-yielding varieties of paddy and wheat. Fertilizer consumption increased from 784,000 tonnes during 1965-1966 to 1,539,000 tonnes during 1967-1968 to 24,909,000 tonnes in 2008-09. In 2010 the sale of urea in kharif (summer or monsoon crop) 2010 season, up to July 31st, was 7.36 million tonnes, up from 6.81 million tonnes in the corresponding period last year.

The fertilizer subsidy bill doubled over the first seven years of the current millennium. The subsidy growth has clearly overtaken the crop growth, with some estimates saying that at least one-third of the subsidy goes to fertilizer producers. The worry is compounded by food productivity not keeping up with the continuous increase in fertilizer application, while soil quality has been simultaneously degraded. Yet another aspect of the fertilizer crisis is around the use of potash. Plants need more potash than any other nutrient, but Indian soils are being continuously mined by crop plants while soils are getting depleted of potash at an alarming rate. Global stocks of mineral potash are not expected to last beyond 30 to 40 years. The implications are grave for Indian agriculture.

Long-term use of synthetic fertilizer has resulted in nutrient imbalance, micro-nutrient deficiency and the deterioration of soil health, causing low agricultural productivity.

#### Reducing Arable Land

Further anxiety derives from the industrial assault on agricultural land that has led to nationwide turmoil -leading to the impending exit of the Leftists from West Bengal (where they have held sway for more than three decades) and even in Gujarat, which has handled the changing land use professionally. Indeed, the ratio of agricultural land to India’s farming population has shrunk to 0.3 hectares per person in India. In advanced nations the area is more than 11 hectares per person.

In a developing country such as India, the dilemma between growth and preservation of the natural habitat will continue to be posed for some time. However, the focus has to be on improving agricultural yields through tried and tested technology, knowledge-sharing and access to energy, credit and decent infrastructure.
Fragmentation of Agricultural Land

The third associated area of concern is the fragmentation of agricultural land, with the average size of the holdings shrinking from 1.69 hectares in 1985-1986 to 1.33 hectares in 2000-2001. The proportion of marginal landholdings (less than a hectare) increased from 57.8 percent in 1985-1986 to 62.3 percent in 2000-2001. More importantly, about 19 percent of the other holdings are in the small farms category: between one and two hectares.

Agricultural Indebtedness

It is little wonder then that agricultural indebtedness has been the bane of the sector. Indeed, at least 10,000 farmers committed suicide every year; the five worst affected states being Maharashtra, Andhra Pradesh, Karnataka, Madhya Pradesh and Chhattisgarh. The government’s US$ 1.4bn (INR 71,000 crore) farm loan waiver scheme last year helped large and medium farmers more than small and marginal farmers who are indebted to local moneylenders.

Moreover, increased funding for agriculture and rural development is a partial misconception (see table). Standard credit delivery mechanisms do not help farmers because these banks - even the inept co-operative banks - are not accessible by the bulk of farmers and, when they are, there is no collateral to produce for loans. Finally, when the loans come, they are inherently risky given the vagaries facing Indian agriculture. No out-of-the-box thinking has been deployed in this calamitous space, and the substantial hikes in credit to the farmer have been commandeered by the better-placed agro industry sector.

As far as the small farmer is concerned, increasing credit flows without a supporting policy framework that safeguards farmers’ rights to land and improves the profitability of agriculture may well be of limited value. Short-term loans for high-cost, high-input agriculture are likely to increase indebtedness for small farmers. In Madhya Pradesh, the local press has indicated the farmers had availed of credit for financing land leases and the purchase of agricultural inputs. When frost destroyed their crop, they had no means of repaying the loans.

The finance minister admitted as much in his latest budget speech. Micro-finance as it is practiced in India - despite its promise - has failed to deliver. The gaps in institutional credit, which were to be covered by micro-finance, have thus attracted tremendous interest in recent years. The Andhra Pradesh experience shows that the delivery costs are very high, pushing interest rates up to unacceptable levels in the absence of consumer protection regulation and a perceived absence of a cap on micro-finance interest rates. A proposed plan for the direct transfer of subsidies (proposed in the recent Union Budget) may ensure the subsidy reaches the intended beneficiaries more efficiently.

Water Waste

The fifth area of concern is the sinister waste of water resources. India’s annual precipitation of a handsome 4,000 cu km gets slashed into an effective water availability of no more than 1,123 cu km (utilizable water resources 690 cu km and utilizable ground water 433 cu km). No more than 28.3 percent of the rainwater is utilized, thanks to India’s creaking water management infrastructure, lopsided policies, illogical spending patterns on large irrigation projects that pay poor dividends and a comprehensive lack of perspective that haunts the water industry. There is a lack of realization that water has an economic value in all its competing uses and should be recognized as an economic good and supported with sound planning for conservation and efficient allocation.

The rainfall in India is not evenly spread - nearly 80 percent of it coming in the four-month monsoon season from June to September. A sizable part of this water is allowed to flow away wastefully to the seas, eroding precious soil on its way. India needs to conserve this water for year-round use by storing it either in the surface reservoirs or in the sub-surface (underground) water aquifer. None of this is happening to the required extent. The surface water storage capacity created in India through major and medium reservoirs and millions of small ponds, tanks and other water bodies is insufficient to hold enough water to meet the annual needs of the country. Contrast this with the United States, for instance, with water storage capacity good enough to meet three to five years’ requirement.
Low Soil Fertility

Soil fertility is also an area of concern. Maps of India show that only about 11 percent of soils are high in available nitrogen. Similarly, about 20 percent of soils are high in available phosphorus and about 50 percent in potassium. With intensive cropping using only NPK (Nitrogen, Phosphorus and Potassium) fertilisers and limited use of organic manures, soils and crops became deficient in a large numbers of elements even as food production increased with time.

The major issues around soil health today are:
- Physical degradation of soil - compaction, crusting and other effects caused by excessive cultivation
- Chemical degradation of soils due to wide gap between nutrient demand and supply
- High nutrient turnover in soil-plant system coupled with low and imbalanced fertiliser use
- Emerging deficiencies of secondary nature and micronutrients
- Poor nutrient use efficiency
- Insufficient organic resource use because of competitive uses
- Acidification and aluminium toxicity in acidic soils
- Irrigation induced water-logging
- Biological degradation by organic matter depletion and loss of soil fauna and flora
- Soil degradation due to water and wind erosion
- Soil pollution from industrial wastes, excessive use of pesticides and heavy metal contamination

Climate Change

Indian agriculture is particularly vulnerable to climate change which A. K. Singh, deputy director-general, natural resource management, of the Indian Council of Agricultural Research, believes could cause yield drops of between 4.5 and 9 percent by 2039. Crop yields may fall by 25 percent or more by 2099.

India has had a taste of what is to come: rain-fed tracts have been experiencing three to four droughts every 10 years. Of these, two to three droughts are generally of moderate intensity and one is severe. Furthermore, there has been a fluctuating weather cycle with unpredictable cold waves, heat waves, floods and heavy one-day downpours. In 2008, the groundnut crop in the Rayalaseema (Andhra Pradesh) was subject to high as well as low rainfall at different stages of crop growth. While heavy rainfall early in the season adversely affected the development of pegs (which bear groundnut pods below the soil), the relatively drier spell at the later stage hit the development of pods. The impact of these dramatic weather cycles on agriculture is baneful.

Climate change affects the small and marginal farmers the most because they can least afford irrigation. Indeed some 80 million hectares (net sown area of around 143 million hectares) is irrigation-deprived and depends on the errant rains, but more than 85 per cent of the pulses and coarse cereals, more than 75 percent of the oilseeds and nearly 65 percent of cotton are produced from land characterized by low yields, usually in semi-arid zones.

Food Wastage

The most inexplicable issue around Indian agriculture is the continued waste of food that has promoted the Supreme Court to castigate heavily the government. The food ministry has admitted that foodgrains of USD 6 billion have gone waste in 2010, most of it in state warehouses.

Given a production (in 2010) of around 80 million tonnes but the combined storage space of the Food Corporation of India, State Warehousing Corporations and other agencies of just 60 million tonnes, some 20 million tonnes of food is left out for the elements to ravage. The estimated loss was around INR 270 billion rupees (US $6 billion). Between 1.2 million metric tonnes of rice and wheat was wasted in Punjab alone, forcing the Supreme Court to order the Centre to distribute free food grains, especially to those in the drought and flood-hit areas. The highest court also directed the Centre to...
establish a large state run Food Corporation of India (FCI) warehouse in every state and small warehouses in all districts. In addition, the recent introduction of a negotiable warehouse receipt (WR) system and effective enforcement by a Warehousing Development and Regulatory Authority (WDRA) is likely to add new storage capacity through private-sector participation.

The Agriculture Produce Marketing Committee (APMC) Act is another tangled web. The anti-retail and land acquisition lobby has, however, strongly opposed the Act, which allows private companies to procure produce directly from farmers. Those for the change allege that the Act forces farmers to sell perishable items like fruits and vegetables only to a limited number of licensed traders at APMC mandis (wholesale markets), thereby encouraging cartel activity in agricultural marketing. However, the traders’ lobby insists that “the Act does not require any amendment,” says Ashok Walunj, head of the onion-potato market at Vashi APMC: “Trade cannot survive without middlemen. Were it not for us, the farmers would not be paid a fair price for their goods on the spot. Exports should rather be resumed so farmers get a better deal.”

The APMC Act of most states does not encourage direct marketing and contract farming, and the prohibitions under the APMC Act do not allow investment by the private sector for improving the infrastructure. They do not facilitate procurement of agricultural produce directly from the fields. The purchaser has to be a registered agent at the wholesale market.

13.3 Opportunities in the Challenges

It is encouraging to note that marketing reforms are expected to become one of the top priorities in the 12th five-year plan. The APMC Act has been repelled in Bihar and amended in a further 16 other states. Industry bodies are lobbying hard to delist perishables such as fruits and vegetables from Schedule I of the APMC Act and allow for competition. In the states where APMC has been amended, the government is providing financial incentives to set up Terminal Market Complexes with a hub-and-spoke model in the public-private partnership (PPP) mode.

The latest Union budget has thus focused on aspects of food preservation, storage and logistics. Mukherjee has talked of the need to have warehousing and cold chains. On January 1st, 2011, the food grain stock in the Central pool reached 4.7 million metric tonnes, 2.7 times higher than 1.74 million metric tonnes on January 1st, 2007, and the storage capacity for such large quantities requires augmentation.

The process to create new storage capacity of 1.5 million metric tonnes through private entrepreneurs and warehousing corporations has been fast-tracked. The decision to create 0.2 million metric tonnes of storage capacity under the Public Entrepreneurs Guarantee (PEG) Scheme through modern silos has been taken. The addition will reach 4 million tonnes by March 2012. During 2010-2011, another 2.4 million metric tonnes of storage capacity has been created under the Rural Godown (Warehouse) Scheme.

A CRISIL Research study estimates allowing foreign direct investment in multi-brand retail could reduce wastage by about US$ 12 billion (INR 630 billion) in the fruit and vegetable subsectors alone every year, or about 30 percent of total output.

Foreign retailers who want entry into India, such as Wal-Mart, say foreign investment is key to minimising waste and lowering prices to consumers.

While the government permits foreign investment in the supply chain, foreign retailers have been unwilling to commit large sums of money, as there are still restrictions in multi-brand retail.

Bharti-Wal Mart estimates that it could take a decade to build a supply chain of international quality in India, and indeed numerous presentations have been made to move India from an indigent-farmer model to one that relies on cold chains.

While all this looks encouraging on paper, there is enormous confusion at a policy-making level because agriculture is a state responsibility and central decisions often get ignored. Indeed, pan-Indian solutions may sometimes be difficult to implement at the state level and for Indian agriculture to get out of its moribund state, it is important for growth and development impulses to flow from the ground upward.
The problem lies in the disconnect between the farmer, the administration and the agriculture knowledge worker, which is why critical information does not travel to the small farmer even though there is a multiplicity of agencies at the policy-making levels.

**Essential Commodities Act**

The other obstructive legislation is the Essential Commodities Act (ECA), which was put in place in 1955 after Independence to control the production, supply and distribution of essential agricultural commodities. India was then facing acute food shortages, and the Act was meant to ensure the availability of food products. Conditions have changed since, and there is recognition that controlling the movement of products by licensing of dealers, limits on stocks and control on movements will hamper the growth of the agricultural sector and the promotion of food-processing industries. This Act was amended in 2003 to encourage free movement of agricultural commodities across regions.

The larger issues are around the fact that India’s growing population has to be fed, and that will need some drastic and dramatic changes in the way agriculture is being run. It needs to be borne in mind that with economic growth, the diet of large segment of India’s population is changing: there is far greater demand for dairy and meat products, and this is an area that will demand special attention. It also means that the rate of increase in food consumption will be higher than the rate of population growth. Furthermore, Indian agriculture will have to grow amidst unsustainable increases in the price of inputs, with petroleum costs making all food grain and input movements expensive and food, therefore, dearer.

**Self-Assessment**

1. Choose the correct option:

   (i) The Black rust of disease of wheat is caused by-
   
   (a) Xanthomonas graminis
   (b) Puccinia graminis
   (c) Puccinia recondita
   (d) None of these

   (ii) A crop grown in zaid season is
   
   (a) Soyabean
   (b) Water melon
   (c) Jute
   (d) Maize

   (iii) The adoption of High Yielding Variety Programme in Indian Agriculture started in -
   
   (a) 1966
   (b) 1965
   (c) 1968
   (d) 1967

   (iv) Which of the following is a food crop?
   
   (a) Palm
   (b) Jute
   (c) Cotton
   (d) Maize

   (v) Which of the following is an oilseed ?
   
   (a) Cardamom
   (b) Garlic
   (c) Clove
   (d) Mustard

   (vi) Which one of the following makes a case for intensive, modern farming?
   
   (a) Cropping pattern
   (b) Higher output using organic method
   (c) Remunerative price
   (d) None of these

   (vii) Which of the following is not an agricultural product?
   
   (a) Alum
   (b) Cotton
   (c) Jute
   (d) Rice
Notes

Crop rotation helps to
(a) lessen use of pesticides
(b) yield more crops
(c) produce a greater choice of plant products
(d) eliminate parasites which have selective hosts

13.4 Summary

- With nearly 12 percent of the world’s arable land, India is the world’s third-largest producer of food grains, the second-largest producer of fruits and vegetables and the largest producer of milk; it also has the largest number of livestock. Add to that a range of agro climatic regions and agri-produce, extremely industrious farmers, a country that is fundamentally strong in science and technology, a government committed to Indian agriculture and an economy that is on the verge of double-digit growth, and you should have the makings of a bumper harvest.
- The story of Indian agriculture today is one of farmers at the grassroots stymied for money, advice, basic technology, energy and water. The government, on the other hand, is more focused on the larger though very real issues around food processing, warehousing and logistics.
- What was traditionally the food bowl of India - the Punjab-Haryana belt - has been devastated by fertilizer abuse and consequent soil degradation that has made agriculture an unprofitable business.
- The fertilizer subsidy bill doubled over the first seven years of the current millennium. The subsidy growth has clearly overtaken the crop growth, with some estimates saying that at least one-third of the subsidy goes to fertilizer producers.
- Long-term use of synthetic fertilizer has resulted in nutrient imbalance, micro-nutrient deficiency and the deterioration of soil health, causing low agricultural productivity.
- In a developing country such as India, the dilemma between growth and preservation of the natural habitat will continue to be posed for some time. However, the focus has to be on improving agricultural yields through tried and tested technology, knowledge-sharing and access to energy, credit and decent infrastructure.
- Moreover, increased funding for agriculture and rural development is a partial misconception (see table). Standard credit delivery mechanisms do not help farmers because these banks - even the inept co-operative banks - are not accessible by the bulk of farmers and, when they are, there is no collateral to produce for loans.
- The finance minister admitted as much in his latest budget speech. Micro-finance as it is practiced in India - despite its promise - has failed to deliver. The gaps in institutional credit, which were to be covered by micro-finance, have thus attracted tremendous interest in recent years.
- The fifth area of concern is the sinister waste of water resources.
- The rainfall in India is not evenly spread - nearly 80 percent of it coming in the four-month monsoon season from June to September. A sizable part of this water is allowed to flow away wastefully to the seas, eroding precious soil on its way.
- The other side of the problem is around the quality and price of water. Low water rates - there has been no revision for years - and a lack of uniform pricing across states and projects adds to the abuse of water.
- The Central Ground Water Authority has issued regulatory directives for more than 100 ground water blocks, and a 2010 World Bank report has warned that if indiscriminate exploitation of the ground water continues unabated, as many as 60 percent of all the ground water blocks will be in a critical condition by 2025.
• Soil fertility is also an area of concern. Maps of India show that only about 11 percent of soils are high in available nitrogen. Similarly, about 20 percent of soils are high in available phosphorus and about 50 percent in potassium.

• Indian agriculture is particularly vulnerable to climate change which A. K. Singh, deputy director-general, natural resource management, of the Indian Council of Agricultural Research, believes could cause yield drops of between 4.5 and 9 percent by 2039. Crop yields may fall by 25 percent or more by 2099.

• Climate change affects the small and marginal farmers the most because they can least afford irrigation. Indeed some 80 million hectares (net sown area of around 143 million hectares) is irrigation-deprived and depends on the errant rains, but more than 85 per cent of the pulses and coarse cereals, more than 75 percent of the oilseeds and nearly 65 percent of cotton are produced from land characterized by low yields, usually in semi-arid zones.

• The most inexplicable issue around Indian agriculture is the continued waste of food that has promoted the Supreme Court to castigate heavily the government. The food ministry has admitted that foodgrains of USD 6 billion have gone waste in 2010, most of it in state warehouses.

• The APMC Act of most states does not encourage direct marketing and contract farming, and the prohibitions under the APMC Act do not allow investment by the private sector for improving the infrastructure.

• It is encouraging to note that marketing reforms are expected to become one of the top priorities in the 12th five-year plan. The APMC Act has been repelled in Bihar and amended in a further 16 other states.

• The latest Union budget has thus focused on aspects of food preservation, storage and logistics. Mukherjee has talked of the need to have warehousing and cold chains. On January 1st, 2011, the food grain stock in the Central pool reached 4.7 million metric tonnes, 2.7 times higher than 1.74 million metric tonnes on January 1st, 2007, and the storage capacity for such large quantities requires augmentation.

• The larger issues are around the fact that India’s growing population has to be fed, and that will need some drastic and dramatic changes in the way agriculture is being run. It needs to be borne in mind that with economic growth, the diet of large segment of India’s population is changing: there is far greater demand for dairy and meat products, and this is an area that will demand special attention.

• The answer to these issues lies in science and technology and in research. Merely copying Western solutions will not suit the Indian need. In any event, unlike in the corporate sector where multinationals and their technology could gain easy entry because Indian companies were at par or nearly at par with them - agriculture is one area where global technologies will encounter resistance and, in many cases, for good reason.

• There are also opportunities in the dairy and livestock sectors through bio-technology to strengthen conventional breeding methodology by evolving plant varieties resistant to pest and diseases, tolerant to adverse weather conditions, with better nutritional value and enhanced durability. Here too, appropriate PPP models are being examined.

13.5 Key-Words

1. Infrastructure : Infrastructure is basic physical and organizational structures needed for the operation of a society or enterprise, or the services and facilities necessary for an economy to function. It can be generally defined as the set of interconnected structural elements that provide framework supporting an entire structure of development. It is an important term for judging a country or region’s development.
Notes

The term typically refers to the technical structures that support a society, such as roads, bridges, water supply, sewers, electrical grids, telecommunications, and so forth, and can be defined as "the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions.

2. Nutritional value: The nutritional value of food defines what a food is made of and its' impact on the body. Because of disease and weight control, it's particularly important to understand the nutritional value of food due to the impact on the body as it relates to cholesterol, fat, salt, and sugar intake. The food label is the primary tool enabling consumers to understand nutritional values in order to make informed decisions about consumption.

13.6 Review Questions

1. Identify the recent issues in Indian Agriculture.

2. What are the challenges we are facing in agriculture in India? Explain.

3. Discuss the opportunities in the challenges.

Answers: Self-Assessment

1. (i) (b) (ii) (b) (iii) (a) (iv) (d) (v) (d) (vi) (a) (vii) (a) (viii) (d)

13.7 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.

2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Objectives

After reading this Unit students will be able to:

• Explain the Rural Credit in India.
• Discuss the Rural Marketing or Agricultural.

Introduction

Farmers often borrow from their own relatives in cash or kind in order to tide over temporary difficulties. These loans are generally contracted in an informal manner; they carry low or no interest and they are returned soon after the harvest. Farmers, particularly small farmers and tenants, depend upon landlords and others to meet their financial requirements. This source of finance has all the defects associated with money-lenders, traders and commission agents. Interest rates are exorbitant. Often the small farmers are cheated and their lands are appropriated. The landless labourers are forced to become bonded slaves. What is worse, this source of finance is becoming more important. Marketing of his produce is the most important activity of a farmer. This is particularly tore in the case of small farmers who have surpluses for marketing.

14.1 Rural Credit in India

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

Period of Credit

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

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

(c) The farmers need finances for the purpose of buying additional land, to make permanent improvements on land, to pay off old debt and to purchase costly agricultural machinery. These loans are for long periods of more than 5 years.
Productive and Unproductive Loans

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

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

Sources of Rural Credit

Broadly, there are two sources of credit available to the farmers—institutional and private. Institutional credit refers to loans provided to farmers by co-operative societies and co-operative banks, and commercial banks including regional rural banks (RRBs). Non-institutional or private sources include money-lenders, traders and commission agents, relatives and landlords.

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

Non-Institutional Sources :

A. Money-Lenders

There are two types of money-lenders in rural areas. There are rich farmers or landlords who combine farming with money-lending. There are also professional money-lenders whose only occupation or profession is money-lending.

The cultivators depend upon the money-lenders for their requirements of cash. The Government and the Reserve Bank of India have been propagating that the importance of the money-lenders as suppliers of loans to the farmers has been declining rapidly. However, there are many reasons for the preponderance of the village money-lenders in rural areas even now.

(a) The money-lender freely supplies credit for productive and non-productive purposes, and also for short-term and long-term requirements of the farmers.

(b) He is easily accessible and maintains a close and personal contact with the borrower, often having relations with family extending over generations.

(c) His methods of business are simple and elastic.

(d) He has local knowledge and experience and, therefore, can lend against land as well as against promissory notes. He knows how to protect himself against default, through legal and illegal methods.

B. Landlords and Others

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

Need for Institutional Finance

The need for institutional credit arises because of the weakness or inadequacy of private agencies to supply credit to farmers. Private credit is defective because:

(i) it is based on profit motive and, therefore, it is always exploitative;
(ii) it is very expensive and is not related to the productivity of land;
(iii) it does not flow into most desirable channels and to most needy persons;
(iv) it is not available for making agricultural improvements—and much of the necessary improvements are not undertaken as funds are not available for long periods at low rates of interest; and
(v) it is not properly integrated with the agriculturist’s other needs.

Institutional credit is not exploitative and the basic motive is always to help the farmer to raise his productivity and maximise his income. The rate of interest is not only relatively low but can be different for different groups of farmers and for different purposes. Institutions also make a clear distinction between short-term credit and long-term credit requirements and give loans accordingly. Finally, institutional credit is fully integrated with other needs of agriculturists. The farmers require not only credit but also guidance in the planning of their agricultural operations like the use of seeds, fertilisers, pesticides etc., assistance in raising crops and in general, help for maximising their income. Agricultural credit and agricultural improvement should go hand in hand and the farmers should be taught improved farming methods and also be provided adequate and cheap credit. In all developed countries, provision of credit facilities and extension services go hand in hand. This work can be done best by institutions like co-operative societies and commercial banks and not by rapacious money-lenders and commission agents.

National Policy and Objectives

Since independence, a multi-agency approach consisting of co-operatives, commercial banks and regional rural banks—known as institutional credit—has been adopted to provide cheaper and adequate credit to farmers. The major policy in the sphere of agricultural credit has been its progressive institutionalisation for supplying agriculture and rural development programmes with adequate and timely flow of credit to assist weaker sections and less developed regions.

The basic objectives of this policy are:

(a) to ensure timely and adequate flow of credit to the farming sector;
(b) to reduce and gradually eliminate the money-lenders from the rural scene;
(c) to make available credit facilities to all the regions of the country, i.e., reduce regional imbalances; and
(d) to provide larger credit support to areas covered by special programmes like Pulses Development Programme, Special Rice Production Programme and the National Oilseeds Development Project.

Institutional credit, as mentioned earlier, refers to the funds made available by co-operative societies, commercial banks, and Regional Rural Banks (RRBs).

Evolution of Multi-agency Approach

Faced with the serious problem of deteriorating agricultural production and the rapacious money lenders, the Government set up co-operative credit societies and land mortgage banks. Much was expected from the co-operative credit movement as it was led by the farmers themselves. A survey of rural credit in 1950-51 showed that the co-operatives could meet barely 33 per cent of the total credit requirements of farmers, while the money-lenders accounted for 93 per cent of the credit needs of the farmers. The All-India Rural Credit Survey Committee (1954) stated: “Co-operation has failed, but
co-operation must succeed.” It was the All India Rural Credit Survey Committee (1969) which recommended the adoption of “multi-agency approach” to finance the rural sector. For the first time, the Government openly accepted that rural credit could not be met by co-operative societies alone and that commercial banks should play an important role in the rural sector.

On the recommendations of this committee, RBI took a series of measures to strengthen the co-operative movement. The State Bank of India was set up in 1955 after nationalising the Imperial Bank of India to show a special concern for agricultural credit.

In 1969 14 leading banks were nationalised. This was followed by the setting up of Regional Rural Banks (RRBs). Thus, the multi-agency approach of institutional credit to agriculture was evolved over a number of years.

While RBI was helping the co-operative sector directly, it was felt that the multi-agency approach to rural finance required a special banking institution to coordinate and help all the institutions specialising rural finance. It was for this reason that NABARD was set up as the apex bank for rural finance in 1982.

Growth of Institutional Credit for Farmers

The extent of institutional credit for farmers in recent years is given in table 1.

Table 1 shows that total agricultural credit from institutional sources had steadily increased from ₹6,230 crores in 1984-85 to ₹2,03,300 crores in 2006-07. The contribution of co-operatives was 55 per cent of total institutional credit in 1984-85 but was only 21 per cent in 2005-2006. Correspondingly commercial banks including RRBs have raised their share from 45 per cent to 69 per cent during this period.

The Tenth Plan (2002-07) projected a substantial jump in institutional credit flow to the agricultural sector to the tune of ₹7,36,600 crores - almost three times, as compared to the Ninth Plan) — and the annual average credit flow would be ₹1,49,120 crores — as against ₹46,000 crores during the Ninth Plan.

Table 1 : Institutional Credit to Agriculture

<table>
<thead>
<tr>
<th>Year</th>
<th>Cooperative Banks Amount</th>
<th>%</th>
<th>RRBs Amount</th>
<th>%</th>
<th>Commercial Banks Amount</th>
<th>%</th>
<th>Total Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>3,440</td>
<td>55</td>
<td>-</td>
<td>_</td>
<td>2,790</td>
<td>45</td>
<td>6,230</td>
<td>100</td>
</tr>
<tr>
<td>1997-98</td>
<td>14,090</td>
<td>44</td>
<td>2,040</td>
<td>6</td>
<td>15,830</td>
<td>50</td>
<td>31,960</td>
<td>100</td>
</tr>
<tr>
<td>2002-03</td>
<td>23,720</td>
<td>34</td>
<td>6070</td>
<td>9</td>
<td>39,770</td>
<td>57</td>
<td>69,560</td>
<td>100</td>
</tr>
<tr>
<td>2006-07</td>
<td>42,480</td>
<td>21</td>
<td>20,440</td>
<td>10</td>
<td>1,40,380</td>
<td>69</td>
<td>2,03,300</td>
<td>100</td>
</tr>
<tr>
<td>2007-08</td>
<td>48,258</td>
<td>19</td>
<td>25,312</td>
<td>10</td>
<td>1,81,088</td>
<td>71</td>
<td>2,54,658</td>
<td>100</td>
</tr>
<tr>
<td>2008-09</td>
<td>36,762</td>
<td>13</td>
<td>26,724</td>
<td>9</td>
<td>2,28,951</td>
<td>78</td>
<td>2,59,337</td>
<td>100</td>
</tr>
<tr>
<td>2009-10</td>
<td>63,492</td>
<td>17</td>
<td>35,218</td>
<td>9</td>
<td>2,85,799</td>
<td>74</td>
<td>3,84,514</td>
<td>100</td>
</tr>
<tr>
<td>2010-11</td>
<td>29,450*</td>
<td>15</td>
<td>19,141</td>
<td>10</td>
<td>1,45,801</td>
<td>75</td>
<td>1,94,392</td>
<td>100</td>
</tr>
</tbody>
</table>

Source : Economic Survey, 2010-11
* Upto Sept. 2010

Table 1, however, shows that during Tenth Plan (2002-03 and 2007-08), there was substantial increase in institutional credit flow and by the year 2009-10, it reached ₹3,84,514 crores.

Table 1 shows that even though total institutional credit to agriculture, has been steadily rising, there has been

(a) Steady decrease in percentage terms, in the contribution of cooperative banks in rural credit - from 55% in 1984 to 17% in 2009-10.
(b) The share of RRBs continue to remain low (around 10 percent).
(c) The share of commercial banks has been steadily rising and reached 74 percent in 2009-10. It would be a good idea if cooperative banks and RRBs are made subsidiaries of commercial banks.

Shortcomings of Institutional Credit

Way back in 1950 the private money-lender reigned supreme in rural India and institutional sources met no more than three per cent of the credit requirements of farmers. Thanks to progressive institutionalisation of agricultural credit under the Five Year Plans, over 60 per cent of the required short-term (including medium-term) production credit is now provided by co-operatives, commercial banks, and RRBs in many States. It should, however, be remembered that all the changes and improvements in the last 30 years in the field of rural credit appear to have failed to make a dent on poverty and provide adequate credit to improve the economic condition for the bottom 70 per cent of our rural population. In this connection, it can be safely asserted:

(i) The many new institutions created by the Government and the vastly extended facilities of rural finance provided by these institutions have generally been appropriated by the top 30 per cent of middle and affluent farmers in the country.
(ii) Even those credit facilities exclusively created for marginal and small farmers and for economically backward classes do not reach the target groups but are misappropriated by more affluent farmers through collusion with government officials and politicians.
(iii) Precious little is being done for the weakest of the rural population consisting of bonded labourers, landless agricultural labourers, tribes, scheduled castes’ and scheduled tribes, etc. These people, constituting about 25 to 30 per cent of the total rural population, continue to be cruelly exploited by the high caste money-lenders and landlords. This has led to extensive suicides by farmers all over the country, specially in Andhra and Karnataka.

Problems of Multi-agency Approach

The government was of the view that multi agency approach to rural credit was the real solution to the emancipation of small farmers from the clutches of money lenders. But the Working Group under the chairmanship of C. E. Kamath brought out the following problems of multi-agency approach:

(i) There has been a steady declining trend in the share of cooperative banks in the flow of institutional credit over the years - from 55% in 1984-85 to 40% in 1999-00 and further to 28% in 2004-05. This indicates the need of restructuring and reforming these banks.
(ii) There was no coordination between different agencies operating in the same area and, as a result, there was multiple financing, over-financing in some areas and under-financing in others.
(iii) Despite the adoption of lead bank scheme and district credit plans, the different agencies often failed to formulate and develop meaningful agricultural credit programmes in given blocks and districts.
(iv) Despite guidelines issued by RBI, different agencies adopted different procedures and policies in the matter of providing loans and in their recovery. The result was unnecessary competition among the different agencies.
(v) There were practical problems in the recovery of loans when different agencies had lent to the same persons against the same securities. Ultimately, there were heavy overdues.

The recently introduced “service area approach” (SAA) is definitely an improvement in the credit delivery system but it does not do away with the weakness of the multiple agency approach. The major problem faced by the lending institutions, particularly the cooperatives, is the most unsatisfactory level of overdues. The ratio of overdues to demand is around 40 to 42 per cent in the case of co-operatives and 47 per cent in the case of regional rural banks. Accordingly, the health of
agricultural credit institutions, both co-operatives and RRBs, is in a very sad state in several parts of the country. The Planning Commission regretfully admits: “Wilful default and overdues are mounting in a number of states including some co-operatively progressive states like Maharashtra and Gujarat. By writing off agricultural loans and providing subsidies out of the state exchequer, some of the states have set a bad example to the entire country. If this trend is not reversed and if banks are reduced to institutions providing grants rather than recycling scarce resources to get the maximum benefits for the country as a whole, the banking system will be unable to provide more credit to meet the growing needs of the farmers.”

Pitiable Financial Condition of Small and Marginal Farmers

The farming community, all over the country has been seething with anger and dissatisfaction about the falling interest rates of banks not reaching them and being forced to borrow at exorbitant rates from the moneylenders. There were a series of suicides among farmers in Andhra Pradesh, Maharashtra and Punjab. This was one of the major reasons for the fall of NDA Government in 2004. The UPA Government realized the need to enhance credit flow to agriculture. In consultation with RBI, NABARD and commercial banks, the UPA Government announced a package for agriculture:

The initiatives announced in June 2004 include:

(i) Stepping up agricultural credit from all lending institutions (co-operative banks, RRBs and commercial banks) from about Rs 85,000 crores to Rs 1,05,000 crores (30 percent increase - this would continue year after year).

The farm credit package of the UPA Government has increased year after year – Rs 125,000 crores in 2004-05, Rs 1,80,480 crores in 2005-06 and Rs 2,04,000 in 2006-07. If these figures are true, as farm credit, why do farmers commit suicide. This can only mean that much of the farm credit goes to well-to-farmers.

(ii) The branches of commercial banks and RRBs would be energized to enhance the flow of agricultural credit.

(iii) Under special agricultural credit plan, at least 100 new farmers would be financed at each rural and semi-urban branch during each year.

(iv) Financing of at least 2 to 3 new investment projects by each branch in plantations and horticulture, fisheries, organic farming, etc.

(v) Providing credit to tenant farmers and oral lessees.

(vi) Debt restructuring as opposed to debt write-off in the following forms:

(a) Relief to farmers in distress by rescheduling their loans and making them eligible for fresh loans; and

(b) One-time settlement for small and marginal farmers and consider them eligible for fresh loans.

None of these proposals worked satisfactorily. The money lenders still continue their stranglehold on poor and marginal farmers. The banks have increased their lending considerably but to the well to do farmers only. Farmers suicides continue.

Rural Co-Operative Credit Societies

Indian planners considered co-operation as an instrument of economic development of the disadvantaged, particularly in the rural areas. They saw in a village panchayat, a village co-operative and a village school, as the trinity of institutions on which a self-reliant and just economic and social order was to be built. The non-exploitative character of co-operatives, voluntary nature of membership, the principle of one man one vote, decentralised decision-making and self-imposed curbs on profits eminently qualified them as an instrument of development combining the advantage of private ownership with public good.

The rural co-operative movement was started in over 100 years back largely with a view to providing agriculturists funds for agricultural operations at low rates of interest and protect them from the clutches of money lenders.
The organisation of the co-operative credit for short period is briefly outlined here:

**Primary Agricultural Credit Society**: (PACS) A co-operative credit society, commonly known as the primary agricultural credit society (PACS) may be started with ten or more persons, normally belonging to a village. The value of each share is generally nominal so as to enable even the poorest farmer to become a member. Primary Agricultural Credit Societies (PACS) are the grassroot level arms of the short-term cooperative credit structure. PACS deal directly with farmer-borrowers, grant short term and medium term loans and also undertake distribution and marketing functions.

The management of the society is under an elected body consisting of President, Secretary and Treasurer. The management is honorary, the only paid member being normally the accountant (in case the society is large and requires a paid whole-time accountant). Loans are given for short periods, normally for one year, for carrying out agricultural operations, and the rate of interest is low. Profits are not distributed as dividend to shareholders but are used for the welfare of the village, in the construction of a well, or maintenance of the village school, and so on.

The usefulness of PACs has been rising steadily. In 1950-51, they advanced loans worth ₹ 23 crores; this rose to ₹ 200 crores in 1960-61, and to ₹ 34,520 crores in 2000-01. The PACS have stepped up their advances to the weaker sections particularly the small and marginal farmers. This progress has been quite spectacular but not adequate considering the demand for finance from farmers. However, “the primary credit society has continued to remain the weakest link in the entire co-operative structure.”

**Restructuring of PACS**: Considerable attention was given during the past few decades to build the PACS into strong institutions. Such a structure, close to the farmers, is very essential for disbursing rural credit, particularly to small farmers. A programme was introduced by the Government and RBI to reorganise and revitalise the primary agricultural credit societies. It was completed in Rajasthan, Orissa, Madhya Pradesh, Kerala, Tamil Nadu and Gujarat. In other States, it has not made much headway.

The number of PACS had come down from 2,12,000 in 1960-61 to 1,61,000 in 1970-71 and 1,06,380 at the end March 2006 with estimated membership of over 10 crore farmers.

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**Cooperative Credit Institutions**

- **Rural Cooperative Credit Institutions**
- **Urban Cooperative Banks**

**Short-Term Structure**

- State Cooperative Bank
- District Central Cooperative Bank
- Primary Agricultural Credit Societies

**Long-Term Structure**

- State Cooperative Agriculture and Rural Development Banks
- Primary Cooperative Agriculture and Rural Development Banks

Notes

Most of the PACS are dependent on the finance provided by central cooperative banks (CCBs). In case the CCBs are weak, the PACS are starved of finance which affects the credit functions of PACS. As at the end of March 2006, the loans and advances outstanding for PACS were about ₹ 51,780 crores.

Financial Strength of PACS: To make all primary agricultural societies viable and ensure adequate and timely flow of co-operative credit to the rural areas the Reserve Bank of India, in collaboration with State Governments, had been taking a series of steps to strengthen PACS and to correct regional imbalances in co-operative development. Steps were taken to reorganize viable PACS and for amalgamation of non-viable societies with farmers’ service societies or large sized multipurpose societies. These efforts are being intensified by providing larger funds to weak societies to write off their losses, bad debts and overdues. The programme of re-organisation of PACS has been under implementation for the last two decades and is almost completed in all states except Gujarat, Maharashtra and Jammu & Kashmir.

PACS and Weaker Sections: The major objective of the co-operative development programmes is to ensure that the benefits of co-operative activities flow increasingly to weaker sections including scheduled castes and scheduled tribes. The Government seeks to achieve this through expanding the membership of the weaker sections in the existing PACS and ensuring larger flow of funds and services to them. In the tribal areas, large sized multipurpose societies are being organised mainly for the benefit of the tribals.

PACS and Commercial Banks: The commercial banks in India introduced in 1970 a scheme of financing PACS, through which the funds of the commercial banks are being made available to PACS. This scheme came in handy to commercial banks which could use PACS for disbursing agricultural loans and thus find a way out of the serious problem of not having close contacts with farmers through their own branches and field staff. The scheme, however, has not been as successful as was anticipated.

Firstly, the two systems with two unrelated cultures—one commercial and the other co-operative—could not be linked effectively. Difficulties have arisen from this basic incompatibility.

Secondly, state co-operative banks as well as central co-operative banks have not liked successful PACS being taken away from their fold by the commercial banks.

However, a good deal of scope for co-ordination exists between PACS and the branches of commercial banks in rural areas:

(a) The rural branches of commercial banks can assist such of those members of the PACS who are eligible for loans but who are unable to get finance from PACS for lack of funds.

(b) They can also help the PACS with advice on management e.g., proper maintenance of books of accounts, accounting procedures, etc.

(c) The PACS, in their turn, can help commercial bank branches to identify eligible borrowers and to recover loans.

Shortcomings of PACS: The co-operative credit system makes credit available to the farmers at convenient distances and has intimate knowledge of the local conditions and problems. But it is organisationally and financially weak and hence, in practice, its ability to support credit to the agricultural sector is considerably limited. The All-India Rural Credit Review Committee brought out the following weaknesses of the primary credit societies:

(a) Co-operative credit still forms a small portion of the total borrowings of the farmers;

(b) Tenants and small farmers find it difficult to satisfy their need for funds fully from PACS alone.

(c) Most primary credit societies are financially weak and are unable to meet fully even the production-oriented credit needs of farmers.

(d) Overdues at all levels are financially increasing alarmingly indicating the failure of co-operative credit institutions; and

(e) PACS have not been able to ensure adequate and timely credit for the borrowing farmers.
**District Central Co-operative Banks (DCCBs):** These are now at the end of March 2006 369 District Central Cooperative Banks. The loans outstanding came to ₹ 79,200 crores. These are federations of primary credit societies in specified areas normally extending to a whole district (hence they are sometimes known as district co-operative banks). These banks have a few private individuals as shareholders who provide both finance and management. Their main task is to lend to village primary societies, but they are expected to attract deposits from the general public also (volume of deposits). But the expectation has not been fulfilled and many of the co-operative central banks act as intermediaries between the State Co-operative Bank on the one hand and the village primary credit societies on the other. The Reserve Bank — now NABARD has formulated a scheme for the rehabilitation of weak central co-operative banks. NABARD is providing liberal assistance to the State Governments for contributing to the share capital of the weak central co-operative banks selected for the purpose.

**State Co-operative Banks (StCBs):** There are now 31 State Co-operative Banks (StCBs) in the country. They form the apex of the co-operative credit structure in each State. The StCB finances and controls the working of the District central co-operative banks in the State. It serves as a link between NABARD (formerly RBI) from which it borrows and the co-operative central banks and village primary societies. The State Co-operative Bank obtains its working funds from its own share capital and reserves, deposits from the general public and loans and advances from NABARD (formerly from RBI). The last mentioned source is quite important, as it constitutes between 50 and 90 per cent of the working capital of State Co-operative Banks in the country. The State Co-operative Bank are not only interested in helping the rural co-operative credit movement but also in promoting other co-operative ventures and in extending the principles of co-operation. During 2005-06 the 31 state cooperative banks had lent about ₹ 48,260 crores to District central co-operative banks.

**The Problem of Overdues**

A highly distressing fact of rural co-operative credit is the heavy overdues estimated around ₹ 15,500 crores at the end of March 2006. According to RBI “Study Team on Overdues of Co-operative Credit Institutions”. “Lack of will and discipline among the cultivators to repay loans was the principal factor responsible for the prevalence of overdues of co-operatives. Defective lending policy pursued by co-operatives, the apathy of management in taking quick action against recalcitrant members and absence of favourable climate were other contributory factors.”

Apart from these common factors normally responsible for a high level of overdues, intervention of external forces such as loan waivers, concessions in various forms towards repayment of principal and payment of interest had also affected the recovery performances of credit institutions to a significant extent. The problem is further accentuated on account of the State Governments’ inability to meet the financial commitments to cooperative banks emanating from waiver of loans, interest subsidy, etc.

Loans overdue, it is disquieting to note, represent 45 per cent of loans outstanding in all-India; the percentage ranges from 23 in the case of Tamil Nadu to 77 in the case of Bihar.

In recent years, the farmers are getting organised and one of the chief demands of the farmers’ union is the cancellation of their debts to co-operative societies and banks. States have meekly surrendered to such demands to write off these debts. This tendency of States to write off the debts is a matter of extreme concern, as it hampers recovery of dues from the farmers. The National Front Government wrote off farmers’ debts upto the value of ₹ 10,000.

The problem of loan overdues is a matter of serious concern, as it affects the recycling of funds and credit expansion on the one hand, and economic viability of the lending institutions, specially the cooperatives and the RRBs, on the other.

**Other Weaknesses of Co-operative Credit Movement**

Another weakness of rural credit co-operation is that in the case of tenants, share-croppers, landless agricultural labourers and rural artisans who are the poorest and, therefore, the most needy, the flow of co-operative credit in terms of percentage share continues to range around 3 to 5 per cent over the...
Notes

years. The small and marginal farmers are apparently getting credit in larger proportion, viz., 35 per cent of the total. But since these farmers depend mainly on credit for the purchase of their inputs, the available credit to them is still inadequate. In other words, even though the share of the weaker sections of the rural community has been steadily increasing over the years and is, at present, placed around 40 per cent of the total, this share falls short of their essential production needs.

There is also the problem of uneven distribution of co-operative benefits as between different States. For instance, the loans advanced per member varied widely; the farmers of Gujarat, Punjab, Haryana and Tamil Nadu are getting much more than those in Orissa, Bihar, U.P. and West Bengal. Viewed in another way, that is, in terms of average credit per hectare of cropped area, it is only in five States, namely, Gujarat, Haryana, Kerala, Punjab and Tamil Nadu, that such credit is much higher than (double or more than double) the All-India average.

Apart from considerable regional disparities in credit availability, the co-operatives have not been able to ensure an increasing flow of production loans and investment credit in most of the tribal and hill areas.

Moreover, though the co-operatives have now come to cover almost the entire countryside, the membership is only around 45 per cent of the rural families; agricultural labourers and rural artisans constituted only 10 per cent of the total membership. The weaker sections of the rural community are still not adequately represented in the membership roll.

In the ultimate analysis, the most outstanding of the weaknesses, which indeed is at the root of many of the shortfalls in the co-operative performance, is in the area of management. There has been considerable discussion over the years at all levels in regard to the need for proper man-power development in the co-operative sector. Not much progress has taken place. The co-operatives themselves have shown a singular lack of appreciation of this problem.

Long-Term Rural Credit: Cooperative Agriculture and Rural Development Banks (CARDBs)

Land Mortgage Banks

The long-term requirements of the farmers were traditionally met by the money-lenders but later by other agencies also, such as the State Governments and the co-operative credit banks. But these agencies were found defective for one reason or another. There was, thus, a great need in India for an institution specially designed to cater to the long-term credit needs of the agriculturists, which would offer long-term funds at moderate rates and recover loans in annual or semi-annual instalments spread over a number of years. Initially, land mortgage banks were organised for the purpose of providing long-term credit to farmers. These banks were later called land development banks. In recent years, they have been renamed as cooperative agricultural and rural development banks. (CARDBs). These are classified into Primary Co-operative agricultural and rural development banks (PCARDBs) and State Co-operative Agricultural and Rural Development Banks (SCARDBs).

The real beginning in land development banking was made by Madras with the organisation of central land development bank in 1929 for centralising the issue of debentures and for co-ordinating the working of primary banks in the State. The progress of land development banking has been very slow and also uneven. During the great depression, (1929-33) land-development banks received some stimulus as agricultural prices fell considerably and the farmers needed financial assistance. But with the Second World War, the farmers experienced a good measure of prosperity and were in a position to repay their debts with the land development banks. But after Independence, land development banks have been enjoying a great degree of prosperity. However, it is important to note that whatever progress was achieved was concentrated in only a few States, viz., Andhra, Tamil Nadu, Karnataka, Maharashtra and Gujarat. The number of PCARDBs and their branches increased from 286 in 1950-51 to 696 in 2005-06, while that of State cooperative agricultural and rural development banks (SCARDBs) increased from 5 to 20 during the same period.

Total loans advanced by PCARDBs during 2005-06 were ₹ 2,250 crores and the loans outstanding at the end-March 2006 stood at ₹ 12,740 crores. On the other hand, SCARDBs had sanctioned loans
worth ₹ 2,900 crores in 2005-06 and the amount of loans outstanding at the end-March 2006 was ₹ 17,710 crores.

**The Structure of CARDBs**

The long-term credit structure consists of the central land development banks generally one for each State and are now called State Cooperative Agricultural Rural Development Banks (SCARDBs) and Primary Cooperative Agricultural Rural Development banks (PCARDBs). In some States, there are no primary land development banks but in their place, there are branches of central land development banks. In Madhya Pradesh, the State Co-operative Bank itself functions as a central land development bank through a separate land development banking department. In Andhra, Kerala and Maharashtra, there are more than one central land development banks and efforts are being made to integrate them into a unified bank for the whole State. Similarly, there are considerable differences in the organisation of PCARDBs in different States.

**Finances of CARDBs**

CARDBs obtain their funds from share capital reserves, deposits and issue of bonds or debentures. However, the last is the most important. Debentures are long-term loans which are issued by SCARDBs, carrying fixed interest and for fixed periods, generally up to 20 years. These debentures are guaranteed by State Governments in respect of payment of interest and repayment of principal. They are sub-scribed by the LIC, the commercial banks, the State Bank of India and its subsidiaries and by the Reserve Bank of India. Besides ordinary debentures, SCARDBs float rural debentures for periods up to 7 years which are subscribed by farmers and panchayats and by the Reserve Bank of India (up to 66 per cent of the value of the rural debentures). In recent years, the substantial refinance facilities provided by NABARD to SCARDBs have helped enlarge the lending operations of these banks.

**Loan Operations of CARDBs**

The main function of CARDBs is to grant loans on the security of agricultural properties:

(a) Since they grant loans which run for several years, strict rules are laid down with regard to the security against which they can advance loans.

(b) Generally, these banks restrict their loans to first mortgage of agricultural property, though in a few cases they may advance loans against the security of second mortgage as well.

(c) They generally lend up to 50 per cent of the value of the security. In order to assess the value of land against which they lend they employ experts who assess the value of land and are conversant with local conditions. In assessing the value of land such factors as the amount of land tax paid, the rental value of land, gross and net income from the land, sale value of the land etc., are taken into account.

(d) While granting loans the banks consider not only the value of the security offered but also examine the repaying capacity of the applicants.

(e) Finally, they are able to lend at fairly low rates of interest and enable the needy farmer to secure funds for long periods.

CARDBs provide credit for a variety of purposes such as redemption of old debts, improvement of land, purchase of costly agricultural equipment, construction of wells and erection of pumps and so on. At one time, the redemption of old debts was the most important and, in a sense, the only purpose for which the farmers approached the land development banks. In recent years, however, farmers have been borrowing from CARDBs mainly for the purpose of land improvement and development including sinking of wells (56 per cent) and purchase of agricultural machinery (30 per cent).

**Problems of CARDBs**

Land development banking is yet to take strong roots in India barring a few States. However, CARDBs have contributed in large measure to agricultural development by lending specially for minor irrigation. All their loans are for productive purposes benefiting mostly the small farm holders. Though land development banking has made considerable progress in recent years, it has not really contributed
much to the improvement of the financial position of the farmers. A large number of factors are responsible for the relative ineffectiveness of CARDBs.

**Problem of overdues:** Mounting overdues in most of the CARDBs have crippled the structure badly, in recent years. Overdues at the level of PCARBs have been put between 42 to 44 per cent. Overdues have caused innumerable financial problems besides limiting the capacity of these banks to lend and operate as viable units. The financial discipline imposed on the banks in the matter of eligibility to undertake fresh lending based on recovery performance has been the main limiting factor for quantitative growth of credit operations. To some extent, the banks themselves are to be blamed for this predicament due to faulty loaning policies, inadequate supervision, over-utilisation of loans, ineffective measures for recovery etc. Which have contributed to the deterioration in recovering the loans. Even when the wilful defaulter’s lands are attached and auctioned under the provision of law, the banks find few coming forward to purchase such lands. Various suggestions for making the coercive measures effective have largely remained unimplemented at the levels of State governments. With large overdues, restricted lending eligibility and financial problems, the operations of the banks in a few states have come to a standstill. Unfortunately, there are neither permanent arrangements to rehabilitate borrowers and banks, nor any credit stabilisation arrangements take care of overdues affected by national calamities and other factors beyond the control of CARDBs and the borrowers. Overdues, however, are not peculiar to CARDBs alone. The position is equally bad in other sectors of rural credit. Some serious thinking is called for to remedy the situation at the higher levels before the institutional rural credit arrangements are put out of gear.

**Future of CARDBs**

Since the Seventh Plan, the CARDBs were the main institutional agency to implement the minor irrigation programmes. Apart from minor irrigation, the CARDBs are also stepping up their credit assistance to several other agricultural development activities and for various subsidiary occupations. The integrated rural development programme now covers the entire country to improve the rural economy and institutional agencies including the CARDBs are involving themselves effectively to support various productive activities which, besides supplementing the income of the people, result in creating employment potential in rural areas.

**Commercial Banks and Rural Credit**

An important argument in support of bank nationalisation was that commercial banks had kept themselves aloof from the problems of agriculture and had remained largely indifferent to the credit needs of farmers for agricultural operations and land improvement. When social control of banks was introduced in 1967, a rapid expansion in bank branches in rural areas was started. By July 1969, all commercial banks had over 1,860 branches in rural and semi-urban areas; this number had increased to over 30,585 by June 2006. There were 3,07,17,195 million agricultural borrowing accounts with commercial banks amounting to ₹ 3,08,087 crores (2007-08), as compared to only 0.2 million accounts with total outstanding advances to the extent of about ₹ 160 crores in June 1969. A large number of village co-operatives are among the borrowers, some of them borrowing from other financial agencies as well.

**Direct Finance by Commercial Banks**

At the time of bank nationalisation, it was clearly conceded that the commercial banks did not have the necessary experience or the personnel to deal with the farmers directly, while the co-operatives had been specialising in rural credit since the beginning of the century. Even then, the nationalised banks were expected to go vigorously in support of the farmers in general and the small cultivators in particular. In the initial stages, for obvious reasons, the nationalised banks concentrated their attention on large cultivators and other special category farmers such as those engaged in raising high-yielding varieties of foodgrains. At present short term crop loans account for nearly 42 to 45 per cent of the total loans disbursed by the commercial banks to farmers. Term loans for varying periods for purchasing pump sets, tractors and other agricultural machinery, for construction of wells and tube-wells, for development of fruit and garden crops, or levelling and development of land for the
purchase of plough animal, etc. are provided. These term loans account for about 35 to 37 per cent of the total loans disbursed by commercial banks.

Finally, commercial banks extend loans for such activities as dairying, poultry farming, pig breeding, bee keeping, fisheries and others—these loans account for 15 to 16 per cent. Regionwise, Southern region accounts for the bulk of the credit disbursed by commercial banks viz., 52 per cent of the total credit extended.

Commercial Banks and IRDP

Since October 1980, the Government has extended the integrated rural development programme (IRDP) to all development blocks in the country and has asked the commercial banks to finance IRDP. The leading banks have to prepare banking plans, and allocate the responsibility of financing the identified beneficiaries among the participating banks. It has been found that commercial banks have not implemented IRDP enthusiastically. But commercial banks have valid reasons for their lukewarm attitude.

In the first place, commercial banks have been asked to finance all economically and backward people identified by government agencies. Commercial banks have found that most of the affluent farmers have managed to get their names inserted in the beneficiaries list through paying the Government officials or through using political pressure. In other words, all the prospective borrowers are not really economically backward and banks have the responsibility to find out the eligible beneficiaries.

Secondly, commercial banks have found that all the beneficiaries do not utilise the loans for which they are granted. In many cases, the farmers may use the bank loans for unproductive purposes but may produce receipts of purchase of buffaloes through bogus sellers (who may obligate for a commission). Commercial banks have to ascertain the credibility of sale-purchase transactions before disbursing loans.

Finally, small and marginal farmers are fleeced by petty government officials, veterinarians, local politicians and panchayat samiti members before they could become beneficiaries of bank loans. Ultimately it is the banks which suffer due to heavy overdues. Accordingly, banks are reluctant to finance IRDP.

Indirect Finance by Commercial Banks

Even though the scope for direct financing by commercial banks would be limited for some years to come, there is considerable scope for indirect financing by commercial banks. For instance, commercial banks are financing co-operative societies to enable them to expand their production credit to the farmers. More especially, they increasingly finance co-operatives engaged in the marketing and processing of agricultural produce or in activities ancillary to agriculture such as dairy farming, poultry farming etc. In this connection., the State Bank of India and its subsidiaries are already playing an active role in financing co-operative marketing and processing.

Commercial banks are providing indirect finance for the distribution of fertilisers and other inputs. Commercial banks extend credit to manufacturing or distribution firms and agencies and co-operatives engaged in the supply of pumpsets and other agricultural machinery on a hire-purchase basis. They finance the operations of the Food Corporation of India, the State Government and others in the procurement, storage and distribution of foodgrains.

Finally, commercial banks increasingly subscribe to the debentures of the central land development banks and also extend advances to the latter. This enables land development banks to expand their medium and long-term advances to farmers for purposes of land improvement and land development.

Commercial Banks and Small Farmers

It has been estimated that nearly 70 per cent of farmers owning less than 2 hectares of land are not getting bank credit; only large landowners have been found creditworthy and suitable for bank advances. But such a situation cannot continue for long. Under the direction of the Planning Commission, Small Farmers Development Agencies (SFDAs) have been set up to identify small farmers and work out economically viable schemes of agricultural development. Commercial banks have to group them into various categories for credit support so as to enable them to become viable cultivators.
For instance, in areas where the subsoil water table is high, the small cultivator has to be helped by banks to convert his dry holding into wet holding. With a pumpset loan, the cultivator can change the cropping pattern into double or even multiple cropping activity. As regards small cultivators near urban areas and with irrigation facilities, commercial banks can help them to go in for poultry farming and maintaining one or two vegetable cultivation or combine it with small milch cattle.

**Problems of Commercial Banks in Agricultural Credit**

The annual credit needs of the agricultural sector in the next few years are estimated to rise to ₹2,00,000 to ₹3,00,000 crores. To meet these needs is an enormous task, and responsibility will have to be borne by cooperatives and commercial banks. As resources available to commercial banks in the agricultural sector will naturally be limited, it is important that every commercial bank attempts to make optimum use of its limited resources in this sector.

In the field of financing of agriculture, the problem is not merely quantitative but also of coverage vis-a-vis the organisation and the personnel available to the nationalised banks. The majority of the rural population consists of small farmers. Further, there are 5,50,000 villages spread throughout the country. To reach all of them with only about 47,000 banking offices is, no doubt, a stupendous task. Even with the completion of the branch expansion programmes of the commercial banks now in hand or those which may be undertaken during the next 5 to 10 years, commercial banks may not be in a position to cover many of the villages. Moreover in recent years, the rural branches of commercial banks in general and branches of regional rural banks (RRBs) in particular have been under severe financial strain on account of higher transactions costs involved in handling of large number of small-size loan accounts and somewhat lower interest income as a result of concessional rate of interest on small-size loans. The lower proportion of current deposits in total deposits of rural branches has also placed them at a disadvantage with regard to cost of resources. Finally, the presence of overdues, particularly after the implementation of Agricultural and Rural Credit Debt Relief Schemes, 1990 has further adversely affected the viability of rural branches of commercial banks.

Under these conditions, if the development of agriculture is not to suffer for want of credit and if there has to be some improvement in the lot of innumerable small farmers, new dimensions will have to be given to schemes of financing agriculture.

**Nabard and Its Role in Rural Credit**

Since its inception, RBI had shown keen interest in agricultural credit and maintained a separate department for this purpose. RBI extended short-term seasonal credit as well as medium-term and long-term credit to agriculture through State level co-operative banks and land development banks. At the same time, RBI had also set up the Agricultural Refinance Development Corporation (ARDC) to provide refinance support to the banks to promote programmes of agricultural development, particularly those requiring term credit. With the widening of the role of bank credit from “agricultural development” to “rural development” the Government proposed to have a more broad-based organisation at the apex level to extend support and give guidance to credit institutions in matters relating to the formulation and implementation of rural development programmes. A National Bank for Agriculture and Rural Development (NABARD) or the National Bank, for short, was, therefore, set up in July 1982 by an Act of Parliament to take over the functions of ARDC and the refinancing functions of RBI in relation to co-operative banks and RRBs. NABARD is linked organically with the RBI by the latter contributing half of its share capital—the other half being contributed by the Government of India— and nominating three of its Central Board Directors on the board of NABARD, besides a Deputy Governor of RBI being appointed as Chairman of NABARD.

**Resources of NABARD**

The authorised share capital of NABARD was ₹500 crores and its paid-up capital was ₹100 crores, contributed equally by the Central Government and the Reserve Bank. The paid-up capital of NABARD was raised from ₹100 crores to ₹500 crores and then to ₹2,000 crores by the year 1999-00. The resources of the National Agricultural (long-term operations and stabilisation) funds were transferred to NABARD. World Bank and IDA have also been providing funds to NABARD for implementation.
of the projects financed by them. The most important source of NABARD’s funds are now RIDF deposits, closely followed by market borrowings.

In recent years, there has been considerable improvement in the resource position of NABARD mainly due to:

(a) Significant rise in the deposits under the Rural Infrastructure Development Fund (RIDF) by commercial banks;
(b) use of tax-free bonds through the issue of capital gains bonds and priority sector bonds.
(c) acceptance of priority sector deposits from private banks.

NABARD cannot accept short-term public deposits and, therefore, it has depended on the general line of credit (GLC) from RBI from its inception in 1982. NABARD’s dependence on GLC from RBI is quite large and NABARD uses this source to meet short-term credit and working capital requirements.

Functions of NABARD

NABARD has a dual role to play:

(a) as an apex institution and
(b) as a refinance institution. NABARD has inherited its apex role from RBI i.e. it is performing all the functions formerly performed by RBI with regard to agricultural credit. At the same time, NABARD has taken over the functions of ARDC and thus provides refinance facilities to all banks and financial institutions lending to agriculture and rural development.

(i) NABARD services as a refinancing institution for all kinds of production and investment credit to agriculture, small-scale industries, cottage and village industries, handicrafts and rural crafts and real artisans and other allied economic activities with a view to promoting integrated rural development;
(ii) it provides short-term, medium-term and long-term credits to State Co-operative Banks (SCBs), RRBs, LDBs and other financial institutions approved by RBI;
(iii) NABARD gives long-term loans (up to 20 years) to State Governments to enable them to subscribe to the share capital of co-operative credit societies;
(iv) NABARD gives long-term loans to any institution approved by the Central Government or contribute to the share capital or invests in securities of any institution concerned with agriculture and rural development;
(v) NABARD has the responsibility of co-ordinating the activities of Central and State Governments, the Planning Commission and other all-India and State level institutions entrusted with the development of small scale industries, village and cottage industries, rural crafts, industries in the tiny and decentralised sectors, etc;
(vi) it has the responsibility to inspect RRBs and co-operative banks, other than primary co-operative societies; and
(vii) it maintains a Research and Development Fund to promote research in agriculture and rural development, to formulate and design projects and programmes to suit the requirements of different areas and to cover special activities.

Working of NABARD

NABARD is the apex organisation with respect to all matters relating to policy, planning and operational aspects in the flow of credit for the promotion of agriculture, small-scale industries, cottage and village industries, handicrafts and other rural crafts and other allied economic activities in rural areas.

NABARD is performing the various functions assumed by it smoothly and efficiently. For instance, it sanctioned short-term credit limits worth ₹ 8,820 crores during 2003-04 and ₹ 16,100 crores during 2006-07 for financing seasonal agricultural operations at the concessional rate of 3 per cent below the Bank Rate. NABARD has attempted to ensure the flow of credit to weaker sections of society under the new 20-point programme by making it obligatory for banks to disburse a specified percentage of short-term loans to small and marginal farmers and other economically weaker sections.
NABARD has continued to follow the policy earlier laid down by the Reserve Bank in regard to sanction of medium credit limits for approved agricultural purposes. It also grants longterm credit to State Governments for contribution to the share capital of co-operative credit institutions.

NABARD provides two types of refinance. The first is extended to RRBs, Apex Rural Credit Institutions, viz., State Cooperative Banks and State Governments. The second type of refinance is extended to provide resources for ground level deployment of rural credit.

14.3 Rural or Agricultural Marketing

There are many ways by which the farmer may dispose of his surplus produce. This first and the most common method is to sell away his surplus produce to the village money-lender-cum-trader, who may buy it either on his own or as an agent of a bigger merchant of the neighbouring ‘mandi’ town. It is estimated that in the Punjab, 60 per cent of wheat, 70 per cent of oils and 35 per cent of cotton are sold in the village itself.

The second method adopted by the Indian farmer is to dispose of his produce in the weekly village markets, known in Hindustani as the ‘hat’. Besides, fairs are held once a year in important villages or towns in connection with religious festivals. In ‘hats’ and fairs, the farmers bring their produce as well as livestock and sell them.

The third method of agricultural marketing is through the mandis in small and large towns. The mandi may be located at a distance of several miles and, therefore, the farmer has to make special effort to carry his produce to the mandi. In the mandis, there are brokers or ‘dalals’ who help the farmers to dispose of their produce to till wholesalers known as ‘arhatiyas’. The wholesalers may dispose of the agricultural produce which they have purchased from the farmers to retailers or flour mills and processing units. For instance, in the case of cotton, the wholesaler sells to the cotton ginning factories, and in the case of foodgrains like wheat he sells to the flour mills or to retailer.

Basic Facilities Needed for Agricultural Marketing

In order to have best advantage in marketing of his agricultural produce the farmer should enjoy certain basic facilities:

(i) He should have proper facilities for storing his goods.
(ii) He should have holding capacity, in the sense, that he should be able to wait for times when he could get better prices for his produce and not dispose of his stocks immediately after the harvest when the prices are very low.
(iii) He should have adequate and cheap transport facilities which would enable him to take his surplus produce to the mandi rather than dispose of it in the village itself to the village money-lender-cum-merchant at low prices.
(iv) He should have clear information regarding the market conditions as well as about the ruling prices; otherwise, he may be cheated. There should be organised and regulated markets where the farmer will not be cheated by the dalals and arhatiyas.
(v) The number of intermediaries should be as small as possible so that the middlemen’s profits are reduced. This increase the returns to the farmer.

Defects of Agricultural Marketing in India

Judging from these considerations, the position of agricultural marketing in India is still deplorable. The Indian farmer does not have facilities for storing his produce. The storage facilities which are available in the village at present are so poor that 10 to 20 per cent of the produce is eaten away by rats. Secondly, the average farmer is so poor and indebted that he was no capacity to wait for better prices. He is forced to sell his output to the money-lender or to the trader so as to clear his debts. Such distress sales weaken the already miserable position of the average Indian farmer further.

Thirdly, the transport conditions in rural areas continue to be bad that even richer farmers, who have large amounts of surplus, may not be interested ingoing to the mandis. Most roads are kachcha (unmetalled) and in rainy season they are unusable.
Fourthly, the conditions in the mandis are such, that the farmer may have to wait for some time before he may be able to dispose of his produce. He may not have proper warehousing facilities to keep his stock while he waits. The method of transaction is generally against the interest of the farmer. In the mandis the farmer makes use of the services of a dalal (broker) to sell his output to the arhatiya. The dalal is often in collusion with arhatiya and, therefore, the price which is settled is generally to the advantage of the arhatiya and not to the farmer. Moreover, through unnecessary deduction on the plea that his produce is of inferior quality, the farmer often loses in going to the mandis.

Fifthly, the number of intermediaries and middlemen between the farmer and the final consumer of his produce is too many and the margin going to them too large.

Finally, the farmers do not ordinarily get information about the ruling prices in the big markets. As a result the farmers have to accept whatever price is quoted to them and have to believe whatever the traders tell them.

**Regulated Markets**

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

**Features of a Regulated Market**

A regulated market is started under the law either for any specific commodity or for a group of commodities. Such a market is administered by a market committee, which consists of representatives of the State Government, the legal bodies (as for instance, the district board), the traders, the commission agents or the dalals and the farmers themselves. The committee is appointed by the government for a specific period and is entrusted with management of the market.

The market committee fixes the market charges, such as the commission to be charged. It ensures that no dalal represents either the buyer or the seller. It prevents unauthorised deductions from the price paid to the farmer and ensures that correct weights and measures are always used. The committee hears all the complaints and settles them. In cases of dispute, it arranges for arbitration. The committee is responsible for the licensing of brokers and weighmen. It is vested with powers to punish any one who is found guilty of dishonest and fraudulent practices.

The system of regulated markets has been found to be very useful in removing fraudulent practices followed by brokers and commission agents and in standardising market practices. They have helped farmers to secure fair prices for their produce and to come to the market without fear of being cheated. They have helped in using standard measures and weights throughout the country. Hence it is the policy of the government to convert all markets in the country into the regulated type.

Regulated markets aim at the development of the marketing structure to:

(a) ensure remunerative price to the producer of agricultural commodities,

(b) narrow down the price spread between the producer and the consumer,

(c) reduce non-functional margins of the traders and commission agents.

To achieve these objectives, the Government went for comprehensive and rapid expansion of regulated marketing system. Considerable success has been achieved in States like Punjab and Haryana, where regulated markets have been established in major producing areas, with linked up satellite markets in the rural growth. The regulated marketing system has also proved a good source of generating income for the marketing boards and for use in rural infrastructure. The regulated market complex also includes facilities for grading and for monitoring of prices.

The regulated markets are set up especially in areas where commercial crops like cotton, jute, tobacco
important non-traditional crops are produced and sold in weekly markets and ‘hats’. Co-operative marketing and distribution and banking are also linked with the regulated markets.

**Co-Operative Marketing**

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

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

**Advantages of Co-operative Marketing Societies**

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

(a) The marketing society substitutes collective bargaining in place of individual bargaining. The farmer by himself is weak but the marketing society is said to be strong.

(b) It advances loans to the farmers and enables them to wait for better prices. Besides, it lends to them for their other needs. Thus, co-operative marketing societies can link credit, farming, marketing and processing to the best advantage of the farmers.

(c) It can have its own storage and warehousing facilities, it can thus remove the damage to agricultural produce through rats, ants, dampness etc.

(d) It can arrange to have quick and cheap transport and sometimes it can even have its own transport.

(e) It can encourage the farmers to produce graded and standardised products and discourage them from adulterating their produce.

(f) It can control the flow of supplies and thus influence the prices.

(g) It can eliminate many of the middlemen and thus remove their large-profit margins.

(h) Apart from selling the produce of the farmers it can supply them such essential goods as seeds, fertilisers, implements etc. Thus the co-operative marketing society is probably the best method to reorganise rural marketing and promote planned growth of our rural areas.

**Development of Co-operative Marketing**

There is great scope for the development of co-operative marketing societies. In the first place, there is the necessity to co-ordinate better farming, finance and marketing. At present efforts are being made to have one society which will perform all the three services for the farmers.

Secondly, the marketing societies increasingly undertake processing of agricultural goods. Several agricultural goods can be more favourably marketed if they are processed before sale. Cotton can be ginned and pressed; oilseeds can be crushed and oil may be sold; jute can be processed and baled; and so on.

Thirdly, the co-operative marketing societies can attempt to sell agricultural goods to consumers directly (wherever this is possible) and thus eliminate the middlemen and their commission.

Fourthly, the co-operative marketing societies should be made to grade their goods. The grading facilities may be made available to them by the Government through the Agricultural Marketing
Department. Grading will not only help the societies to secure better prices for their produce but also induce them to bring pressure upon their members to improve the quality of their products through the use of improved seeds, etc.

Fifthly, the co-operative marketing societies are going for their own storage and warehousing facilities in the rural areas and “mandis.” This may be promoted through the provision of grants and subsidies by the Government or through cheap finance provided by the State Bank and the Reserve Bank of India.

Sixthly, the area of operation of the co-operative marketing society should be expanded to cover many villages (if necessary, even a tehsil) so that it may render effective marketing service to the farmers. This will also enable it to engage qualified men to manage its affairs.

Seventhly, there is very great scope for co-operative marketing societies to supply inputs to their members, such as fertilisers, certified quality seeds, agricultural machinery and implements, pesticides etc. Nearly 47 per cent of the total fertilisers distributed in the country are sold through co-operative marketing societies.

Finally, the government should use the co-operative marketing societies whenever it is possible and necessary. The Food Corporation of India should buy foodgrains from the co-operative marketing societies and thus eliminate the usual channels of trade. This will encourage the formation of cooperative marketing societies.

**Government and Agricultural Marketing**

Let us consider the various measures which the Government has taken so far in the field of agricultural marketing.

(i) **Marketing Surveys** : In the first place the government has undertaken marketing surveys of various goods and has published these surveys. These surveys have brought out the various problems connected with the marketing of goods and have made suggestions for their removal. The Government gives vide publicity to prices of agricultural goods in all major markets.

(ii) **Grading and Standardisation** : The government has done much to grade and standardise many agricultural goods, Under the Agricultural Produce (Grading and Marketing) Act, 1937 the government has set up grading stations for commodities like ghee, flour, eggs, etc. To facilitate grading, standards have been laid down for 162 agricultural and allied commodities. The graded goods are stamped with the seal of the Agricultural Marketing Department--AGMARK. The ‘Agmark’ goods have a wider market and command better prices.

A Central Quality Control Laboratory has been set up at Nagpur and eight other regional laboratories in different parts of the country with the purpose of testing the quality and purity of agricultural products applying for the Government’s ‘Agmark’ have been created. The Government is further streamlining quality control enforcement and inspection and improvement in grading. The number of testing laboratories is being increased and the programme of grading at producers’ level is receiving greater attention especially for commercial crops.

(iii) **Setting up of regulated markets** : A very important measure which the Government has taken to improve agricultural marketing has been the setting up of regulated markets in the country. There are now 7,062 regulated markets. With the establishment of these regulated markets, the malpractices in mandis have disappeared and the market charges have been rationalised. As much as 80 per cent of agricultural produce is now sold in regulated markets.

(iv) **Provision of Warehousing Facilities** : To prevent distress sale by the farmers, particularly, the small and marginal farmers, due to prevailing low prices, rural godowns have been set up. The government has done much to provide warehousing in towns and villages. The Central Warehousing Corporation was set up in 1957 with the purpose of constructing and running godowns and warehouses for the storage of agricultural produce. The States have set up the State Warehousing Corporations with the same purpose. At present the Food Corporation is constructing its own network of godowns in different parts of the country.
The total storage capacity in the country is now 35 million tonnes.

(v) **Organisation of Co-operative marketing Societies**: The Government has given active encouragement to the organisation of multi-purpose co-operative societies with emphasis on credit and marketing. The primary marketing societies have been encouraged to form central marketing societies and apex marketing societies (at the state level) and the National Agricultural Co-operative Marketing Federation (NAFED). The Government has also provided larger financial resources to the co-operative marketing societies and federations through the State Bank of India and other nationalised banks.

In this connection, we should refer to the setting up of the National Co-operative Development Corporation (NCDC) by the Government of India in 1965 to plan and promote programmes for the production, processing, storage and marketing of agricultural produce through co-operative societies.

(vi) **Setting up of Special Boards**: The Central Government has set up a number of development councils for special commodities like rice, pulses, jute, millets, cotton, tobacco, oilseeds, sugarcane, arecanut, etc. The Government of India has also set up export promotion councils such as Cashewnuts Export Promotion Council and the Agricultural and Processed Food Export Development Authority.

(vii) **Boost to Export of Agricultural Products**: Under Government support, export of agricultural products has shown an increasing trend in recent years — as for example, ₹7,880 crores in 1992-93 and ₹34,000 crores in 2003-04. India’s agricultural exports include pulses, rice, wheat, tobacco, sugar and molasses, poultry and dairy products, spices, cashew nuts, sesame and Niger seed, groundnut, oilmeals, castor oil, shellac, fruits and vegetables, meat and meat preparations, marine products, etc. The share of agricultural exports in India’s exports ranges around 12 to 15 per cent.

Foreign Trade Policy (2004-09) of the Government of India has emphasized the importance of agricultural exports and has initiated a new scheme - Special Agricultural Produce Scheme - for promoting the export of fruits, vegetables, flowers, minor forest produce. The Government is earmarking funds to assist states for development of Agro Export Zones (AEZ).

(viii) **Agricultural Marketing Reforms**: The Government appointed an Inter-Ministerial Task Force on Agricultural Marketing Reforms to suggest measures for making agricultural marketing system more vibrant and competitive. The Task Force has in its report submitted in June 2002 recommended:

(i) Promotion of direct marketing and contract farming;
(ii) Development of agricultural markets in private and cooperative sectors;
(iii) Expansion of future trading to cover all agricultural markets;
(iv) Introduction of negotiable warehouse receipt system; and
(v) Use of information technology to provide market-led extension services to the farmers.

The Government of India has drafted and circulated a Model Act on agricultural marketing which, among other items, will provide for the establishment of direct purchase centers, farmers’ markets for direct sale to consumers (thus eliminate middlemen, such as wholesale and retail traders), complete transparency in the pricing system, payment to farmers on the same day, public private partnership for professional management of existing markets, etc. In 2004, state Governments agreed to adopt the Model Law.

(ix) **Futures Trading**: As part of economic reforms, the Government permitted the resumption of futures trading in gur, potato, castor seed, pepper, turmeric and hessian. During 1997-98 the Government extended futures trading in coffee, cotton, castor oil jute goods. In the 1998-99 budget, the Government announced futures trading in oilseeds, oilcakes and edible oils. The Government has allowed international futures trading in pepper and castor oil.

In 2003-04, the Government of India initiated major steps towards introduction of future trading in all commodities by setting up the National Level Commodity Exchanges. The major agricultural commodities traded at these exchanges are wheat, kapas (cotton), soya oil, guar
gum, jute, rubber, pepper turmeric, etc. These commodity exchanges have introduced various innovations which would increase efficiency of agricultural marketing in the country. Basically, physical delivery is blocked by warehouse receipt – the rigidity inherent in the trading of physical goods is thus eliminated. There is also a judicious mix of protection against both price and quality risks. The National Commodity and Derivative Exchange, Mumbai has launched pilot projects in the states of Gujarat, Madhya Pradesh and Andhra Pradesh to help farmers understand the concepts and benefits of hedging the price risk on trading platform of an Exchange prior to harvesting.

Reforms in Agricultural Marketing with Special Reference to Model APMC Act

After independence there was a general feeling that agricultural markets do not function in an efficient manner. There exist inefficiencies in distribution, including wastage of agricultural produce. Farmers suffer due to exploitation by traders on different accounts such as weight, illegitimate deductions, delayed payments etc. To overcome such problems different state governments enacted their respective APMC Acts. Stringent provisions were made under these Acts, to safeguard the interests of the farmers and save them from exploitation ensuring efficiencies. Norms were made for spending market fees on different heads including infrastructural developments.

Structure of APMC committee, the apex decision making body in respective Mandis was made such that farmers were in an overwhelming majority and Chairman of the committee would also be a farmer. There is not doubt that with time we have to bring amendments in the laws, howsoever good they may be in their original form. Emerging changes in the field of agriculture, on call for changes in laws pertaining to agriculture marketing.

With the stated objective of making the agricultural marketing system more vibrant and competitive, Government of India first constituted Expert Committee on Agricultural Marketing and later on ‘Inter Ministerial Task Force on Agricultural Marketing Reforms’ was constituted. Main recommendations of the Expert Committee are listed as follows:

(a) An alternative marketing systems to promote direct marketing,
(b) Increasing Credit flow to agricultural sector
(c) Introducing a system of negotiable warehouse receipt
(d) System of ‘Forward’ and ‘Futures’ contracts be evolved and modalities be worked out
(e) Promoting Information Technology in the field of agricultural marketing.
(f) Extension and training services

‘Inter Ministerial Task Force on Agricultural Marketing Reforms’ set 9 priority areas for itself which are as follows:

(a) Legal reforms;
(b) Direct marketing;
(c) Market infrastructure;
(d) Pledge financing;
(e) Warehousing receipt system;
(f) Forward and futures markets;
(g) Price support policy;
(h) Information Technology in agricultural marketing and
(i) Marketing extension, Training and Research.

The Task Force made various recommendations, The most important recommendations included amendments to the State APMC Act and Contact Farming.
Salient features of amendments in States’ APMC Acts

In order to guide the states in the implementation of suggested reforms, central government drafted a ‘Model Act on Agricultural Marketing’ which inter-alia provided for the establishment of direct purchase centers and farmers’ markets for direct sale to consumers. ‘The Model Act’ and the suggested reforms were discussed at the National Conference of State Agriculture Ministers held on 7th January 2004 at New Delhi and on 19th November, 2004 at Bangalore. The states were requested to complete the process of amendment to the APMC Act within 2-3 months time. So far a number of states have either amended their respective APMC Acts in tune with APMC Model Act or have started the process for the same. Some states have even notified the new legislation. In some other states process of amendment have initiated or is about to be initiated.

In most states the APMC Act prohibits transactions outside the mandis. Even in states that allow transactions outside the mandi, the Act states that while procurement may be direct, companies need to pay a mandi tax.

The Model APMC Act, sought to amend the APMC Act to permit private and corporate bodies to establish a marketing network for agriculture produce.

States such as Madhya Pradesh, Rajasthan and Uttar Pradesh had amended their respective APMC Acts at the first instance. Many other states have either amended their APMC Acts in tune with Model APMC Act or are making efforts to amend their respective state APMC Acts. The intentions of Model APMC Act prepared by the government of India and being imposed are clear from the following points:

1. The monopoly of Government regulated wholesale markets has prevented development of a competitive marketing system in the country, providing no help to farmers in direct marketing, organized retailing, a smooth raw material supply to agro-processing industries and adoption of innovative marketing system and technologies.

2. Inter-Ministerial Task Force On Agricultural Marketing Reform, set up by the Ministry has suggested promotion of new and competitive agricultural markets in private and cooperative sectors to encourage direct marketing and contract farming programmes, facilitate industries and large trading companies to undertake procurement of agricultural commodities directly from the farmer’s fields and to establish effective linkages between the farm production and retail chains.

3. If agricultural markets are to be developed in private and cooperative sectors and to be provided a level competitive environment vis-a-vis regulated markets, the existing framework of state APMC Act will have to undergo a change. The state has to facilitate varying models of ownership of markets. Working of existing government regulated markets also needs to be professionalized by promoting public private partnership in their management. Appropriate legal framework is also required to promote direct marketing and contract farming arrangements as alternative marketing mechanism. Therefore, there is a need to formulate a new model law for agricultural market.

4. Provision made for the appointment of Chief Executive Officer of the market committee from among the professionals drawn from open market (Section-36).

5. Provision made for the purchase of agricultural produce through private yards, directly from agriculturists in one or more than one market area. (Section-45) Adoption of the Model APMC Act in place of the earlier APMC Acts of different states is expected to bring some unfavourable impact on the farmers, traders and agriculture at large.

Self-Assessment

1. Choose the correct option:
   (i) The choice between high markups and high volume is part of which of the following retailer marketing decisions?
      (a) Target market decisions          (b) Product assortment and services decisions
      (c) Pricing decisions                (d) Promotion decisions
(ii) All of the following factors can affect the attractiveness of a market segment except?
(a) the presence of many strong and aggressive competitors
(b) the likelihood of government monitoring
(c) actual or potential substitute products
(d) the power of buyers in the segment

(iii) The type of sales force structure in which the sales force sells along product lines is called a ?
(a) territorial sales force
(b) product sales force
(c) customer sales force
(d) retail sales force

(iv) Technological advances, shifts in consumer tastes, and increased competition, all of which reduce demand for a product are typical of which stage in the PLC?
(a) decline stage
(b) introduction stage
(c) growth stage
(d) maturity stage

14.4 Summary

- The financial requirements of the Indian farmers can be classified into three types depending upon the period and the purpose for which they are required:
- Farmers need funds for short periods of less than 15 months for the purpose of cultivation or for meeting domestic expenses.
- We can further classify the credit requirements of farmers into two types—productive and unproductive loans. The former include loans (a) to buy seeds, fertilisers, implements, etc. (b) to pay taxes to the Government and (c) to make permanent improvements on land, such as digging and deepening of wells, fencing of land, etc.
- Broadly, there are two sources of credit available to the farmers—institutional and private. Institutional credit refers to loans provided to farmers by co-operative societies and co-operative banks, and commercial banks including regional rural banks (RRBs). Non-institutional or private sources include money-lenders, traders and commission agents, relatives and landlords.
- The need for institutional credit arises because of the weakness or inadequacy of private agencies to supply credit to farmers.
- Institutional credit is not exploitative and the basic motive is always to help the farmer to raise his productivity and maximise his income. The rate of interest is not only relatively low but can be different for different groups of farmers and for different purposes.
- The major policy in the sphere of agricultural credit has been its progressive institutionalisation for supplying agriculture and rural development programmes with adequate and timely flow of credit to assist weaker sections and less developed regions.
- Way back in 1950 the private money-lender reigned supreme in rural India and institutional sources met no more than three per cent of the credit requirements of farmers.
- The government was of the view that multi-agency approach to rural credit was the real solution to the emancipation of small farmers from the clutches of money lenders.
- There are many ways by which the farmer may dispose of his surplus produce. This first and the most common method is to sell away his surplus produce to the village money-lender-cum-trader, who may buy it either on his own or as an agent of a bigger merchant of the neighbouring ‘mandi’ town.
- In order to have best advantage in marketing of his agricultural produce the farmer should enjoy certain basic facilities:
  (i) He should have proper facilities for storing his goods.
  (ii) He should have holding capacity, in the sense, that he should be able to wait for times when he could get better prices for his produce and not dispose of his stocks immediately after the harvest when the prices are very low.
Notes

- Judging from these considerations, the position of agricultural marketing in India is still deplorable. The Indian farmer does not have facilities for storing his produce.
- The purpose of a regulated market is to eliminate unhealthy market practices, to reduce marketing charges and to ensure fair prices and in general, to protect the interests of farmers.
- Before 1954, separate co-operative marketing societies were established as distinct from the co-operative credit societies. Since 1954, however, multipurpose societies have been started with the purpose of giving credit to the farmers and marketing their surplus produce.
- In some of the Western countries, co-operative marketing has been extremely successful. Denmark has been well-known throughout the world for co-operative marketing of dairy products.
- The National Agricultural Co-operative Marketing Federation of India Ltd. (NAFED) is the apex, co-operative organisation at the national level; it deals in procurement, distribution, export and import of selected agricultural commodities.
- NCDC has actively promoted distribution of essential consumer articles such as foodgrains, sugar, edible oils, controlled cloth, kerosene, salt, soft coke, etc, in rural areas through service cooperatives.
- After independence there was a general feeling that agricultural markets do not function in an efficient manner. There exist inefficiencies in distribution, including wastage of agricultural produce.
- Earlier agricultural market (mandi) could be established under the Act, where market committee is constituted by elections, where majority of the members are farmers a few members from the trading community would be there.
- In the earlier Acts, though different types of agricultural markets are allowed to be established, but there was no provision of establishment of private markets.
- The reasons for failure of contract farming have been mainly in the design and the management of the projects by the companies and their partner institutions.

14.5 Key-Words

1. Rural Credit : Rural credit is a small amount of money which give to the poor people including small scale farmers and unemployed person as loan to start their own work by development banks or any other financial institutions.
2. Marketing : The action or business of promoting and selling products or services.

14.6 Review Questions

1. What do you mean by rural credit? Discuss the various sources of Rural Credit?
2. Write a short note on the rural co-operative movement.
3. Discuss the working and functions of Nabard.
4. Explain the rural and agricultural marketing. What are the basic facilities needed for agricultural marketing?

Answers: Self-Assessment

1. (i) (c) (ii) (b) (iii) (b) (iv) (a)

14.7 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-11055.
Unit 15: WTO and Agriculture

## CONTENTS

- Objective
- Introduction
- 15.1 WTO and Agriculture
- 15.2 Summary
- 15.3 Key-Words
- 15.4 Review Questions
- 15.5 Further Readings

### Objective

After reading this Unit students will be able to:

- Explain the WTO and Agriculture

### Introduction

Agriculture is one of the few economic sectors which has its own agreement within the WTO. Other than the broad WTO distinction between goods and services, all other WTO provisions are neutral as to the economic sector involved. Agriculture is therefore unique. However understanding agriculture is central to understanding the WTO.

Agriculture has given rise to a high number of disputes. Ironically the two most famous agricultural disputes, EC - Bananas III and EC - Hormones, were not brought on the basis of the Agreement on Agriculture but on the GATT 1994 and GATS for bananas and on the Agreement on the Application of Sanitary and Phytosanitary Measures or SPS Agreement for hormones. The first big dispute to examine the Agreement on Agriculture was, in fact, the FSC case which was about a general tax scheme in the United States which favoured exporters.

Recently there have been two cases on the Agreement on Agriculture which are of utmost importance and which are dealt with in this module: the Canada - Dairy case and the Chile - Price Band System case. Like many dispute cases both these cases only look at specific parts of the Agreement on Agriculture. This module, on the other hand, looks at the broad provisions of the Agreement on Agriculture as well as the specific issues which were decided in all the cases which have examined the interpretation of the provisions of the Agreement on Agriculture.

Overall this module examines both the agricultural sector specific provisions in the Agreement on Agriculture and the general WTO rules in a number of other WTO Agreements which can impact agricultural trade. The reader of this module should, on completion, be able to understand the main legal provisions affecting trade in agricultural products. Where technical terms have been used simple explanations of them have been provided.

### 15.1 WTO and Agriculture

WTO Agreement on Agriculture stipulated that developed countries would reduce their subsidies by 20 per cent in six years and developing countries by 13 per cent in 10 years. But as facts stand today, developed countries tried to circumvent this agreement by providing Green Box and Blue Box subsidies to support agriculture.

**Green Box Subsidies** include amounts spent on Government services such as research, disease control, infrastructure and food security. They also include payments made directly to farmers that do not
stimulate production, such as certain forms of direct income support assistance to help farmers restructure agriculture, and direct payments under environmental and regular assistance programmes. This definition is very wide and includes all types of Government subsidies.

**Blue Box Subsidies** are certain direct payments made to farmers where the farmers are to limit production, certain government assistance programmes to encourage agriculture and rural development in developing countries, and other support on a small scale when compared with the total value of the products supported 15 per cent or less in the case of developed countries and 10 per cent or less for developing countries.

Similar to domestic support subsidies, developing countries are not allowed to increase their negligible level of export subsidies while developed countries are allowed to maintain 64 per cent of their subsidy outlays on the base level. Consequently, agriculture imports from developed countries are available at much below the market price in the domestic economy. **Human Development Report** (1997) reviewing this problem mentions: “According to the OECD, the per capita transfer to US farmers amounted to $29,000 in 1995. In the main maize producing areas of Mindanao and Cagayen Valley, the average per capita income amount to less than $300. So each US farmer receives in subsidies roughly 100 times the income of a maize farmer in Philippines.”

“In the real world, as distinct from the imaginary or inhabited by free traders, survival in agricultural markets depends less on comparative cost advantage than on comparative access to subsidies. Liberalising local food markets in the face of unequal competition is not a prescription for improving efficiency, but a recipe for the destruction of livelihood.”

“Implementation of the Uruguay Round agriculture agreement over the next five years will not materially change the picture... Agriculture remains the only area in which export dumping is accepted as a legitimate trade practice.”

Earlier, Indian agricultural prices were lower than international prices mostly. But as a result of the heavy subsidization of agricultural exports by developed countries, the situation undertook a dramatic about-turn. The Indian farmers have been put to serious disadvantage. The phenomenon of farmers suicides and the growing unrest in several states because of the distress of farmers specialising in agricultural commodities and their exports is a very serious human problem.

**Has the Situation Changed after Doha?**

Doha Ministerial (2001) forced the developed countries to consider issues of implementation before undertaking consideration of new issues. Developed countries agreed to discuss the issues related with implementation. It was also felt that developed countries should reduce tariffs and also remove non-tariff barriers. But did the situation change thereafter? It would be relevant to quote the findings of the **Human Development Report (2003)** in this regard.

“The most important expectation of poor countries in the Uruguay Round of international trade negotiations (1986-94) was that rich countries would open their markets in these two sectors (Agriculture and Textiles). But the results have been largely disappointing. Protection in most rich countries remains extremely high, through a variety of instruments.”

**Creating Fairer Markets in Agriculture Sector**

Although earlier rules of GATT did apply to agriculture trade, they contained loopholes. Some developed countries protected their costly and inefficient production of temperate zone agricultural products (e.g., wheat and other grains, meat, and dairy products) by imposing quantitative restrictions and variable levies on imports in addition to the high import tariffs. This level of protection often resulted in increased domestic production which, because of high prices, could be disposed off in the international markets only under subsidy. Such subsidized sales depressed international market prices of such agro-products. Providing subsidies by developed countries also led to taking away of legitimated market share of competitive producers, mainly low income countries in the agro sector.

As a result, international trade in agriculture became highly ‘distorted’, especially with the use of export subsidies which would not normally have been allowed for industrial products. Trade is termed as ‘distorted’ if prices are higher or lower than normal, and if quantities produced, bought, and sold are also higher or lower than normal of the levels that usually exist in a competitive market.
The Uruguay Round produced the first multilateral agreement dedicated to the agriculture sector. The objective of the Agreement on Agriculture (AoA) was to reform trade in agriculture and to make policies more market oriented. This is likely to improve predictability and security for both importing and exporting countries.

**Elimination of non-tariff measures through the ‘tariffication’ process**

Subsequent to the Uruguay Round, quotas and other types of trade restrictive measures were to be replaced by tariffs that provide more or less equivalent levels of protection. This process of converting quotas and other types of non-tariff measures to tariffs that represent about the same level of protection, is termed as ‘tariffication’. Under the Uruguay Round, member countries agreed that developed countries would cut the tariffs by an average of 36 per cent in equal steps over six years while developing countries would make 24 per cent cuts over 10 years. Several developing countries also used the option of offering ceiling tariff rates in cases where duties were not ‘bound’ before the Uruguay Round. Least developed countries do not have to cut their tariffs.

For products whose non-tariff restrictions have been converted to tariffs, governments are allowed to take special emergency actions or ‘special safeguards’ in order to prevent swiftly falling prices or surges in imports from hurting their farmers.

**Binding against further increase of tariffs**: In addition to elimination of all non-tariff measures by tariffication, all countries have bound all their tariffs applicable to agricultural products. In most cases, developing countries have given binding at rates that are higher than their current applied or reduced rates.

Tariffs on all agricultural products are now bound. Almost all import restrictions that did not take the form of tariffs, such as quotas, have been converted to tariffs. This has resulted into substantial market predictability in agriculture. The tariffs have also been reduced substantially. Besides, market-access commitments on agriculture also eliminate previous import bans on certain products.

**Domestic support**: National policies that support domestic prices or subsidized production often encourage over-production. This squeezes out imports or leads to export subsidies and low-price dumping in international markets. Under the agreement on agriculture, domestic policies that have a direct effect on production and trade have to be cut back. The domestic support in the agriculture sector is categorized under Green, Amber, and Blue boxes as shown in Exhibit.

Member countries quantified the support provided per year for the agriculture sector which is termed as ‘total aggregate measurement of support’ (total AMS) in the base years of 1986-88. Developed countries agreed to reduce total AMS by 20 per cent over six years starting in 1995 while the developed countries agreed to make a 30 per cent cut over 10 years. Least developed countries were not required to make any cut in AMS. The AMS is calculated on a product-by-product basis by using the difference between the average external reference price for a product and its applied administered price multiplied by the quantity of production. To arrive at AMS, non–product-specific domestic subsidies are added to the total subsidies calculated on a product-by-product basis.

**Export subsidies**: The agreement on agriculture prohibits export subsidies on agricultural products unless the subsidies are specified in a member’s lists of commitments. Where they are listed, the

<table>
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<th>Exhibit : 15.1 Categories of domestic support in agriculture sector</th>
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<td><strong>Green Box</strong>: All subsidies that have little or at most minimal trade distorting effects and that do not have the ‘effect of providing price support to producers’, are exempt from commitments towards reduction. The subsidies under the Green Box include:</td>
</tr>
<tr>
<td>• Government expenditure on agricultural research, pest control, inspection and grading of particular products, marketing, and promotion services</td>
</tr>
<tr>
<td>• Financial participation by government in income insurance and income safety-net programmes</td>
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<tr>
<td>• Payments for natural disaster</td>
</tr>
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</table>
Notes

- Structural adjustment assistance provided through
  - Producer retirement programmes designed to facilitate the retirement of persons engaged in marketable agricultural production
  - Resource retirement programmes designed to remove land and other resources, including livestock, from agricultural production
  - Investment aids designed to assist the financial or physical restructuring of a producer’s operations.
- Payments under environmental programmes
- Payments under regional assistance programme

Amber Box: This category of domestic support refers to the amber colour of traffic lights, which means ‘slow down’. The agreement establishes a ceiling on the total domestic support that a government may provide to domestic producers.

Blue Box: Certain categories of direct payment to farmers are also permitted where farmers are required to limit production. This also includes government assistance programmes to encourage agricultural and rural development in developing countries, and other support on a small scale when compared with the total value of the product or products supported (5 per cent or less in the case of developed countries and 10 per cent or less for developing countries).

The agreement requires WTO members to cut both the amount of money they spend on export subsidies and the quantities of exports that receive subsidies. Taking averages for 1986-90 as the base level, developed countries agreed to cut the value of export subsidies by 36 per cent over six years starting in 1995 whereas developing countries by 24 per cent over 10 years. Developed countries also agreed to reduce the quantities of subsidised exports by 21 per cent over six years whereas developing countries by 4 per cent over 10 years. Least developed countries did not need to make any cuts. During the six-year implementation period, developing countries were allowed under certain conditions to use subsidies to reduce the costs of export marketing and transporting.

Developing countries’ perspective of the Agreement on Agriculture

Contribution of agriculture to economies of developing countries is highly important in terms of sustaining livelihood of a significant proportion of the population, which includes a large number of low-income and resource-poor producers and landless agriculture labourers. This section of the population in developing countries, including India, lacks skills and is not covered under any safety net, which is essential for ensuring a minimal cross-sector labour mobility. Thus, the situation in developing countries is in sharp contrast to the reality of agriculture sector in developed countries. India and other developing countries have, therefore, been insisting that special and differential treatment for developing countries must be integral to all aspects, including the negotiated outcome on agriculture under the Doha Round in the WTO.

Mitigating the risks associated with price declines, price volatility, predatory competition, and other market imperfections that low-income, resource-poor, and subsistence farmers have to face, remains paramount. Key reasons for market imperfections include huge amounts of production and trade-distorting subsidies provided by some developed countries to their agricultural sector. Therefore, along with other developing countries, particularly its alliance partners in the G-20 and G-33, India has been emphasizing that the Doha agricultural outcome must include at its core

- Removal of distorting subsidies and protection by developed countries to the level playing field
- Appropriate provisions designed to safeguard food and livelihood security to meet the rural development needs in developing countries

Apart from insisting on appropriate policy and flexibilities to enable developing country governments to help low-income and vulnerable producers absorb or insure themselves against risks, India has also taken the stand that governments must be able to foster stable and remunerative prices for domestic producers to increase productivity and gradually move away from dependence on low-
productivity agriculture. To these ends, meaningful and effective instruments such as Special Products and the Special Safeguard Mechanism are important for developing countries, such as India. At the Hong Kong Ministerial Conference, it has been agreed that Special Products and the Special Safeguard Mechanism shall be an integral part of the modalities and the outcome of negotiations in agriculture. Moreover, developing countries shall have the right to self designate an appropriate number of special products, guided by indicators based on the three fundamental criteria of food security, livelihood security, and rural development needs. These designated products will attract more flexible treatment. Developing country members will also have the right to recourse to a special safeguard mechanism based on import quantity and price triggers, with precise arrangements to be further defined.

Self-Assessment

1. Choose the correct option:
   (i) Which of the following is NOT an argument to support free trade?
      (a) Free trade leads to efficient allocation of resources.
      (b) Free trade limits the influence of special-interest groups.
      (c) Free trade is always welfare-improving because those who gain can compensate those who lose.
      (d) Free trade allows firms to exploit economies of scale.
   (ii) What is the essence of the “terms-of-trade” argument against free trade?
      (a) Terms-of-trade is an important policy tool that is not available if the government commits to free trade.
      (b) A large country can improve its terms-of-trade by imposing tariffs, and the optimal tariff is positive.
      (c) A large country can improve its terms-of-trade by subsidizing exports, and the optimal export subsidy is positive.
      (d) A small country cannot affect its terms-of-trade, so it might as well impose tariffs to raise government revenues.
   (iii) What particular market failure does the “market failure argument” against free trade refer to?
      (a) Knowledge and technology spill-overs.
      (b) Unemployment.
      (c) Environmental externalities.
      (d) Any market failure that occurs in the tradable sector.
   (iv) The “theory of the second best” states that:
      (a) Free trade is only the “second best” policy, after the optimal tariff.
      (b) Free trade is only desirable if everything else works properly.
      (c) There is always an alternative solution if the first best is not feasible.
      (d) Trade intervention is the best policy for dealing with domestic market imperfections.
   (v) What is the main reason explaining why agriculture enjoys protective tariffs in the U.S.?
      (a) Producers (who gain) are well organized, while consumers (who lose) are not.
      (b) The “infant industry” argument.
      (c) Environmental and health concerns force the government to restrict non-compliant imports.
      (d) Unfair competition from European agriculture.
      (e) Low wages in the agriculture sector would fall even further in the absence of protection.

15.2 Summary

- WTO Agreement on Agriculture stipulated that developed countries would reduce their subsidies by 20 per cent in six years and developing countries by 13 per cent in 10 years. But as
facts stand today, developed countries tried to circumvent this agreement by providing Green Box and Blue Box subsidies to support agriculture.

- Earlier, Indian agricultural prices were lower than international prices mostly. But as a result of the heavy subsidization of agricultural exports by developed countries, the situation undertook a dramatic about-turn.
- Doha Ministerial (2001) forced the developed countries to consider issues of implementation before undertaking consideration of new issues.
- The upshot of the entire analysis is that whereas the developed countries want to penetrate the markets of developing countries in agriculture, they continue to use tariffs, quotas and subsidies to help their farmers.
- Although earlier rules of GATT did apply to agriculture trade, they contained loopholes. Some developed countries protected their costly and inefficient production of temperate zone agricultural products (e.g., wheat and other grains, meat, and dairy products) by imposing quantitative restrictions and variable levies on imports in addition to the high import tariffs.
- Contribution of agriculture to economies of developing countries is highly important in terms of sustaining livelihood of a significant proportion of the population, which includes a large number of low-income and resource-poor producers and landless agriculture labourers.
- Mitigating the risks associated with price declines, price volatility, predatory competition, and other market imperfections that low-income, resource-poor, and subsistence farmers have to face, remains paramount.
- Apart from insisting on appropriate policy and flexibilities to enable developing country governments to help low-income and vulnerable producers absorb or insure themselves against risks, India has also taken the stand that governments must be able to foster stable and remunerative prices for domestic producers to increase productivity and gradually move away from dependence on low-productivity agriculture.
- Developing country members will also have the right to recourse to a special safeguard mechanism based on import quantity and price triggers, with precise arrangements to be further defined.

15.3 Key-Words

1. Tariff : A tax or duty to be paid on a particular class of imports or exports.
2. Export subsidies : Export subsidy is a government policy to encourage export of goods and discourage sales of goods on the domestic market through low-cost.

15.4 Review Questions

1. Discuss the role of WTO.
2. What is the WTO agreement on agriculture? Discuss.

Answers: Self-Assessment

1. (i) (c) (ii) (b) (iii) (d) (iv) (b) (v) (a)

15.5 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Unit 16: Industrial Sector in Pre-Reform Period

CONTENTS
Objective
Introduction
16.1 Industrial Sector in Pre-Reform Period
16.2 The Role of Industrialisation
16.3 Summary
16.4 Key-Words
16.5 Review Questions
16.6 Further Readings

Objective

After reading this Unit students will be able to:
• Discuss the Industrial Sector in Pre-Reform Period
• Explain the role of Industrialisation.

Introduction

The term ‘pre-reform period’ in Indian context means that the process of industrial policy reform started in 1970s. During the 1970s and 1980s, automatic capacity expansions were permitted and a few industries were delicensed in 1975. Moreover, systematic deregulation began in earnest in the mid-1980s. One major change was taxation reforms which primarily related to the conversion of multi-point excise duties into a Modified Value-Added Tax (MODVAT) in all sectors except petroleum products, textiles and tobacco. However, this liberalisation was trivial and hence the intensive industrial policy reforms were launched when the New Industrial Policy (NIP) statement of 1991 introduced. This policy announced reforms in regulations governing foreign investment, licensing, small-scale sector industries, monopoly, and in public sector enterprises. The economic reforms of 1990s were unprecedented in their scope and magnitude. Therefore, the period before 1991 is known as ‘pre-reform period’ and after 1991 is termed as ‘post-reform period’. However, the discussion with regard to the industrial sector will have an emphasis on its performance during 1980s only.

16.1 Industrial Sector in Pre-Reform Period

The direction of industrial development in India made an early start with the introduction of the Statement of Industrial Policy, 1945, the Industrial Policy Resolution of 1948, the enactment of the Industries (Development and Regulation) Act, 1951, the First and Second Five Year Plan documents, and the Industrial Policy Resolution of 1956. These were efforts of organised thinking. It may be noted that the 1945 Statement of Industrial Policy is remarkable as a precursor of all the thinking that became enshrined in the key industrial policy resolutions after independence.

The concept of industrial licensing was also included in this statement. At this point of time, special emphasis was laid on the development of steel, heavy engineering, machine tools and heavy chemicals industries in the economy. The active participation of the Government in the setting up of certain important industries was also mooted in this industrial policy. A significant continuity is observed in thinking between pre-independence and post-independence Government as reflected in the Industrial Policy Resolutions of 1948 and 1956. The dominant view in development economics during 1950s and 1960s was that the Government had to play an important role and it should undertake activities that would compensate for market failure. The low growth of the economy persisted during 1970s. A succession of Five Year Plans set forth a large number of economic policies controlling and directing
private economic activity and guiding public sector enterprises that absorbed a high and increasing fraction of investment. According to Rakesh Mohon (1992), the Second Five Year Plan and even later Plans had been increasingly concerned with the allocation of public resources and much less with indications and policies to direct the whole economy in desired directions. P.C. Mahalanobis influenced the plans heavily. His economic model ignored foreign trade and assumed that domestic investment was limited by the domestic ability to produce capital goods. In this model, the key elements were import substitution, predominance of the public sector and promotion of heavy industry. With the passage of time, these policies combined with industrial licensing system and extensive bureaucratic control over production, import and export, capital issues, foreign exchange, allocation of raw materials, price and allocation of credit served to eliminate competition within the domestic market and to generate a highly inefficient and restrictive production system. It was clear by the late 1970s and early 1980s that the pervasive regulation and controls over private economic activity by the Government had effects opposite to those intended and had inhibited economic efficiency and industrial growth in the country. Thus, from that time onwards, the idea of bringing in industrial policy reforms in the Indian economy was in the air. In 1984, to “rationalise” controls became the declared objective.

**Industrial Sector in Pre-Reform Period**

In the pre-reform period, the industrial sector in India fared quite impressively in the 1980s in terms of growth of output/value added, compared to the earlier decades. There has been much discussion in recent literature on the pattern of growth in the 1980s and the factors behind the improved growth performance. With the introduction of some major policy reforms in 1985, the re-orientation of industrial and trade policies initiated in the mid-1970s received a fillip. Let us see whether the growth performance in the second half of the 1980s was superior to that in the first half of the period.

**Pattern of Industrial Growth**: If we look at average annual growth rates in Gross Value Added (GVA) for the entire economy, the agricultural sector and the different subsectors of the industrial sector for the 1970s, 1980s and the two halves of the 1980s, we find that there was appreciable increase in the growth rate in the 1980s in all sectors/sub-sectors for which comparable figures are available. We find from comparison of the two halves of the 1980s that with the exception of registered manufacturing, other sectors/sub-sectors fared better in the second half. Moreover, the unregistered manufacturing sub-sector improved its growth rate considerably from 4.1 to 7.5% per annum and this improvement alone is responsible for the observed increase in the growth rate of the manufacturing sector from 6.2 to 7.8%. It may be noted that the share of industry increased substantially over the 15-year period (1950-51 to 1965-66), from 12.8 to 19.1%. However, the increase was marginal over the subsequent 15-year period (1965-66 to 1980-81) from 19.1 to 20.8%. We see that the structural change in favour of industry again gained momentum in 1980s. Industry, on the other hand, accounted for a little more than one quarter (25.1%) of total GDP at the end of that decade.

**16.2 The Role of Industrialisation**

Industrialisation has a major role to play in the economic development of the underdeveloped countries. The gap in per capita incomes between the developed and underdeveloped countries is largely reflected in the disparity in the structure of their economies; the former are largely industrial economies, while in the latter production is confined predominantly to agriculture. Table 1 clearly reveals the positive relationship between per capita income and the share of manufacturing output (industry including construction). Undoubtedly, some countries have achieved relatively high per capita incomes by virtue of their fortunate natural resource endowments.

Petroleum exporting countries like Saudi-Arabia, Kuwait, and UAR have achieved higher per capita income by exploiting the strong advantage that they enjoy in international trade. But these countries are a rather special case.

The pattern of ‘growth through trade’ in primary commodities was, however, realised in the nineteenth century when industrialization was closely linked with international trade, because (a) countries previously isolated by high transport costs as well as other barriers came to specialize, and (b) economic
development through trade was diffused in outlying areas because the pattern of advance in the rising industrial countries happened to be such as to cause a rapidly growing demand for crude products of the soils which those areas were well-fitted to supply. This traditional pattern of growth through trade is out of place now. As rising levels of per capita consumption have gradually resulted in the more economic use of new materials or the creation of synthetic substitutes, the growth of import demand of the advanced countries for most primary products has lost the momentum of the earlier period and, currently, it lags behind the growth in their domestic incomes and output. The volume of exports from the underdeveloped countries expanded at a rate of 3.6 per cent per annum while the exports from the developed countries rose at the rate of 6.2 per cent. This export lag is accompanied by a deterioration in their terms of trade. Thus in view of unfavourable trends in world trade of primary commodities, industrialisation is the only effective answer to the problems of underdeveloped countries. They can no longer depend upon trade for their development; they have to activise dynamic elements within their economies.

Table 1: Percentage Industrial Distribution of Gross Domestic Product and Per Capita Income (2009)

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<tr>
<td></td>
<td>Agriculture</td>
<td>Industry</td>
</tr>
<tr>
<td>U.S.A.*</td>
<td>46,436</td>
<td>1.3*</td>
</tr>
<tr>
<td>Belgium</td>
<td>44,429</td>
<td>.8*</td>
</tr>
<tr>
<td>U.K.*</td>
<td>35,164</td>
<td>.7*</td>
</tr>
<tr>
<td>Japan</td>
<td>39,726</td>
<td>1.4*</td>
</tr>
<tr>
<td>China</td>
<td>3,744</td>
<td>10.3</td>
</tr>
<tr>
<td>India</td>
<td>1,134</td>
<td>17.1</td>
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</tbody>
</table>

Source: World Bank, World Development Indicators, 2010 *2008

Besides the limitation of ‘trade gap’, these countries are facing a relentless increase of population combined with a likelihood of diminishing returns in agriculture which is instrumental in creating the trap of poverty. The essential precondition for development (and to break this vicious circle) is an all-round rise in low productivity occupations to high productivity occupations. In general, the net value of output per person is higher in industry than in agriculture. In industry, the scope for internal as well as external economies is greater than in other sectors and certainly greater than in agriculture. As industrialisation proceeds, economies of scale and inter-industrial linkages (complementarity) become more pronounced. It also leads to the creation of economic surplus in the hands of industrial producers for further investment.

The Pattern of Industrialisation

While there is now almost universal agreement on the importance of industrialisation, there is still much debate regarding the proper pattern of industrial development. Historically, industrial development has proceeded in three stages. In the first stage, industry is concerned with the processing of primary products: “Milling grain, extracting oil, tanning leather, spinning vegetable fibres, preparing limber and smelting ores.” The second stage comprises the transformation of materials making bread and confectionery, footwear, metal goods, cloth, furniture and paper. The third stage consists of the manufacture of machines and other capital equipments to be used not for the direct satisfaction of any immediate want but in order to facilitate the future process of production. Hoffmann
classified all industrial output into two categories, consumer goods and capital goods output and classified various stages in terms of the ratio of consumer goods output to that of capital goods output. “In stage I the consumer goods industries are of overwhelming importance, their net output being on the average five times as large as that of capital goods industries.” This ratio is 2.5 : 1 in the second stage and falls to 1 : 1 in the third stage and still lower in the fourth stage. Both these types of classifications emphasise the increasing role of the capital goods industries in the economy as industrial development takes place.

Though the general development of industry itself has proceeded from consumer goods to the capital goods, there are many variations of this pattern, both in terms of time taken to attain later stages and in terms of relative importance of each of the stages. Similarly, underdeveloped countries may also evolve a different pattern of industrialisation suitable to their economic conditions. It has been suggested that the pattern of industrialisation in under-developed countries should be guided primarily by considerations arising from the relative scarcity of capital. Since labour is relatively plentiful and capital scarce, the development of labour-intensive consumer goods seems quite legitimate. However, the basic premise of this approach is inappropriate. The problem is not how to economise the use of capital (this has to be done as an inevitable condition) but how to increase its supply. Since most underdeveloped countries do not produce these goods at home, the only alternative to increasing their supplies is through imports. This depends upon the rate of growth in exports of primary commodities and manufactured goods. As it has been pointed above, the countries are facing an “export lag” in their exports of primary commodities. Consequently, primary commodity exports do not seem to be a reliable source of foreign exchange earning in order to increase the import of capital goods.

Did you know? Soviet pattern of industrialisation involves a straight jump from the first to the third stage while British pattern is that of a gradual evolution.

Industrial Pattern and the Five-Year Plans

The Government of India launched the process of industrialisation as conscious and deliberate policy of economic growth in early fifties. The Government recognised the significant contribution industrialisation could make to the development process, “as a base for the growth of the primary sector, as a catalytic agent for the development of infrastructure, as a stimulant to generation of technologies through R & D effort . . . and as a growth multiplier.”

Industries and the Second Plan (1956-61)

The Second Five-Year Plan programme for industrialisation was based on the Industrial Policy Resolution of 1956 which envisaged a big expansion of the public sector. A base of heavy industry was sought to be created. The actual investment in the public sector on organised industry was ₹ 870 crores. Private sector investment was ₹ 675 crores during the Second Plan period — more than envisaged in the Plan. Similarly, investment in village and small industries was ₹ 265 crores (in both public and private sectors). Taken together, total investment in industries was ₹ 1,810 crores, i.e., 27 percent of the total investment during the Second Plan.

The industrial pattern sought to be developed during the Second Plan was conceived in terms of the following priorities:

(i) increased production of iron and steel and of heavy engineering and machine building industries;
(ii) expansion of capacity in respect of other development commodities and producer goods such as aluminium, cement, chemical pulp, dyestuffs and phosphatic fertilisers, and of essential drugs.
(iii) modernisation and re-equipment of important national industries which have already come into existence such as jute and cotton textiles and sugar;
(iv) fuller utilisation of existing installed capacity in industries where there are gaps between capacity and production; and
(v) expansion of capacity of consumer goods keeping in view the requirements of common production programmes and the productions targets for the decentralised sector of industry.
During the Second Plan a major task in industry was the building up of three steel plants in the public sector: Rourkela Steel Plant in Orissa, Bhilai Steel Plant in Madhya Pradesh and Durgapur Steel Plant in West Bengal. The other programmes of industrial development include manufacture of electrical equipment, expansion of Hindustan Machine Tools, expansion of Sindri Fertilizer factory and the establishment of a fertilizer plant at Nangil further expansion of Hindustan Shipyard and Chittaranjan Locomotive factory.

The Second Plan witnessed a major diversification of the industrial spectrum. It strengthened further programmes of development in respect of oil exploration and coal and made a beginning with the development atomic energy.

Most of the investments in the Second Plan were heavy and basic industries. There was also rapid expansion of machine-building industries for use in agriculture are transport and for such industries as chemicals, textiles, jute, cement, tea, sugar, flour and oil mills, paper, mining, etc. Good progress was also recorded in modernisation and equipment of important industries such as jute, cotton textiles and sugar. Quite a number of new industrial items e.g., industrial boilers, milling machines, tractors, motor cycles, scooters, etc., were also produced in large quantity.

In the sphere of village and small industries substantial progress was recorded. About 60 industrial estates comprising 1,000 small factories were set up. The period also witnessed the rise of a vigorous class of small entrepreneurs. In a number of items such as machine tools, sewing machines, electric motors, fans, bicycles, hand tools, etc. production increased from 25 to 50 per cent during the five-year period. Khadi, handloom and powerloom cloth production increased from 1,610 million metres to 2,150 million metres.

Industries and the Third Plan (1961-66)

With the base created in the first two Plans, the Third Plan called for the maximum rate of investment to (a) strengthen industry, power and transport and (b) hasten the process of industrial and technological change.

The overall financial outlay in organised industries and mining during the Third Plan period was ₹ 3,000 crores out of which the outlay in the public sector was about ₹ 1,700 crores and that in the private sector ₹ 1,300 crores.

The key role in industrial development programme was for the public sector. The aim was to make the economy self-sustaining in producers' goods industries such as steel, machine building, etc., so that the quantum of external assistance needed could be curtailed to a very low level. An overall target of 7 per cent increase in industrial production was envisaged in the Plan.

Except for the year 1965-66, industrial output increased steadily at the rate of 7.6 percent per annum. The achievement was lower than the average of 14 per cent per annum visualised in the plan. Although the increase in the output of producer and basic industries was higher than the growth in the general index of production, yet it was much lower than the target set out in the Third Plan.

Despite the overall under-achievement of targets of Third Plan reflected the first stage of a decade or more intensive development leading to a self-reliant and self-generating economy. Engineering industries like automobiles and cotton textile machinery, diesel engines, electric transformers and machine tools, advanced according to set-targets as did industries such as petroleum products, heavy chemicals, cement etc. Mining and extractive industries also showed considerable progress. It was during this period that a fairly sound base for future industrial growth was laid through the completion of projects of the HEC for manufacture of machinery and equipment for steel plants, the MAMC for the production of mining equipment and Bharat Heavy Electrical for power generation and transmission equipment.

Industries and the Fourth Plan (1969-74)

The Fourth Plan intended to complete industrial projects undertaken in the Third Plan. It also aimed to enlarge capacities in export promotion and import substitution industries.

During the Fourth Plan, the actual outlay on organised industry was of the order of ₹ 2,700 crores in the public sector. Thus, the financial investment was short of the targets set out in the Fourth Plan. Nearly three-fourths of the total investment was in the core sector, viz., iron and steel, non-ferrous
metals, fertilisers, petroleum and petro-chemicals, coal and iron ore.

The performance in industry was far short of even the modest targets set out in the Fourth Plan. On an average, the growth rate in industry was around 5 per cent which was much below targeted growth rate of 8 per cent envisaged in the Plan.

**Industries in the Fifth Plan (1974-78)**

Programmes of industrial development in the Fifth Plan were formulated keeping in view the objectives of self-reliance and growth with social justice. The Plan proposed to lay emphasis on the following:

(i) Rapid growth of core sector industries by giving high priority to steel, non-ferrous metals, fertilisers, mineral oils, coal and machine building.

(ii) Development of industries which promise a rapid diversification and growth of exports.

(iii) Enlarging the production of industries supplying mass consumption goods, viz., cloth, edible oils and vanaspati, sugar, drugs, bicycles.

(iv) Restraint on the production of inessential goods, except for exports.

(v) Development of small industries by reserving 124 items exclusively for them and by initiating an intensive programme for the development of ancillary industries as feeder industries to large-scale units.

Against the targeted annual growth rate of 8.1 per cent in the industrial sector, the actual annual industrial growth rate was of the order of 5.3 per cent during 1974-75 to 1977-78—much below the target.

**Industries in the Sixth Plan (1980-85)**

The Sixth Plan (1980-85) intended to work within the overall developmental strategy particularly with regard to the objectives of structural diversification, modernisation and self-reliance. The other elements of policy included the following:

(a) To meet foreign exchange requirements, export of engineering goods and industrial products, as also project exports would be stepped up.

(b) A judicious blend of permitting import of contemporary technology and promoting the development of indigenous know-how through domestic research and development.

(c) New strategies for development of backward regions would be devised. The thrust would be to implement a new model of development which would prevent concentration of industry in existing metropolitan areas.

A review of the progress of the industrial growth during the Sixth Plan reveals that as against the target of 7% growth in industrial productions, the growth rate achieved, however, was only 5.5 per cent. This was lower than the trend growth rate of 6 percent witnessed in the earlier three decades.

**Industries in the Seventh Plan (1985-90)**

In consonance with the guiding principles of the Seventh Plan, viz., to achieve growth with social justice, and improving productivity, the objectives of the development programmes in the industrial sector were:

(i) to ensure adequate supply of wage goods and consumer articles of mass consumption at reasonable prices and of acceptable quality;

(ii) to maximise the utilisation of the existing facilities through restructuring, improved productivity and upgradation of technology;

(iii) to concentrate on development of industries with large domestic market and export potential to emerge as world leaders in them;

(iv) to usher in ‘sunrise’ industries with high growth potential and relevance to our needs; and

(v) to evolve an integrated policy towards self-reliance in strategic fields and opening up of avenues for employment of skilled and trained manpower.
The Seventh Plan provided for an investment of ₹ 19,710 crores in large and medium industries and ₹ 2,750 crores for the development of village and small industries. Total investment in the industrial sector would thus be of the order of ₹ 22,460 crores or 12.5% of the total Plan outlay. The annual target growth rate was 8 per cent.

The main elements of the Seventh Plan industrial strategy were:

(i) Rapid removal of infrastructural constraints, by placing greater emphasis on additional availability of power through more efficient use of existing capacity as well as the establishment of new power stations including super thermal and nuclear plants.

(ii) Encouragement of modernization and technological upgradation in industries like textiles and sugar where a large number of units were set up in the early part of the 20th century.

(iii) Specific targets of productivity for major industries like steel, fertilizers, non-ferrous metals, petro-chemicals, paper and cement were to be set for the Plan.

(iv) Export production was to be made an integral part of production in the domestic economy. A special effort was to be made in selected industries in which the country has comparative advantage and has reached a degree of industrial maturity.

(v) Encouragement of ‘sunrise’ industries such as telecommunications, computers, micro-electronics, ceramic composites and bio-technology. Industries were to be encouraged to adopt technologies like fibre optics, lasers, robotics etc. for enhancing productivity and quality.

(vi) Location of industries near the small district towns which were not industrialized so far would be promoted with a view to removing regional disparities and encouraging dispersal of industries.

(vii) About 30 per cent of industries—large and medium—had already installed pollution control system. The Seventh Plan intended to enlarge the coverage of this programme as also to strengthen it.

A review of the progress of the Seventh Plan reveals that the annual growth rate of the industrial sector including mining, manufacturing and electricity generation during the Seventh Plan period was 8.5% which though marginally lower than targeted 8.7% was much higher than the 5.5% achieved during the Sixth Plan.

Industries in the Eighth Plan (1992-97)

The Eighth Plan was formulated under a new environment when a number of reforms in industrial, fiscal, trade and foreign investment policies were introduced in the economy—commonly called as economic liberalisation. In the context of the new Industrial Policy of July 1991, the role of the public and private sector was reviewed. In the initial phase of planned development the public played a pioneering role but its principal weakness extremely poor performance and its inability to general adequate resources for sustaining the growth process. During this period, the private sector has come of age has developed considerable entrepreneurial, manage technological, financial and marketing strengths. Thus, private sector should henceforth play a greater role in process of development. This new approach is consist with the general philosophy of placing greater reliance competitiveness of industries and efficiency of operation. Future growth would, therefore, be more in those sector where the country has comparative cost advantage.

Eighth Plan allocated a total investment of ₹ 38,083 crores for industry and mineral production (at 1991-92 prices). A review of the progress of actual outlay reveals that at current prices, ₹ 40,759 crores were spent, but measured at 1991-92 prices, this worked out to be ₹ 31,39 crores. In other words, actual investment worked out to about 82 per cent of planned investment. There therefore, a serious shortfall of the order of 18 per cent.

Industries during the Ninth Plan (1997-2002), Tenth Plan (2002-07) and onward

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

Ninth Plan allocated ₹ 69,972 crores for industry at 1996-97 prices, but the Tenth Plan reveals that the total allocation to industry in the public sector was ₹ 44,695 crores at 2001-02 prices. If we revalue the proposed allocation of the Ninth Plan of ₹ 69,972 at 1996-97 prices, it works out to be ₹ 88,730 crores at 2001-02 prices. Comparing it with the public sector outlay of ₹ 44,695 crores, it implies that actual outlay of the public sector was only 50.3 per cent of the proposed outlay. It was hoped that the private sector would fill the gap, but this did not happen.

Reviewing the internal and external factors for the slowdown during the Ninth Plan, the Tenth Plan states: “The industrial slowdown is widespread, covering all broad sectors, e.g. manufacturing, electricity and mining and all end-use based groups such as capital goods, intermediate goods and consumer goods (both durables and non-durables). The slowdown in domestic and global demand appeared to be a major factor constraining industrial growth. Another major reason has been the decline in investment, noticeably by the private sector.”

The difficulties caused by internal factors were aggravated by the slow growth of the world economy, which resulted in a substantial slowdown in manufacturing exports. This implies that failure of the Ninth Plan in industry can be attributed to the fall in public sector investment which was not compensated by an upturn in private investment.

Self-Assessment

1. Choose the correct option:
   (i) What was the Industrial Revolution?
      (a) The industries set up after the French and American Revolutions
      (b) The acceleration of technical and economic development that begun in Britain around 1750
      (c) Where all the poorly paid industrial workers finally had enough and all stopped work at once around 5.30 in the afternoon
      (d) None of These
   (ii) What was the ‘new’ industry dominated by?
        (a) Machinery and Manufacturing
        (b) Farms and Animals
        (c) Selling and Servicing
        (d) None of these
   (iii) Which statement is the best summary of the economy in 1750?
        (a) Heavy manufacturing, lots of pollution
        (b) Water powered factories, some pollution
        (c) Based on agriculture, growing and selling produce
        (d) None of these
   (iv) Why do some historians dislike the term ‘Industrial Revolution’?
        (a) They feel ‘revolution’ means a dramatic change, but the real change was gradual and varied
        (b) They hate using the word revolution if America or France are not involved
        (c) They feel ‘industrial’ is incorrect, implying some sense of mechanised change, where the real change began much earlier
        (d) None of these
(v) When and where was Britain described as ‘the workshop of the world’?

(a) In 1750 when the Americans predicted the ‘revolution’ to come
(b) In 1800 at the Paris Industrial Conference
(c) In 1851 at the Great Exhibition
(d) None of these

16.3 Summary

- The direction of industrial development in India made an early start with the introduction of the Statement of Industrial Policy, 1945, the Industrial Policy Resolution of 1948, the enactment of the Industries (Development and Regulation) Act, 1951, the First and Second Five Year Plan documents, and the Industrial Policy Resolution of 1956.

- In the pre-reform period, the industrial sector in India fared quite impressively in the 1980s in terms of growth of output/value added, compared to the earlier decades.

- If we look at average annual growth rates in Gross Value Added (GVA) for the entire economy, the agricultural sector and the different subsectors of the industrial sector for the 1970s, 1980s and the two halves of the 1980s, we find that there was appreciable increase in the growth rate in the 1980s in all sectors/sub-sectors for which comparable figures are available.

- There are several opinions about the resurgence of growth in the 1980s but there are certain most common factors causing the improvement in the growth rate.

- Industrialisation has a major role to play in the economic development of the underdeveloped countries. The gap in per capita incomes between the developed and underdeveloped countries is largely reflected in the disparity in the structure of their economies; the former are largely industrial economies, while in the latter production is confined predominantly to agriculture.

- The industrial sector which possesses a relatively high marginal propensity to save and invest contributes significantly to the eventual achievement of a self-sustaining economy with continued high levels of investment and rapid rate of increase in income and industrial employment.

- In many cases, the diversion of underemployed rural labour to non-agricultural occupations is an urgent requirement for development.

- While there is now almost universal agreement on the importance of industrialisation, there is still much debate regarding the proper pattern of industrial development.

- Soviet pattern of industrialisation involves a straight jump from the first to the third stage while British pattern is that of a gradual evolution.

- The alternative to the increase of exports of primary products from under-developed countries would be to develop export promoting manufacturing industries.

- Before the rise of the modern industrial system Indian manufacturers had a world-wide market. Indian muslin and calicoes were in great demand the world over. Indian industries not only supplied all local wants but also enabled India to export its finished products.

- The British Government in India provided discriminating protection to some selected industries since 1923. This protection was accompanied by the most favoured nation clause for British goods.

- The Government of India launched the process of industrialisation as conscious and deliberate policy of economic growth in early fifties. The Government recognised the significant contribution industrialisation could make to the development process, “as a base for the growth of the primary sector, as a catalytic agent for the development of infrastructure, as a stimulant to generation of technologies through R & D effort... and as a growth multiplier.”
Notes

16.4 Key–Words

1. Propensity : An inclination or natural tendency to behave in a particular way.
2. Industrialisation : Industrialization is a historical phase and experience. Industrialization is the overall change in circumstances accompanying a society’s movement population and resources from farm production to manufacturing production and associated services.

16.5 Review Questions

1. Discuss the pre reform period in industrial sector.
2. What is meant by industrialization? Discuss the role of industrialization.

Answers: Self–Assessment

1. (i) (b) (ii) (a) (iii) (c) (iv) (c) (v) (c)

16.6 Further Readings

*Books*

1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
Unit 17: Industrial Sector in Post-Reform Period

CONTENTS
Objective
Introduction
17.1 Industrial Sector in Post-Reform Period
17.2 Small-Scale Industries in India
17.3 Pattern of Ownership of Industries
17.4 Summary
17.5 Key-Words
17.6 Review Questions
17.7 Further Readings

Objectives
After reading this Unit students will be able to:
• Explain the Industrial sector in Post-Reform Period

Introduction
Liberalisation of industrial licensing and opening up industry to foreign investment, the amendment to the Monopolies and Restrictive Trade Practices (MRTP) Act and restricting the role of the public sector were some of the important policy changes made by the 1991 reforms of Industrial Policy. At the same time, a separate set of policy measures were introduced for the promotion and strengthening of Small-Scale Industries (SSIs) in August, 1991. The empirical studies have shown that the investment boom of the early 1990s led to a rapid increase in demand and in profits; improvements in technology and efficiency probably added to this effect. Regarding the productivity front of the manufacturing sector, the empirical evidences reflect a fall in labour productivity and capital intensity in the post-reform period. The performance of the SSI sector in India shows that the sector is facing a tough challenge for its survival and growth in the period of globalisation. It is seen that the growth and contribution of the SSI has not been so impressive in the post-reform period. However, international and national policy changes have thrown open new opportunities and markets for the Indian SSI sector. The performance of industrial sector in the post-reform period can be discussed in the light of changes in the industrial policy made in 1991. Moreover, the assessment also includes discussion on structural changes in the industrial production and impact of liberalisation on profitability and productivity of the manufacturing sector. The Small-Scale Sector (SSI) has great potential and an importance place in the Indian economy; hence this sector shall be given special emphasis.

17.1 Industrial Sector in Post-Reform Period

The widespread regulation and controls over private economic activity by the Government had inhibited economic efficiency and growth clearly by the late 1970s and early 1980s. Thus, systematic deregulation was started in the mid-1980s. Moreover, taxation reform-mainly the conversion of multi-point excise duties into a modified value added tax (MODVAT) by 1990—also influenced industrial performance. It did so by reducing the taxation of inputs and the associated distortion. Further, the New Industrial Policy (NIP) statement of 1991 introduced reforms in regulations governing licensing, monopoly, foreign investment and small-scale sector industries and in the role of public sector enterprises. An important part of the NIP statement of 1991 was liberalisation of industrial licensing and opening up industry to foreign investment. Apart from this, the reforms process of the 1990s
amended the Monopolies and Restrictive Trade Practices (MRTP) Act. This eliminated the need for prior Government approval for new investment, capacity expansion and mergers by large firms. At the same time, the scope of Public Sector Units (PSUs) was restricted to the provision of infrastructure services. Complete privatization was introduced in the late 1990s, which made slow progress with the first major successful privatization taking place in 2001. As a result of the above changes, a separate set of policy measures were introduced for the promotion and strengthening of Small-Scale Industries (SSIs) in August, 1991. We find that this new policy statement was a clear re-affirmation of the commitment of the Government towards the importance of this sector in economic growth objectives. In this policy, Government proposed to impart more vitality and growth impetus to the sector to enable it to contribute its mite fully to the economy, particularly in terms of growth of output, employment and exports. In the process, the sector was substantially delicensed and investment limits in plant and machinery were increased. On the whole, firms operating in the Indian market in the pre-reform period (before 1991) faced barriers to entry due to Government control over private investment. It was done through the licensing regulations, reservation of production for the public sector and lengthy and opaque procedures for approving Foreign Direct Investment (FDI). These were further subject to a maximum limit of 40% equity share in the business.

17.2 Small-Scale Industries in India

For defining Small-Scale Industries (SSIs), there is no single functional economic criterion. Specific circumstances have defined the SSIs in different countries. The SSI is a relative concept and has to be understood in the context of the stage of economic development attained and the political and social environments existing in the country concerned. In India, SSIs were not given so much importance during the British rule as is given today. Apparently, most countries define Small-Scale Industries or enterprises in terms of employment levels. Generally, SSIs are taken to be those units, which employ more than 5 but less than 50 or 100 workers. In India, investment ceilings are also used to define SSIs. This limit in 1950 was upto Rs. 0.5 million in fixed assets employing less that 50/100 persons with or without power. Later, from 1960 onwards, there are no conditions regarding employment but investment limit has been raised to keep up with inflation and hence to preserve the real value of investment limits. In 1999, the investment limit was fixed at Rs. 10 million.

Since independence, Small-Scale Industry (SSI) has been one of the major planks of India’s economic development strategy. The key elements of India’s policy for the support of small-scale industries have been small-scale industry reservations, fiscal concessions by way of lower excise duties, preferential allocation of and subsidisation of bank credit, extension of business services by the Government and preferential procurement by the Government. Thus, small-scale industry has been sought to be protected from the competition of large companies both through reservations as well as fiscal concessions. The rationale for protection of SSIs from the viewpoint of the SSIs is that distortions in the capital are much more important than those in the labour market. Moreover, in the land market, small enterprises could face greater regulatory hurdles in achieving appropriate access to land. Similarly, the SSIs make economical use of capital and absorb abundant labour supply which characterises an under developed economy. Recently, it is being asked if protection of SSIs still relevant. There has been vast growth of small units over the years. In the process, the Governmental structure for technical support of SSIs has become both obsolete and inadequate. Further, with the opening of the economy, the reservation policy has become counter productive. In addition to this, the fiscal concessions can also be operating so as to discourage growth into large units. Thus, a new approach for supporting small-scale industries has to be adopted in India.

Globalisation and Small Industry Units Performance in India : Because of its significant role in terms of output, exports and employment, SSI is important for India. There were 3.4 million small industry units at the end of March 2002 and accounted for more than 40% of gross value of output in the manufacturing sector, about 35% of total exports, and providing employment to over 19.2 million people. The employment in this sector is second only to agriculture. The cumulative impact of liberalisation and globalisation and recent developments is a remarkable transformation of the economic environment. Now, SSIs operate in an environment where it has no option but to compete or perish in the process. There are two ways to evaluate growth performance of small industry :
1. To assess the change in small industry’s relative contribution to GDP, exports and organised sector employment in the 1990s with that of the 1980s.

2. Comparison of the growth rates of units, employment, output and exports of small industry in the 1990s with that of the 1980s.

We observe that the growth of small industry in the transitional period of 1990s has come down not only in terms of units and employment but also output. The increasing competition in the globalisation period might have affected the growth of Indian SSIs adversely. It may be noted that the scenario during the two periods does not differ much, except for exports. It is true that the growth rates of units and employment have steadily come down but the growth rates of output and more importantly, exports have fluctuated.

It is seen that the share of small industry in national income increased in the protection period of the 1980s but declined considerably in the transitional period of the 1990s. To conclude, performance of the SSI sector in India does indicate that the sector is facing a tough challenge for its survival and growth in the period of globalisation. However, international and national policy changes have thrown open new opportunities and markets for the SSI sector in India. The Government and small industry must make efforts to imbibe technological dynamism to build upon the opportunities.

Review of Industrial Growth Under Planning — Structural Transformation

The progress of industrialisation during the last 50 years since 1951 has been a striking feature of Indian economic development. The process of industrialisation, launched as a conscious and deliberate policy under Industrial Policy Resolution of 1956 and vigorously implemented under the five year plans, involved heavy investments in building up capacity over a wide spectrum of industries. As a result, over the last nearly 50 years, industrial production went up by about five times, making India the tenth most industrial country of world. The industrial structure has been widely diversified covering broadly the entire range of consumer, intermediate and capital goods. The progress India has made in the field of industrialisation is clearly reflected in the commodity composition of India’s foreign-trade in which the share of imports of manufactured goods has steadily declined; on the other hand, industrial products, particularly engineering goods have become a growing component of India’s exports. Finally, the rapid stride in industrialisation has been accompanied by a corresponding growth in technological and managerial skills for efficient operation of the most sophisticated industries and also for planning, designing and construction of such industries.

Industrial Progress Since Independence

A major achievement in the industrial sector has been the diversification of India’s capability. This indicates the growth of the industrial output in selected commodities. The figures show clearly the tremendous increase in production of some important goods in the country.

India has attained self-sufficiency in almost all consumer goods. Growth of capital goods production has been specially impressive. An impressive industrial capacity has been achieved in mining and metal industries, chemical and petrochemical industries, production, capital goods industries including sophisticated equipment for steel mills, fertiliser plants, chemicals etc. light, medium and heavy engineering industries and transportation industry, construction industries. Further, India can now sustain the future growth sectors of the economy primarily through domestic and only with marginal imports. Finally, the infrasture including R and D capability, consultancy and engineering services, project management services innovative capacity to improve and adapt technology have indeed shown an impressive record of progress.

Rate of Industrial Growth

Industrial growth, however, has not been since 1951. After a steady growth of about 8 pen cent the initial period of 14 years (1951 to 1965), there fluctuating trend since then — near stagnancy during 1968, and of 9.5 per cent during 1976-77, a high level percent in 1979-80. In the sixties (1961-70) the growth rate of industrial output was put at 5.5 per cent in the seventies (1971-80) the average growth rate about 4 per cent per annum. Even during 1980-81 growth rate of industrial production was 5.5 annum.
The basic fact was that the rate of industrial had been slowing down. During the 7th Plan (1985-90) growth rate had picked up to an average of over 8 per annum and in the Eighth Plan, it had declined to 4.6 per annum.

During the Ninth Plan (1997-2001-02), industry growth slumped to 4.6 per cent per annum, but during 10th Plan (2001-02 to 2006-07), it picked up significant to 8.2 per cent per annum. This is a healthy development.

**Growth of Infrastructure**

The rapid pace of industrial growth and the development of productive capacity has been marked by remarkable, though still inadequate, expansion of infrastructural facilities in the country with expansion and modernisation of coal which is India’s primary fuel source, by more than three-fold and notable success in the exploration of oil and gas both on and off-shore. The Sixth Plan summed up the success in infrastructure admirably. An efficient complex of refineries, pipelines, storage and distribution has been developed and India has entered the petrochemical age. A large infra-structure has been built to sustain this sub-continental economy- a network of irrigation, storage works and canals, hydro and thermal power generation, regional power grids, a largely electrified and dieselised railway system, national and state highways on which a rapidly growing road transport fleet can operate and telecommunications system covering most urban centres and linking India with the world. The development of modern industry as well as of agriculture has stimulated the growth of banking, insurance and commerce and required matching expansion and modernisation of ports, shipping and internal and external air services. The major beneficiaries of all these services, as pointed out all however, have been the wealthier sections of the population both in urban and rural areas.

**Science and Technology**

Significant progress has been recorded in the science and technology. India now ranks third in the respect of technological talent and manpower. The scientists and technologists are working in many and the frontiers of today’s knowledge, as in agriculture industry, in the development of nuclear power and of space technology for communications and development. For further industrial and scientific and with growing competence in adaptive research development, we need only a selective import of technology. The country has been able to train a cadre of technology manpower which can handle cement factories, chemicals fertiliser units, oil refineries, power houses, steel locomotive factories, engineering industries, etc. than a lakh and half degree and diploma holders are out by the technical institutions. Similarly in plant and sending brilliant young men and women training in top skills has helped to generate skilled many and thus reduce dependence on foreign technician experts. However, small and cottage industries, rural and activities have not received the research development support that they required.

**Inadequacies of the Programme Industrialisation**

Without under-estimating the achievements process of industrial expansion initiated during the plan era, it may be emphasised that much of the industry growth is only apparent and not real. Our reasons for are as under :

*Firstly*, the share of industry income in national in 1948-49 was 17 per cent. In 1996-97, it was around per cent—an increase of just 4 per cent in 50 years in terms of contribution of national product, manufacturing industry sector continues to be low. In of the developed nations, this share is between 30 per cent.

*Secondly*, the process of industrialisation has been able to make a dent on the problem of unemployment. The high capital intensity of public sector im generated a very small amount of employment. For employment absorbed only 2 per cent of the labour Professor Gunnar Mydral studied the spread effect industrialisation on employment and also its back effects in terms of unemployment on the traditional. After a careful examination of the situation, My observed : “The employment effects of industrialise cannot be expected to be very large for several decade ahead, that is, until the region is much more industrial. For a considerable time the net employment effects even be negative. This
dimension of the problem, as the wider consequences for labour utilisation outside the modern sector,
is overlooked in the vision that sees industrialisation as the remedy for ‘unemployment’ and under-
employment”.

**17.3 Pattern of Ownership of Industries**

The Annual Survey of Industries has reclassified data about the ownership pattern of industries into
three categories. In the non-corporate sector are included

<table>
<thead>
<tr>
<th>Table 4 Ownership of industries (2007-08)</th>
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<tbody>
<tr>
<td>Factories</td>
</tr>
<tr>
<td>1. Non-Corporate Sector</td>
</tr>
<tr>
<td>2. Corporate Sector</td>
</tr>
<tr>
<td>(a) Private</td>
</tr>
<tr>
<td>(b) Public</td>
</tr>
<tr>
<td>3. Others</td>
</tr>
<tr>
<td>Total (1+2+3)</td>
</tr>
</tbody>
</table>

**Note:**

1. Non-corporate sector comprises of individual proprietorship, Joint Hindu Undivided Families (HUF) and Partnership
2. Private corporate sector includes public and private limited companies
3. Others include Khadi & village industry, handloom, co-operative societies etc.

**Source:** Annual Survey of Industries (2007-08)

industrial units which are owned by individuals proprietorships, joint families (Hindu Undivided families -HUF) and partnerships. Secondly, the corporate sector is sub-divided into two sectors - (a) private corporate includes public and private limited companies; and (b) public corporate sector includes Government Departmental Enterprises and public corporations. There is third category ‘others’ comprising of khadi & village Industry. Handloom and co-operative societies running industrial units e.g. sugar mills run by co-operative societies in Maharashtra etc.

In terms of number of units, the non-corporate sector accounts of 63% of units, mostly in small industries sector referred to as the unorganized sector, but they employed 7.3% of productive capital, accounted for only 8.2% of value added, but provided employment to nearly 31% of industrial labour.

The corporate sector accounted for 91.3% of the productive capital, 90.4% of value added and provided employment to about 66% of industrial labour. Within the corporate sector, the private sector accounted for 83.2% of productive capital and 78.4% of the value added and provided employment to about 62% of industrial labour. Along with this, the public sector provided 8% of productive capital with 12% of value added and provided employment to only 3.3% of total industrial labour of the order of 8.45 million.

Others were a minor category where contribution productive capital, value added and employment was insignificant.

Although public sector was relatively small comparison to the private sector, yet a noteworthy of the changing industrial pattern in the planning era in the is the growth of the public sector in a big way in the he and basic industries, the machine goods sector, engineers industries etc. which provided the industrial base of economy and thus created basic infrastructure of economy to enable the private sector to flourish later this sense, the role of public sector as the engine of growth is unique.

Interestingly, the wages per worker received 2004-05 reveal that they were lowest in non-corporate sector as ₹27,603. They were higher in ‘others’ as & Village Industries, Handlooms etc. as ₹50,385 because the State fixed the wages, irrespective of the earned. In the corporate sector or the organized
average wages per worker per annum was the highest ₹ 62,809. Within the Corporate sector, wages in the pull sector were the highest at ₹ 70,720 and the private at ₹ 58,966. Since the public sector is a pace sector improving the level of wages, it provides to lead the followed by to private sector.

**Self-Assessment**

1. **Choose the correct option:**

   (i) India’s central bank the Reserve Bank of India (RBI) in its April-June quarter monetary policy review left the key policy rates unchanged. Which of the following facts are not true with regards to this?

   I. The repo rate remained unchanged at 8 percent while the reverse repo rate remained stable at 7 percent
   
   II. Cash Reserve Ratio (CRR) - the amount of total deposits that banks are required to keep with the central bank - also remained unchanged at 5.25
   
   III. The statutory liquidity ratio (SLR) - the percentage of total deposits that banks need to invest in the government bonds was changed to 23 percent from the erstwhile 24 percent
   
   IV. RBI also cut its economic growth outlook for the fiscal year 2012-13 to 6.5 percent, from the earlier projection of 7.3 percent

   (a) I & III  (b) Only II  (c) III & IV  (d) Only IV

   (ii) As per the a report by Ernst & Young and Event & Entertainment Management Association (EEMA), which interviewed CEOs of 32 Indian events and activation companies, the organised events and activation market in India is expected to grow by what percent over the next two years, powered by weddings, sports and higher spends on below-the-line promotional events?

   (a) 50%  (b) 55%  (c) 53.33%  (d) 46%

   (iii) According to the quarterly report on ‘Public debt management’ prepared by the Department of Economic Affairs (DEA) under the Ministry of Finance, India’s public debt rose by what per cent to 3752576 crore rupees during the first quarter (April-June) of fiscal year 2012?

   (a) 4%  (b) 4.9%  (c) 5.6%  (d) 7.1%

   (iv) Exports from Special Economic Zones (SEZs) grew by what per cent to Rs 118321.56 crore during the first quarter (April-June) of the fiscal 2012-13?

   (a) 51%  (b) 57.5%  (c) 64%  (d) 73%

   (v) The Union government on 30 July 2012 introduced national certification standards for organic textiles to boost the demand for organic textiles in major markets, including Europe and Japan. With respect to the above statement which of the following is not true?

   I. The Indian Standards for Organic Textiles (ISOT) launched by Commerce, Industry and Textiles Minister Anand Sharma is to be included under the National Programme for Organic Productions (NPOP)

   II. The NPOP includes norms for organic production and processing of agriculture crops along with certification standards

   III. In 2011 India exported certified organic products to various countries in Europe, Asia and the US worth Rs 2000 crore

   IV. India with the introduction of the national certification standards thus took over the long-standing position of the Global Organic Textiles standards (GOTS), which are private standards prevailing in the organic textiles industry

   (a) I & IV  (b) II & III  (c) Only IV  (d) Only III

   (vi) Where was the first cotton mill of India was established in 1857?

   (a) Mysor  (b) Madras  (c) Surat  (d) Bombay
17.4 Summary

- The widespread regulation and controls over private economic activity by the Government had inhibited economic efficiency and growth clearly by the late 1970s and early 1980s.
- From 1991, the process of organisational restructuring and the concomitant supportive changes in industrial policy aimed at creating a more competitive and challenging industrial environment are being undertaken.
- The impact of liberalisation on profitability and productivity of the manufacturing sector has not been clearly laid out.
- Largely due to price control and protection from insufficient domestic production capacity, the margins of joint sector companies held up much better.
- For defining Small-Scale Industries (SSIs), there is no single functional economic criterion. Specific circumstances have defined the SSIs in different countries.
- Small-Scale Industry (SSI) has been one of the major planks of India’s economic development strategy. The key elements of India’s policy for the support of small-scale industries have been small-scale industry reservations, fiscal concessions by way of lower excise duties, preferential allocation of and subsidisation of bank credit, extension of business services by the Government and preferential procurement by the Government.
- The progress of industrialisation during the last 50 years since 1951 has been a striking feature of Indian economic development.
- A major achievement in the industrial sector has been the diversification of India’s capability.
- The development strategy adopted by the Indian planners consisted of accelerated industrialisation with base of heavy industry.
- There was yet another aspect to industrial strategy adopted by our planners. From the very beginning, the banners anticipated shortage of foreign exchange as a for the constraint to the development effort.
- One striking feature of the period of planning was that the structure of Indian industries had changed in favour of basic and capital goods sector. The study of structural transformation of the Indian industries reveals that there has a clear shift in favour of basic and capital goods sector.
- The rapid pace of industrial growth and the development of productive capacity has been marked by remarkable, though still inadequate, expansion of infrastructural facilities in the country with expansion.
- Significant progress has been recorded in the science and technology. India now ranks third in the respect of technological talent and manpower. In scientists and technologists are working in many the frontiers of today’s knowledge, as in agriculture industry, in the development of nuclear power and of space technology for communications and development.
- Without under-estimating the achievement process of industrial expansion initiated during the plan era, it may be emphasised that much of the it growth is only apparent and not real.
- The Annual Survey of Industries has reclassified data about the ownership pattern of industries into three categories.
- In terms of number of units, the non-corporate sector accounts of 63% of units, mostly in small industries sector referred to as the unorganized sector, but they employed 7.3% of productive capital, accounted for only 8.2% of value added, but provided employment to nearly 31% of industrial labour.
- Others were a minor category where contribution productive capital, value added and employment was in insignificant.
17.5 Key-Words

1. Delicensing : To deprive of a license.
2. Employment : The state of being unemployed or not having a job; “unemployment is a serious social evil”; “the rate of unemployment is an indicator of the health of an economy”.
3. Growth : Development from a lower or simpler to a higher or more complex form; evolution.
4. Labor market : The market in which workers compete for jobs and employers compete for workers. Market, marketplace, market place - the world of commercial activity where goods and services are bought and sold; “without competition there would be no market”; “they were driven from the marketplace”

17.6 Review Questions

1. What is meant by pattern of ownership industries?
2. Write a short note on small scale industries in India.
3. Discuss the industrial sector in post-reform period.

Answers: Self-Assessment

1. (i) (b) (ii) (a) (iii) (b) (iv) (c) (v) (d) (vi) (d)

17.7 Further Readings

Books 1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
Objective

After reading this Unit students will be able to:

• Discuss about the Issues and Problems of Public Sector

Introduction

Prior to 1947, there was virtually no “Public sector” in the Indian economy. The only instances worthy of mention were the Railways, the Posts and Telegraphs, the Port Trusts, the Ordnance and Aircraft Factories and a few State managed undertakings like the government salt factories, quinine factories, etc. The idea that economic development should be promoted by the State actually managing industrial concerns did not take root in India before 1947, even though the concept of planning was very much discussed by Congress governments in the Indian provinces. However, in the post-independence period, the expansion of public sector was undertaken as an integral part of the 1956 Industrial Policy.

18.1 Issues of Public Sector

The Industrial Policy Resolution 1956 gave the public sector a strategic role in the Indian economy. For one thing, at the time of independence, the country was backward and underdeveloped — basically an agrarian economy with a weak industrial base, heavy unemployment, low level of savings and investment and near absence of infrastructural facilities, Indian economy needed a big push. This push could not come from the Indian private sector, which was starved of funds and of managerial ability and was incapable of undertaking risks involved in large long-gestation period investments. It was assumed at that time that only the Government intervention in a big planned way could accelerate agricultural and industrial production, expand employment opportunities, reduce poverty, etc. In other words, the public sector was thought of as the engine for self-reliant economic growth to develop a sound agricultural and industrial base, diversify the economy and overcome economic and social backwardness.

To this basic argument for the expansion of the public sector, the Government added additional reasons over time, e.g.:

(a) to accelerate the growth of the core sectors of the economy;
(b) to serve the equipment needs of strategically important sectors like Railways, Telecommunications, Nuclear Power, Defence, etc.
(c) to exert countervailing power on the operation of private monopolies and multinationals in selected areas;
(d) to ensure easier availability of articles of mass consumption, to check prices of important articles etc. - the rationale behind setting up consumer-oriented industries;
(e) to protect employment, the Government was forced to take over sick industrial units.
In fact, over a period of time, the Government entered into many sectors for all types of good and bad reasons and in many cases for no reasons at all.

**Central Government Enterprises**

As on March 31, 2010, there were 217 Central Government undertakings, excluding banks, financial institutions and departmental undertakings like the Railways. Ports etc. The growth of investment in Central Government undertakings is shown in Table 1. It will be clear from the table that since 1951, the number of industrial and commercial undertakings of the Central Government had increased from 5 in 1950-51 to 239 units in 2005-2006 and the capital investment had increased from ₹ 29 crores to ₹ 5,79,920 crores on 31st March 2010. The investment is in the form of equity capital and long term loans.

**Total Investment in Public Sector**

Central Government Public Sector Enterprises recorded a total investment of ₹ 4,21,089 crores in 2006-07. The State level Public enterprises accounted for ₹ 2,59,180 crores as on 31.3.2005. Besides them, departments like Railways, Posts and Telegraphs and other departments accounted for an investment of nearly ₹ 50,000 crores. If all these are included, then the total public sector investment in the entire country, in all kinds of enterprises (departmental and non-departmental), at the Centre, State and local level, would be around ₹ 7,30,269 crores.

**Objectives of Public Sector**

We conclude this section by broadly summarizing the objectives of setting up public enterprises in India:

(i) To promote rapid economic development through creation and expansion of infrastructure;
(ii) to generate financial resources for development;
(iii) to promote redistribution of income and wealth;
(iv) to create employment opportunities;
(v) to promote balanced regional growth;
(vi) to encourage the development of small scale and ancillary industries; and
(vii) to promote exports on the one side and import substitution, on the other.

**The Issues of Public Sector**

Some of the financial and accounting issues which have been the subject of public debate, for example external reporting and monitoring, are common to several parts of the public sector, and these are dealt with in this book. Some of these are conceptual issues, some practical. Some are related to external reporting and monitoring, others to internal financial control. But two general questions arise.

The first concerns how specific accounting and control problems should be tackled in a public sector context. Such problems arise because of the distinctive constitutional, economic and financial features of public sector bodies. These are bound to affect the way in which their operations are accounted for and controlled. Areas of special concern include, for example, the accounting treatment of capital equipment and the need to provide non-financial indicators to supplement financial data because of the non-profit basis of most parts of the public sector.

The second question, following naturally from the first, is how far should public sector practice relate to practice in the private sector and in what respects, if any, should it diverge? This question has been asked about most aspects of financial reporting, including the form of financial statements and the treatment of individual items in the accounts, such as capital asset valuation and depreciation. The question is also asked about internal financial and economic issues, such as the use of investment appraisal techniques and monitoring.
That such issues cannot be taken in isolation applies to almost all the main aspects of this book. For example, questions about the form of external financial statements cannot be separated from the nature and objectives of particular public sector operations and the fact that there are a variety of users for financial statements in the public sector, with different kinds of needs. Similarly, the relationship between auditing practices in the public and private sectors cannot be examined without looking at the different ways in which accountability is exercised for public sector institutions compared to the purposes and forms of accountability of private concerns.

In the area of financial reporting, for example, there is the question of how far there should be uniformity, and how much flexibility ought to be allowed between similar types of institutions. Another recurrent theme is the issue of how accounting rules should be developed, while on the use of external financial information the nature and rights of different user groups are not always clear. As for internal financial control, the pressure on resources has in most cases given rise to a call for improved systems for monitoring, not only internally but also for external disclosure and performance review. Finally, on a more personal level, the role and status of accountants within their organizations and in relation to the accountancy profession as a whole continues to be a matter of concern to many public sector accountants.

The public sector is both extremely diverse and, despite privatizations, extremely large. Even ignoring the large sums expended on transfer payments (such as pensions, welfare benefits and subsidies), the total expenditure of the public sector on employing people, goods and services in carrying out both trading and public service activities is enormous – about 40% of the gross domestic product. It gives an idea of the relative size of net public sector expenditure analysed in four ways. It can be seen that local authority expenditure amounts to more than a quarter of all public expenditure, and expenditure on health rather more than 10%. The nationalized industries, by contrast, make little overall demand on the public purse because, although the amounts they spend are large.

### 18.2 Problems of Public Sector

A number of charges are leveled against the public sector in India. Some are lopsided and some are genuine, to a certain extent.

#### Objective and Role

In the history of planning in the country, over the last six decades, there has been a definite shift in the assigned role of public enterprises in the country through various Five Year Plans from ‘attaining the commanding heights’ in the national economy and ‘easing out private sector’ to the ‘opening up’, ‘liberalisation’ and ‘globalisation. It has been a perennial problem for the policy makers to set the role of the public sector in the Indian economy and it would continue to be so.

Secondly, the objectives of public sector have been defined and goals being set not very systematically in each case. Even the objectives at the macro level have been mixed-up with a number of propositions, sometimes contradictory in nature.

#### Extent and Coverage

Whether the public sector should extend to wide variety of economic activities or to be confined to a selected few only, is a very crucial decision of great magnitude.

Similarly, whether the economy of the country should be open to private sector or be confined only to the public sector monopoly or both should be given a competitive share in open market becomes another crucial political decision. The problem is consistently persisting in the Indian polity, more particularly from the recent past.

#### Organisation and Management

The organisation and management of the public sector enterprises has been on ‘trial and error’ ever since independence in the country. Initially, the enterprises were organised as departmental undertakings owing to their simplicity of operations and management.
Then came a time when the government company form was most prevalent. Following the developments in the international field, particularly in England, corporate form was adopted in India too.

And a host of corporation was created, both sectoral and multipurpose as well as development corporations. Lastly, joint ventures came on the scene again taking a cue from the development in the world.

The management has all along been a problem to tackle. In the first place, there has been a consistent dearth of managerial skills in the country, both at the initial stages as well in recent past.

The constitution of management boards is the other major problem, which merits attention most. Here, the government burdens the governing board with the civil servants, undermining the principle of autonomy of the enterprises. The management board tilts the balance of decision making on policy matters greatly in government favour and thus reducing the enterprise to, more or less, a department.

**Personnel Administration**

The personnel management of the public sector is beset with a plethora of problems which are mostly responsible for it’s inefficient, uneconomic and below standards performance.

The recruitment to public enterprises is done by individual enterprises or by a central personnel agency for a group of enterprises in a given sector following general guidelines of the government in matters of reservations, etc.

The tendency to second the civil servants to top management is so rampant in the country that it negates the initiative of inbreeding and the insiders are disillusioned, not to talk of their disappointment and disinterestedness.

Remuneration or compensation to the employees is another area, which needs prompt attention. While compensation to top managers is usually high in most of the enterprises with innumerable perks and other amenities and benefits, it is progressively lower in the middle and lower level managements.

The performance appraisal in most of the public enterprises is done only as the annual recording of character rolls. These results in the low standards of performance and the efficiency of the enterprises go down progressively.

**Financial Management**

The prime requirement of majority of the enterprises is the sound and scientific financial management as they lack financial discipline, consciousness and professionalism.

The financial advisor has to play a crucially important role in the management of finances of the public sector enterprises.

Budgeting, the most crucial of all the segments of financial management, is not properly practised in the public enterprises in most cases.

A number of agencies are involved in the planning and control of financial management of public enterprises in the country, viz., Board of Management, Administrative Ministry, Ministry of Finance, Bureau of Public Enterprises, Planning Commission, Director General of Technical Development and Public Investment Board.

**Workers’ Participation in Management**

With a view to ensure increased productivity for the larger benefit of the enterprise, the employees and the community, to give workers’ better understanding of their role in the production process and to satisfy their demands for self-expression leading to better industrial relations, worker’s participation in management (WPM) was launched.

The process of WPM involves four main steps, viz., information sharing, joint consultations, joint decision-making and self-management. The workers are involved at all these levels to take the decisions in the best interest of enterprise.
With regard to workers’ participating at various levels including board level, it is beset with a number of problems relating to selection of employees to be represented on the Board of Management.

**Autonomy and Accountability**

‘Autonomy’ implies “freedom to act” and is related to “freedom in internal management”.

Autonomy in the case of public enterprises does not imply ‘full freedom’ to act as desired by the individual enterprise management. The Public Enterprises are accountable to Parliament through the concerned minister and therefore cannot act freely.

At the same time the public enterprises should be accorded sufficient autonomy to run their operations on business lines. It facilitates quick decision-making and encourages initiative. Accountability of the public enterprises implies rendering of accounts to the public - the ultimate owner of these enterprises. According to S.S. Kher, “accountability involves measurement of top management. It must be remembered that the accountability that we are talking of, is accountability, which has a particular purpose - a demonstrably useful purpose. A distinction has to be drawn between accountability and control. Control is active function while accountability is a passive function. Control means directing, restraining, or stimulating an organisation or individual to a certain action. In fact, control facilitates accountability. An accountable individual or organisation has to possess control power to give true account.

**18.2.1 Role of the Public Sector in India**

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

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

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

**Share of Public Sector in Employment**

There are two important categories of public sector employment : (a) Government administration and defence and other government services like health, education, research and various activities to promote economic development; and (b) public sector proper, i.e., economic enterprises owned by the Centre, State and Local Government. The total number of workers employed in the public sector in 1971 was 111 lakhs, but by March 2006, their number grew to about 182 lakhs before falling to 180 lakhs in 2007. Since employment in the public sector is confined to the organised sector, public sector employs 65.9 per cent of the workers employed in organised sector of the Indian economy.

**Share of the Public Sector in GDP**

During the last five decades, the share of the public sector in gross domestic product (GDP) has shown a steady improvement. Measured at current prices, public sector accounted for 7.5 per cent of GDP in 1950-51, its share in 1993-1994 had risen to 23.6 per cent. However, it declined to 20.8 per cent in 2008-09. Public sector, therefore, accounts for about one-fourth of national output. This is largely due to a rapid expansion of the public sector enterprises.

There is a big increase in the share of public administration and defence from 4.5 per cent to 8.7 per cent between 1950-51 and 2007-08. The share of public sector enterprises, however, rose from 3 per cent in 1950-51 to 11.2 per cent in 2008-09. Despite this fact, the private sector still occupies a dominant position in the economy. There are some sectors such as agriculture and small-scale sector in which
the share of the state is almost zero. However, in insurance, defence equipment, indigenous crude oil production, etc., government ownership is cent per cent. Increasingly, industries of strategic and national importance are being brought under state ownership.

18.2.2 Causes for the Expansion of Public Enterprises

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

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

To fulfil this ambitious plan target, the government had to resort to compulsory saving through taxation. In the words of Professor Ramanadham, "Having gathered the resources, the government and other important policy making bodies like the Planning Commission are under the normal human temptation to use the funds under the government’s own aegis and it appears to be an avoidable botheration for the administration to offer the money to private enterprises in the first instance and then go about instituting the necessary checks and balances for the sake of ensuring the safety and proper use of funds. Instead it appeals as preferable to Parliament as well as the administrative bodies to launch industrial enterprises in the public sector."

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

(iii) Removal of Regional Disparities through Public Enterprises: Another important reason for the extension of the public sector was the anxiety for balanced development in different parts of the country and to see that there were no serious regional disparities. Public enterprises of the Central Government were set up in those regions which were underdeveloped and where local resources were not adequate. Good examples are the setting up of the three steel plants at Bhilai, Rourkela and Durgapur and the Neyveli Project in Chennai which were meant to help industrialise the regions surrounding the projects. In certain cases, the State Governments were unable to raise adequate resources for development of their regions. The only alternative available was the setting up of projects by the Central Government or to start enterprises which were financed by the Centre.

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

(v) Socialistic Pattern of Society: The socialistic pattern of society calls for extension of public sector in two ways. For one thing, production will have to be centrally planned as regards the type of goods to be produced, the volume of output and the timing of their production. It may be comparatively easy to achieve this through the public sector rather than through private
Unit 18: Issues and Problems of Public Sector

Notes

We may quote the Second Five-Year Plan here: “The adoption of the socialistic pattern of society as the national objective, as well as the need for planned and rapid development, require that all industries of basic and strategic importance, or in the nature of public utility services, should be in the public sector. Other industries which are essential and require investment on a scale which only the state, in present circumstances, could provide, have also to be in the public sector.”

(vi) Limitations and Abuses of the Private Sector: The behaviour and attitude of the private sector itself was an important factor responsible for the expansion of the public sector in the country. When the Americans insisted on the Bokaro Project to be set up in the private sector, Mr. J.R.D. Tata openly confessed that the private sector was not in a position to mobilise resources to the tune of ₹ 700 crores. Thus, the private sector did not want to move into certain sectors or if it wanted to move in, it did not have the necessary resources. This was understandable but the private sector was unwilling to take even the normal risks of business. During the Second Plan period and later, many of the licences issued to the private sector for setting up fertiliser units were surrendered when the need for fertiliser production was paramount for the country to push an agricultural breakthrough. To give another example, the business recession of 1966-67 frightened the private sector cement industry from expansion, even though it had given an undertaking to the Government to expand. To safeguard the long-term prospects of the economy, the Government had to set up the Cement Corporation of India to boost the production of cement. The failure of the private sector drug industry to manufacture antibiotics and at the same time, its tremendous exploitation of the consumers—to the extent of holding them to ransom—was responsible for the entry of the Government in drugs and pharmaceuticals industry.

18.2.3 Performance of Public Sector Undertakings

While the Government has been pushing ahead with more and more public sector undertakings, there has been considerable criticism about the poor performance and in some cases utter failure of government undertakings in the country. Some economists have argued that profit should not be used as a criterion for judging the performance of public enterprises. According to them, public enterprises are guided by a variety of considerations in determining prices and it would not be appropriate to use profit as a criterion of their efficiency. This is particularly so in social utility services, like railways, posts and telegraphs, supply of water, electric energy, etc. The State should not raise the prices of these services, even though costs may have risen. Similarly, the public enterprises have a bulk of their investment in heavy and basic enterprises. Such enterprises have long gestation period and a part of the investment may be under construction. It would, therefore, be appropriate to calculate the rate of return on effective capital employed and thus not include the capital employed in undertakings under construction or in expansion or capital work-in-progress.

*Did you know?* “The profitability” of the running concerns alone should be the index of their performance.

Besides, the term ‘profitability’ should not always be used in a business or a pure commercial sense with reference to public enterprises which are not permitted to manipulate depreciation or other payments to show higher rate of return. Moreover, PSUs offer much better reward for labour in terms of wages and salaries and other perquisites in comparison with small and medium enterprises in the private sector. To judge their performance, an adjustment should, therefore, be made for a higher social rate of return. The concept of total surplus generated in the form of declared profits, retained profits and depreciation becomes more relevant in the case of private sector enterprises and not for PSUs. This is not to suggest that profitability should not be considered as an index of efficiency, but to emphasize that the problem should be viewed in a proper perspective.

Although profit maximisation (or in the case of public enterprises, the generation of surplus) may not be the sole criterion to judge their performance, yet it cannot be denied that it would be a folly to ignore it altogether. It has been aptly pointed out that profit maximisation may not be treated as a positive virtue but it may well be a ‘good whip’ to prevent the public enterprises from misbehaving. Thus the principle of profit maximisation has a negative virtue that it impels enterprises to reduce wastes of resources and inefficiency arising there from. From this point of view, the argument for generation of surplus by public enterprises to be used for economic development has a great force.
18.2.4 Shortcomings of the Public Sector

It would be unreasonable to argue that all is well in the public undertakings. There is much scope for improving the efficiency and working of public sector enterprises. The main points which merit consideration are:

(i) Mounting losses: A review of the working of public sector enterprises reveals that either the profits in them have been deplorably low or that they have been making losses. As compared with the performance of the Central Government, however, the State Governments are having perennial loss-makers like irrigation works, State Electricity Boards and State Road Transport. The biggest losses are made by SEBs. It is estimated that the losses incurred by SEBs rose from ₹4,117 crores in 1991-92 to ₹30,606 crores in 2005-06– these losses were incurred because power was supplied at a mere 240 paise per unit as against the production and distribution cost of 350 paise per unit.

(ii) Political factors influence decision about location: It has been noted that in many situations, political factors influence decisions about location of projects. Powerful ministers in the ruling party make promises about the future location of projects in a state irrespective of the results of the feasibility study about costs. This approach leads to a considerable wastage of capital resources. A classic instance of this political but irrational approach is the decision of the Central Government to break up the MIG aircraft project into two parts to be located in two separate states. These two locations—Nasik and Koraput—are over 900 km apart. This was done to satisfy two powerful political bosses from two states.

(iii) Delays in completion and increase in costs of construction: Many reports on the working of public sector projects have pointed out that many of the projects took longer time to complete than was initially envisaged. Not only that, the cost of the projects was also revised upwards. For instance, in the case of Trombay Fertilizer Project, it took 6-7 years to complete against the original estimate of 3 years. Most of the delay in construction time-schedule and increase in costs can be traced to poor and inadequate project planning. It is very necessary to prepare comprehensive construction plans so that the avoidable delays and increases in costs should not put additional burden on the scarce resources.

(iv) Over-capitalisation: Public sector projects are charged with over-capitalisation. In other words, the input-output ratio obtaining in many projects was unfavourable. The Study Team found several undertakings, viz., Heavy Engineering Corporation, Hindustan Aeronautics, Fertilizers Corporation (Trombay Projects), etc. over-capitalised. In this connection the Study Team mentioned: “The causes leading to over-capitalisation can be traced to inadequate planning, delays and avoidable expenditure during construction, surplus machine capacity, tied aid resulting in the compulsion to purchase imported equipment on a non-competitive basis, expensive turn-key contracts, bad location of projects and the provision of housing and other amenities on liberal scale.”

(v) Price Policy: The pricing policies of the public sector undertakings are not guided solely by the profit maximisation principle, but are under the regulation and control of the Government. Most of the public enterprises produce products which serve as inputs for other sectors of the economy. It would be suicidal from the point of view of the overall growth of the economy if the prices of steel, oil, fertilisers or coal are fixed very high. The public sector has to keep in mind the social implications of its price policy. In this connection, it is important to remember that in many cases, under public pressure, prices are kept low even when costs and prices have been rising. This naturally affects commercial profitability.

(vi) Use of manpower resources in excess of actual requirements: It has been brought out that in most public enterprises, manpower is in excess of actual requirements. There is poor manpower planning and this is clearly reflected in the inadequate arrangements for training and education of workers. The unsatisfactory salary and wage rates and the absence of incentives to staff have resulted in the flight of personnel from the public sector to the private sector. The Sixth Pay Commission has Substantially raised the emoluments of executives and thus prevent their shift to private sector. It has been suggested that top position in a public sector undertaking should
also be opened to its employees. Besides, professional and technical persons of an undertaking should be trained and induced into management.

The Government has been shedding the load of surplus workers in PSE. As a result of this policy, total number of employees in Central PSEs declined from 19.92 lakhs in 2001-02 to 16.14 lakhs in 2006-07—a reduction of 3.78 lakhs. This has reduced the wage cost of CPSEs.

(vii) **Capacity utilisation**: During 2005-06, out of 203 units, 103 units or 51 per cent of all manufacturing/producing units had recorded capacity utilisation of more than 75 per cent. On the other hand, 33 public sector enterprises operated in the capacity utilisation range of 50 to 75 per cent and 67 functioned below 50 per cent utilisation of rated capacity. This is certainly not an optimum situation. It is very necessary to find the causes of low capacity utilisation and thus remedy the situation by appropriate measures.

(viii) **Inefficient management**: Managerial effectiveness and efficiency are crucial factors in improving the overall performance of the public enterprises. For efficiency in business and industrial enterprises it is necessary that operational decisions are prompt. This necessitates a large measure of autonomy and flexibility of operations in the Government enterprises. Again, delegation of authority and elasticity in working are needed in a high degree. Within the enterprise itself the delegation of authority from the top management to lower levels is another essential condition for efficiency in operation. Every officer should know what he is required to do and what result he is expected to produce. Unfortunately, there has been general failure to define responsibilities and duties in public sector enterprises in India. Finally, the successful operation of public enterprises is dependent upon the availability of experienced persons to fill up top positions. Public enterprises are sarcastically referred to as ‘colonies for bureaucrats’. In the initial stages, the officers of the ministry who provided funds for the projects also pre-empted the right of management. In this way they infused ‘bureaucratic blood’ in the system. An unfortunate practice has been to use bureaucrats as chairmen, managing directors and managers of public enterprises. Many of them are not really qualified to run industrial enterprises. The government has been progressively shifting to professionalised management in these enterprises. This is a healthy development.

In conclusion, it may be pointed out that the picture of the public sector generally painted by the Federation of Indian Chambers of Commerce and Industry, Forum of Free Enterprises and such other organisations is too black. It is equally true that all the public sector enterprises are not functioning efficiently. The competitiveness of the private and public sector projects should act as the motivating mechanism for improving efficiency in both the sectors.

**Self-Assessment**

1. **Choose the correct option:**

   (i) Which is the most basic cause of an issue being placed on the policy of agenda?
   
   (a) Increased public attention on a particular issue
   (b) Knowledge that an existing problem can be ameliorated through
   (c) Previous lack of attention to a known public need
   (d) Public problems highlighted by the operation of a free market system.

   (ii) Selling of state owned assets
   
   (a) Deregulation
   (b) Privatisation
   (c) Integration
   (d) Nationalisation

   (iii) Removal of government control over industries
   
   (a) Privatisation
   (b) Administration
   (c) Sequestration
   (d) Deregulation

   (iv) A cost of privatisation
   
   (a) Loss of income to the government
   (b) Loss of customer choice
   (c) Reduction in shareholders
   (d) Loss of employment
18.3 Summary

- The Industrial Policy Resolution 1956 gave the public sector a strategic role in the Indian economy. For one thing, at the time of independence, the country was backward and underdeveloped — basically an agrarian economy with a weak industrial base, heavy unemployment, low level of savings and investment and near absence of infrastructural facilities, Indian economy needed a big push.

- The relationship between auditing practices in the public and private sectors cannot be examined without looking at the different ways in which accountability is exercised for public sector institutions compared to the purposes and forms of accountability of private concerns.

- In the area of financial reporting, for example, there is the question of how far there should be uniformity, and how much flexibility ought to be allowed between similar types of institutions.

- As for internal financial control, the pressure on resources has in most cases given rise to a call for improved systems for monitoring, not only internally but also for external disclosure and performance review.

- The public sector is both extremely diverse and, despite privatizations, extremely large. Even ignoring the large sums expended on transfer payments (such as pensions, welfare benefits and subsidies), the total expenditure of the public sector on employing people, goods and services in carrying out both trading and public service activities is enormous — about 40% of the gross domestic product.

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

- There are two important categories of public sector employment : (a) Government administration and defence and other government services like health, education, research and various activities to promote economic development; and (b) public sector proper, i.e., economic enterprises owned by the Centre, State and Local Government.

- Despite many criticisms against the public sector enterprises, there is no denying the fact that rapid industrialisation in the first three decades after independence was mainly due to the public sector.

- Most of the public sector enterprises have been started keeping in mind the requirements of the Indian economy, in the fields of production and distribution.

- Internal resources consist of depreciation and retained profits. With every five year plan, the public sector was able to mobilise larger internal resources. During the Seventh Plan internal resources of the order of 29,750 crores were generated.

- From every angle, the public sector has grown in importance and has come to occupy a prominent place in the Indian economy. What we have described above relates mostly to enterprises in the Central sector.

- In a developing economy like India, some industries had to be brought within public ownership and control, for otherwise rapid growth of the economy was thought to be impossible.

- The socialistic pattern of society calls for extension of public sector in two ways. For one thing, production will have to be centrally planned as regards the type of goods to be produced, the volume of output and the timing of their production.

- The behaviour and attitude of the private sector itself was an important factor responsible for the expansion of the public sector in the country. When the Americans insisted on the Bokaro Project to be set up in the private sector, Mr. J.R.D. Tata openly confessed that the private sector was not in a position to mobilise resources to the tune of `700 crores.

- In a number of cases, the Government was forced to take over a private sector industry or industrial units either in the interest of workers or to prevent excessive exploitation of consumers.
While the Government has been pushing ahead with more and more public sector undertakings, there has been considerable criticism about the poor performance and in some cases utter failure of government undertakings in the country.

It would, therefore, be appropriate to calculate the rate of return on effective capital employed and thus not include the capital employed in undertakings under construction or in expansion or capital work-in-progress.

Although profit maximisation (or in the case of public enterprises, the generation of surplus) may not be the sole criterion to judge their performance, yet it cannot be denied that it would be a folly to ignore it altogether.

While evaluating the performance of the public sector it is necessary to refer to the gains to the employees in the form of a steady improvement in their emoluments, provision for housing, medical care and educational facilities.

It would be unreasonable to argue that all is well in the public undertakings. There is much scope for improving the efficiency and working of public sector enterprises.

Many reports on the working of public sector projects have pointed out that many of the projects took longer time to complete than was initially envisaged.

In most public sector enterprises, pricing policies are not rational. They have no declared price policy, except perhaps that they have some departmental directives and ad hoc piecemeal orders.

It may be pointed out that the picture of the public sector generally painted by the Federation of Indian Chambers of Commerce and Industry, Forum of Free Enterprises and such other organisations is too black.

To improve the performance of the public sector, the Government of India announced in July 1991 the new Industrial Policy.

18.4 Key-Words

1. Agrarian economy: An economy dominated by agricultural products; a pre-industrial economy.

2. Privatizations: It can have several meanings. Primarily, it is process of transferring ownership of a business, enterprise, agency, service or property to the private sector, either to a business that operates for a profit or to a non-profit organization. The term can also mean government outsourcing of services or functions to private firms, e.g. revenue collection, law enforcement, and prison management

18.5 Review Questions

1. What are the issues of public sector?
2. Discuss the problems of public sector.
3. Discuss the role of public sector.

Answers: Self-Assessment

1. (i) (b) (ii) (b) (iii) (d) (iv) (d)

18.6 Further Readings

1. The Indian Economy; S.K. Ray; Prentice Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
CONTENTS
Objective
Introduction
19.1 Role of Infrastructure in Economic Development
19.2 Energy
19.3 Power
19.4 Transport System in India’s Economic Development
19.5 Urban Infrastructure
19.6 Private Investment in Infrastructure: Outlook and Prospects
19.7 Summary
19.8 Key-Words
19.9 Review Questions
19.10 Further Readings

Objectives
After reading this Unit students will be able to:
• Describe the Role of Infrastructure in Economic Development.

Introduction
Infrastructure is the basic physical and organisational structures needed for the operation of a society or enterprise, or the services and facilities necessary for an economy to function. The term typically refers to the technical structures that support a society, such as roads, water supply, sewers, electrical grids, telecommunications, and so forth. Viewed functionally, infrastructure facilitates the production of goods and services, and also for the distribution of finished products to markets, as well as basic social services such as schools and hospitals; for example, roads enable the transport of raw materials to a factory. Encompassing all things to all people is not a particularly useful way to define infrastructure, as it does not make clear investors, Governments, and citizens’ ability to understand, advocate, and direct capital toward durable, networked assets with widespread societal benefits. Primary infrastructure components are generally monopolistic in nature and require large financial commitments for their development, repair, and replacement. Infrastructures facilitate economic productivity and promote a standard of living. Infrastructure can then be more concisely defined as the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions.

19.1 Role of Infrastructure in Economic Development
The prosperity of a country depends directly upon the development of agriculture and industry. Agriculture production, however, requires irrigation, power, credit, transport facilities, etc. Industrial production requires not only machinery and equipment but also skilled man-power, management, energy, banking and insurance facilities, marketing facilities, transport services which include railways, roads, and shipping, communication facilities, etc. All these facilities and services which help in industrial and agricultural production constitute collectively the infrastructure of an economy. The development and expansion of these facilities are an essential pre-condition for increasing agricultural and industrial production in a country. In the last 200 years or more industrial and agricultural revolutions in England and other countries were accompanied, by a revolution transport and
communications, the extensive use of cargo and later oil as source of energy, tremendous expansion in banking, insurance and other financial institution to finance production and trade, an explosion knowledge of science and technology, and so on.

Infrastructural facilities—often referred to economic and social overheads—consist of:

(a) Irrigation, including flood control and common area development.
(b) Energy: coal, electricity, oil and non-conventional sources.
(c) Transport: Railways, roads, shipping and civilaviation.
(d) Communications: Posts and telegraphs, tele phones, telecommunications, etc.
(e) Banking, finance and insurance.
(f) Science and technology.
(g) Social overheads: health and hygiene and education

**Growth of Infrastructure since Independence**

Indian planners were fully aware of the link between infrastructural facilities and general economic development and, accordingly, they gave high priority the rapid expansion of these facilities right from the first plan itself. The plans have generally devoted over 50 per cent of the total plan outlay on infrastructure development. As a result, there has been phenomenal increase in infrastructural facilities.

For instance, coal production including lignites rose from 32 million tonnes to 566 million tonnes between 1951 and 2010. During the same period, power generation from public utilities, excluding power generation from captive and non-conventional power plants rose from 5 billion kWh in to 768 billion kWh; and production of petroleum crude rose from an insignificant 0.4 million tonnes to over 34 million tonnes. Likewise, there has been tremendous expansion in the other infrastructural facilities.

**19.2 Energy**

The most important single factor which can act as a constraint on economic growth of a country is the availability of energy. India is both a major energy producer and consumer. Currently, India ranks as the world’s seventh largest energy producer and fifth largest energy consumer.

There is a direct correlation between the degree of economic growth, the size of per capita income and per capita consumption of energy. Table 2 based on World Development Report shows per capita income and per capita consumption of energy of six countries:

In Table 1, the first three countries are developing countries with low per capita incomes, while the next three are developed countries with high per capita incomes. The per capita consumption of energy in India in 2003 was 529 kg of oil equivalent (Kgoe) as compared to 1,484 in China. On the other hand, per capita consumption of energy was as much as 3,464 in England, 4,019 in Japan and 7,766 in U.S.A. Per capita consumption of energy in India was only 13 per cent of that in Japan, and only 6.8 per cent of that in the U.S.A. Although per capita commercial energy consumption in India has been steadily going up during the last 2 decades, it is still one of the lowest in the whole world (26 per cent of the world average of 1,750 kg).

<p>| Table 1: Per capita income and per capita consumption of energy for selected countries |
|----------------------------------------|---------------------|------------------|</p>
<table>
<thead>
<tr>
<th>Country</th>
<th>Per capita income (in U.S. dollars 2008 (ppp))</th>
<th>Per capita consumption of energy (kgs. of oil equivalent) 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>2,930</td>
<td>529</td>
</tr>
<tr>
<td>China</td>
<td>6,010</td>
<td>1,484</td>
</tr>
<tr>
<td>U.K</td>
<td>36,240</td>
<td>3,464</td>
</tr>
<tr>
<td>Japan</td>
<td>35,190</td>
<td>4,019</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>46,790</td>
<td>7,766</td>
</tr>
</tbody>
</table>

Sources of Energy

Broadly, there are two sources of energy, viz., commercial energy and non-commercial energy. Commercial energy, or more correctly, commercial sources of energy, consist of coal, petroleum and electricity. These sources are commercial in the sense that they command a price and the users have to pay for them. Commercial energy accounts for over 50 per cent of all energy consumption in India.

Non-commercial sources of energy - also known as traditional sources of energy - consist of firewood, vegetable wastes and dried dung. These are called non-commercial sources, as they are supposed to be free and command no price. Actually, the non-commercial sources such as firewood and dried dung have started commanding a price in urban areas and to some extent in rural areas as well. While commercial sources of energy are generally exhaustible — exception being, hydro-electric power — non-commercial sources of energy are renewable. More than 60 per cent of Indian households depend on traditional sources of energy for meeting their cooking and heating needs.

Availability of Primary Energy in India

There are three broad sources of primary commercial energy, viz., (a) coal and lignite; (b) oil and gas, and (c) electricity.

Coal and lignite: The total estimated resources of coal in India are placed now around 148,790 million tonnes, but the mineable reserves may amount to about 60,000 million tonnes. The total lignite reserves, found mostly at Neyveli in South Arcot district of Tamil Nadu, are placed at 3,300 million tonnes of which 1,900 million tonnes are in the proved category. Annual production of coal including lignite was around 566 million tonnes (2009-10). According to the present and future demand projections, the coal reserves in India would be just sufficient for about 130 years.

Oil and gas: According to the latest available estimates, net recoverable reserves of oil are placed around 550 million tonnes, and the net recoverable reserves of gas are put at about 500 billion cubic metres. Annual production of oil crude is around 34 million tonnes (2009-10). At the current rate of consumption, oil may last for only about 20 to 25 years.

Electric power: As regards electricity, there are hydro-electric power and thermal power. Thermal power is generated by the use of oil and gas and also by the use of nuclear energy. The official estimated annual energy potential from hydro-electric sources is placed around 90,000 MW; of this potential, about 18,000 MW has been developed. This implies that only 20 per cent of the hydro-potential has been utilised and 80 per cent still remains unharvested, despite the inherent advantages and superiority of hydro power plants over thermal and nuclear plants.

Non-commercial Energy Resources in India

(i) Fuelwood: Fuelwood is essential for cooking and it is extensively used in our villages and towns. According to the Tenth Plan estimate, 65 per cent of total rural energy consumption is met from fuel wood. During 2001-02, fuel wood consumption was put at 223 million tonnes — 180 million tonnes for household consumption and the balance 43 million tonnes for cottage industry, hotels, etc. If the present demand and supply conditions continue, there would be a veritable fuelwood famine. In fact, scientists anticipate that in the near future, fuelwood could be a greater constraint than the availability of foodgrains.

(ii) Agricultural wastes: Agricultural wastes such as straw are presently used as feed and fodder, roofing material, organic matter for compost making and as fuel for cooking purposes. There are no really reliable estimates of agricultural wastes, but according to one estimate the consumption of agricultural wastes for fuel purpose was put around 41 million tonnes for the year 1975-76 and it may be around 65 million tonnes now.

(iii) Animal dung: Dried dung of animals is extensively used as fuel in our rural areas (and also in towns). Out of the total estimated production of 324 million tonnes of animal dung, about 73 million tonnes are estimated to be burnt for energy purposes every year. This is more than the total fertiliser consumed in agricultural production in India. If this animal dung, which is a valuable organic manure, was used as fertiliser, food production could be increased considerably.
Non-conventional Sources of Energy in India

While the above sources of energy—both commercial and non-commercial—are known as conventional sources of energy, there are three other sources of energy which are commonly called as non-conventional sources of energy. They are: solar energy, wind energy and tidal power. Solar energy potential is almost unlimited in India, a tropical country. Likewise, wind energy is available in abundance, especially in coastal areas and in hilly regions, but both solar energy and wind energy are not so far utilised in the absence of cost-effective technologies. However, in the context of acute shortage of conventional sources of energy, many countries are exploring the possibilities of using these non-conventional sources of energy. Accordingly, they would assume more significance in the years to come.

Trends in the Consumption of Commercial Energy

The sectoral pattern of consumption of commercial energy (i.e. coal including lignite, oil and gas and electric power) is given in Table 2.

The transport sector was the largest consumer of commercial energy (44%) in 1953-54. However, there has been a continuous fall in the share of the transport sector in the total commercial energy consumption. For instance, its share declined to 22 per cent in 2005-06. The industrial sector is now the largest consumer of commercial energy in the country.

During this period, the agricultural sector has, however, registered sharp increase in the consumption of commercial energy, i.e., from one per cent to 9 per cent.

<table>
<thead>
<tr>
<th></th>
<th>1953-54</th>
<th>1970-71</th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household sector</td>
<td>10</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Industries</td>
<td>40</td>
<td>50</td>
<td>42</td>
</tr>
<tr>
<td>Transport</td>
<td>44</td>
<td>28</td>
<td>22</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Ninth Five Year Plan, Vol. II. Ch 6.

Table 3 brings out the percentage share of different fuels in commercial energy consumption.

<table>
<thead>
<tr>
<th></th>
<th>1953-54</th>
<th>1970-71</th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coal</td>
<td>80</td>
<td>56</td>
<td>29</td>
</tr>
<tr>
<td>2. Oil and gas</td>
<td>17</td>
<td>35</td>
<td>54</td>
</tr>
<tr>
<td>3. Electricity</td>
<td>3</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Same as for Table 1.

It is interesting observe that (a) the share of coal in the total commercial energy consumption has declined steadily over the years; and (b) the share of oil and electricity, however, has steadily increased. These figures do not really reflect the real significance of coal. As these figures relate to final energy consumption, only the direct consumption of coal in industry, household sector, transport, etc., is
considered and the use of coal in power generation has been excluded. But it is important to remember that about 65 per cent of the total coal produced in India is used for thermal power generation.

**Trends in the production of commercial energy since 1950-51**

As energy is an essential input for economic development, the production and the consumption of commercial energy has increased steadily after the introduction of economic planning in 1950-51. Between 1951 and 2007, coal production had increased by nearly 14 times, crude oil production by 120 times and electricity (installed capacity) by over 106 times.

**Table 4 : Growth of Commercial energy since 1950-51**

<table>
<thead>
<tr>
<th></th>
<th>1950-51</th>
<th>1970-71</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal (m. tonnes)</td>
<td>33</td>
<td>76</td>
<td>566</td>
</tr>
<tr>
<td>Oil crude (m. tonnes)</td>
<td>0.3</td>
<td>7</td>
<td>33.7</td>
</tr>
<tr>
<td>Electricity*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installed Capacity (000MW)</td>
<td>2.3</td>
<td>16.3</td>
<td>188</td>
</tr>
<tr>
<td>Generation (billion kwh)</td>
<td>7</td>
<td>61</td>
<td>877.5</td>
</tr>
</tbody>
</table>

*(Utilities and non-utilities)

Source : Economic Survey, 2010-11

**Rural Energy Crisis and Decentralised Energy**

The conventional energy systems, based on fossil fuels such as oil crude and coal and electricity (rural electrification) have miserably failed to solve the rural energy crisis, in India. This may at any time, provoke “fuelwood riots” similar to the food riots of the late 1950’s and early 1960’s. The problem of rural energy supplies calls for a radically new approach known as the “decentralised energy” approach which seeks to supply energy from the locally available renewable sources like the cowdung and agro-wastes. In other words, attempt has to be made to supply commercial energy based on the traditional non-commercial energy forms.

**Firewood** is obviously the most important cooking fuel and will remain so for a long time. With the rise in the price of fossil fuel (of kerosene and of LPG) and their non-availability, people in urban areas have come to depend increasingly upon firewood. There is an acute shortage of firewood and consequent rise in the price of fuelwood. Contrary to the common belief, there is no shortage of land in India to produce even two to three times the fuelwood requirements. The Planning Commission Fuelwood Study Committee estimated that some 240 million tonnes of fuelwood (as against the present demand of 133 to 140 million tonnes) can be produced every year, through :

(a) **fuelwood on farm lands** : Growing trees farm lands as shelter belts, windbreaks, shade trees, fodder trees and fruit trees, all of which will produce fuelwood;

(b) **fuelwood on wastelands** : Growing fuel-wood on nearly 80 million hectares of barren and waste lands including land along the country’s roads, railway lines, canals etc. — even if 15 per cent of this vast tract of land is planted with fuelwood species, estimated yield would be 95 to 100 million tonnes per year; and

(c) **fuelwood degraded forests** : proper protection of degraded forests and afforestation through fuelwood trees can supply about 50 million tonnes of fuelwood per year.

Really speaking, therefore, the problem of fire-wood famine can be successfully tackled, if the Government is prepared to mobilise sufficient financial resources — about ₹ 800 to ₹ 1,000 crores a year — and is willing to change the present forest policy from timber production to the production of fuel and fodder. Such an effort is worth attempting since this would not only solve the acute problem of fuelwood in both rural and urban areas but also help promote employment in a big way, in planting, maintenance, in felling of trees, in processing of wood, etc. Moreover, it will have a favourable ecological effect through increase in tree cover, control of floods and of soil erosion and of promoting soil fertility.
To some extent, the Government has appreciated the need to encourage the fuelwood plantation programme and has promoted farm forestry and social forestry programmes since 1976. But by subsidising and encouraging richer and more affluent farmers to go for massive tree planting, the Government has turned wood into a lucrative economic commodity and has condemned the weaker sections in the rural areas to continue to experience acute fuelwood crunch. The correct alternative would be to involve the rural poor, especially the rural women, directly in the community forestry programmes and help them to produce more fuel and fodder and share these resources equally. This alternative is rather difficult for the bureaucrats to implement but sooner or later, the Government policy makers will have to try this method.

**Biogas**

The Planning Commission Working Group on Energy Policy stated enthusiastically, “Biogas plants constitute the most promising alternative energy technology in the household sector”. The Government announced a series of subsidies and concessional bank loans for the construction of biogas plants in rural areas. Under the National Project for Biogas Development nearly 3.2 million biogas plants have been set up so far in the country; the current annual target is around 2 lakh biogas plants.

The biogas plant has the double advantage of producing fuel as well as manure. The gas produced can be used for cooking and lighting and to carry out simple agricultural operations. It is estimated that there are 15 million households with the requisite number of cattle—4 to 5 heads of cattle are the minimum needed to feed a family size plant. The scheme has thus a large potential for developing local sources of energy supply and the Government introduced an ambitious and massive programme of installation of biogas plants.

The biogas programme did not have the success the Government anticipated. One basic reason for the poor performance is that no attempt was made to study carefully the cost-benefit of these plants to the users. More important than this factor, is the growing realisation that the biogas scheme would further accentuate the inequality between the energy-haves and the energy-havenots in the rural areas. For instance, it has been estimated that only about 10 per cent of rural households in India possess 4 to 5 heads of cattle and, therefore, the biogas plants would be useful only for richer farmers. Again, these richer farmers would use animal dung only for their own personal needs and deprive the poor of a fuel that does not have any price at present and has been freely available. To overcome these problems created by family biogas plants, the Government and some voluntary agencies have started promoting community plants which are relatively economical to set up and to operate. But there are problems of collection of manure and distribution of gas in fact, the cost of distribution to individual house-holds is quite high. Considering the caste, religious, and other social factors in our villages, the community biogas programme does not promise of have much future.

**Agricultural Wastes**

With the increase in the production of foodgrains to around 200 to 210 million tonnes, residue from grain crops alone would come to about 335 million tonnes. With the use of improved and efficient technologies, it is possible to increase the scope of rice husks, cotton stalks, etc. as cooking fuels. Dr. Pathak of the Punjab Agricultural University studied the potential of agricultural wastes in a rich village in Ludhiana District and found that after all the fodder needs of the village were met, the energy potential of the remaining crop wastes and animal wastes was enough to meet all the energy requirements of the village and still leave a surplus. In a situation where supplies of conventional energy, and sources like firewood, are decreasing and since alternatives like kerosene are not within the reach of the rural poor, this increase in energy supplies in the form of agricultural wastes will benefit the society in general and the rural poor in particular.

The present national energy policy of the Government has been extremely lopsided, as it seeks to solve essentially the oil shortage on the one side and coal and power shortage, on the other. The major consideration has been the energy needs of industry and transport and of the higher income groups in urban areas. The national energy policy has virtually ignored the cooking energy needs of the poor people in urban and rural areas. The sporadic and half-hearted measures to promote solar cookers, biogas plants and recently fuelwood plantations have not solved the cooking energy crunch in any
significant way. The Centre for Science and Environment, an enlightened voluntary organisation, therefore, pleads for a national cooking energy policy: “If the Government wants to help meet the basic needs of our population without causing wholesale environmental destruction, an integrated national cooking energy policy is an imperative. If the Government fails to come up with an implementable policy or lacks the will to implement one, the results will be disastrous for the people and the environment.”

“Did u know? At present around 80 million tonnes out of a total estimated output of 450 to 500 million tonnes of agricultural wastes and residues are used as fuel for cooking purposes.

19.3 Power

Electric power, which is one form of energy, is an essential ingredient of economic development and, it is required for commercial and non-commercial uses. Commercial uses of power refer to the use of electric power in industry, agriculture and transport. Non-commercial uses include electric power required for domestic lighting, cooking, use of domestic mechanical gadgets like the refrigerators, air conditioners, etc. With rapid growth of population in India and with the increase in the use of modern gadgets in daily life, it is quite natural that the demand for electricity for domestic use should grow at a fast rate. Table 5 explains the pattern of utilisation of electric power produced and supplied by public power sector units or public utilities.

Table 5. Pattern of electricity consumption (utilities) (per cent)

<table>
<thead>
<tr>
<th></th>
<th>1950-51</th>
<th>1970-71</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>63</td>
<td>68</td>
<td>37.1</td>
</tr>
<tr>
<td>Agriculture</td>
<td>4</td>
<td>10</td>
<td>20.4</td>
</tr>
<tr>
<td>Railway traction</td>
<td>7</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td>Public lighting and commercial</td>
<td>13</td>
<td>10</td>
<td>15.6</td>
</tr>
<tr>
<td>Domestic use</td>
<td>13</td>
<td>9</td>
<td>24.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>


A marked feature is the increasing use of electricity in agriculture. With programmes of rural electrification, the demand for power for lift irrigation and energisation of pumpsets has increased during recent years, from 4 per cent to 22 per cent. The establishment of new industries like iron and steel, machine tools, engineering, fertilisers, etc., and the expansion of capacity of consumer goods industries have led to considerable increase in the consumption of power in India. But it will be observed that the share of industry in the total utilisation of power has come down from 68 per cent in 1970-71 to 37.1 per cent in 2009-10. This does not mean that industrialisation has slowed down, nor does it imply that industrial units are shifting to other sources of fuel. Many large, industrial units have set up, in a big-way, their own captive power plants, instead of depending upon the inadequate and often undependable public utilities. It is estimated that non-utilities (the private sector power units) generated 109.7 billion kWh of power which was consumed by industries.

It may be observed that the consumption of power by domestic consumers has increased rapidly, however, consumption of electricity by railways and for public lighting as a proportion of total consumption has declined.

Sources of electric power

There are three main sources of generation of electric power, viz., hydel power thermal power, and nuclear power.
Table 6. Growth of Installed Plant Capacity in Public Utilities (in thousand MW)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hydro</th>
<th>Thermal</th>
<th>Nuclear</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>0.6(33)</td>
<td>1.1 (67)</td>
<td>--</td>
<td>1.7</td>
</tr>
<tr>
<td>1970-71</td>
<td>6.4 (43)</td>
<td>7.9 (59)</td>
<td>0.5(2)</td>
<td>14.7</td>
</tr>
<tr>
<td>2000-01</td>
<td>25.1 (25)</td>
<td>73.6 (72)</td>
<td>2.9 (3)</td>
<td>101.6</td>
</tr>
<tr>
<td>2008-09</td>
<td>36.9 (25)</td>
<td>107.0 (72)</td>
<td>4.1 (3)</td>
<td>148.0 (100)</td>
</tr>
<tr>
<td>2009-10</td>
<td>36.9(23.0)</td>
<td>118.0(74.0)</td>
<td>4.5(3.0)</td>
<td>159.4(100)</td>
</tr>
</tbody>
</table>

Note: Figures in brackets are percentage of total installer capacity.


Hydel Power

Hydro-electric power is a renewable natural resource. In 1950-51 installed capacity of hydro-power was 560 MW but by 2009-10 it had increased to 36,900 MW; but in relative terms, it had declined from 33 per cent to 23 per cent. (This was because of the greater growth of thermal power since 1951)

Hydel power has several advantages:

(a) It is the most economical source of power
(b) There is no problem of pollution of atmosphere or disposal of waste in generation of hydel power; and
(c) Oil, coal and natural gas resources which can be used for producing electricity are in short supply and have implications in terms of high costs and exert greater pressure on foreign exchange resources; hydel power can easily replace them.

It has, however, been argued that hydel projects take a long period of gestation as compared to thermal projects. This point was examined by the Power Economy Committee which after thorough investigation concluded that in case a hydro project is thoroughly examined and designed before implementation, the actual period of construction is nearly the same as that of a thermal project. This explains why the Power Commission in 1962 and Energy Survey of India Committee (1965) recommended that greater reliance be placed on hydropower projects. After the tremendous enthusiasm for hydro-electric projects during the First and the Second Plans, there was a slackening of emphasis of hydro schemes. This was an unwise step, and there was a need to reverse this trend. Emphasising this as a future directional change of policy, the Power Economy Committee (1971) stated: “Under the existing conditions in the country, the hydel schemes constitute the most economic source of electric production .... To control and reduce the cost at energy generation and supply in the country, to enable full utilisation of generating facilities already built up and to ensure that the limited capital allocations to the power supply industry go to the farthest in meeting the country’s estimated deficit, the bulk of the new generating capacity to be added during the 5th and 6th Plans should be derived from hydro sources.”

In spite of these clear advantages claimed for hydro-power, and despite the fact that only one-fifth of hydro power has been harnessed in the country so far, the Government has been relying more on thermal power to relieve the power shortage in India.

During 1998-99, the Government of India announced a policy on Hydro-Power Development with a view to exploiting the vast hydropower potential available in the country at a faster rate. Accordingly, action was initiated to add nearly 8800 MW hydel capacity in the Central Sector by 2004-2005.

Thermal Power

Thermal power which is generated by coal and oil has always been the major source of electric power in India. In absolute terms installed capacity of thermal power had increased from 1,150 MW in 1950-51 to 1,18,000 MW in 2009-10; and in relative terms the share of thermal power had increased from 67 per cent to 74 per cent during this period. Bulk of the thermal power is derived from coal and only a small fraction comes from oil. Both coal and oil are non-renewable and exhaustible resources. Low
grade coal and middlings available at collieries and washeries are used for the generation of electric power. Accordingly, thermal power generation plants are located near coal mines and washeries. With the increase in the international price of oil and consequently with the rise of domestic price of oil, the cost of generation of power through oil has shot up and the Fuel Policy Committee recommended the substitution of coal based technology in place of oil. While the use of oil for power generation is being discouraged, the success of its substitution by coal depends on the extent to which coal production can be augmented in the country.

Nuclear Power

Nuclear power is of recent origin and its supply accounts for only 3 per cent of the total installed capacity of electricity. The Planning Commission has stated clearly: “In relation to the total capacity of the power systems in India and their rates of growth, the contributions of nuclear power will remain relatively modest in the coming two decades.” Attempts are, however, made to set up nuclear power stations in Tamil Nadu, Rajasthan, etc. Considering the relative failure of nuclear power plants in Russia and in other countries including India, nuclear energy is unlikely to make a significant contribution to power generation in the country.

Amidst increasing aversion of developed world, it is being said that the future of nuclear energy is now in developing countries. At present there are 19 nuclear power plants in the country, with a total installed capacity of 4000 megawatts. In the post Indo-US nuclear deal this capacity is expected to get enhanced to 60000 megawatts. Five new nuclear power parks have been planned including one in Jaita Pur, Maharashtra. Other nuclear parks have been planned in West Bengal, Gujarat, Andhra Pradesh and Tamilnadu. Each such park will have an installed capacity of 10000 megawatts. There were 436 nuclear reactors in the world. US, Japan and France were producing 56.5 percent of global nuclear energy production, fulfilling 6.5 percent of energy requirements all over the world. It may be noted that US fulfils 19 percent of its electricity requirements from nuclear power, but for some time it is not establishing any new nuclear power plant. Even Japan is producing less energy from nuclear source. Major reason for the same is that its Kashiwazaki kariwa nuclear plant was closed down after earthquake in 2007. Many nuclear reactors have retired and they have not been replaced by new ones. Last year global production of nuclear power came down by 1.8 percent. Therefore it seems that government of India is extra enthusiastic about the feature of nuclear energy in India. Strong opposition to Jaitapur nuclear project is a signal to the future resistance, which nuclear plans are going to face in context to the international experiences.

Targets and Achievements

Table 9 shows how the targets of power generation were not reached in any of the plans completed so far. In every Five Year Plan there was a shortfall in achievement—15 per cent in the First Plan and as much as 50 per cent in the Fourth Plan. The cumulative result of slackness in this basic area of planning is that power crisis threatens to choke the growth process of the Indian economy. In fact, it seriously damaged the targets of the Fourth and Fifth Plans. Accordingly, the Sixth Plan (1980-85) put maximum emphasis on power generation; even then, there was a shortfall of 28 per cent in the power generation target. The shortfall of 4 per cent during the Seventh Plan period was the lowest. The shortfall in the Ninth Plan was a hefty 53 per cent.

19.4 Transport System in India’s Economic Development

Significance of Transport

If agriculture and industry are regarded as the body and the bones of the India economy, transport and communications constitute its nerves which help the circulation of men and materials. The transport system helps to broaden the market for goods and by doing so, it makes possible large-scale production through division of labour. It is also essential for the movement of raw materials, fuel, machinery etc., to the places of production. The more extensive and continuous the production in any branch of activity, the greater will be the need for transport facilities. Transport development helps to open up remote regions and resources for production. Regions may have abundant
agricultural, forest and mineral resources but they cannot be developed if they continue to be remote and inaccessible. By linking the backward regions with the relatively more advanced, transport development helps in the better and fuller utilisation of resources. Finally, expansion of transport facilities, in turn, helps industrialisation directly. The demand for locomotives, motor vehicles, ships etc. leads to the start of industries which specialise in the production of these goods. Expansion of transport is thus of fundamental importance for a developing country like India.

**Transport and the Five Year Plans**

Indian planners gave high priority to the development of transport, for in their opinion “an efficient and well developed system of transport and communications is vital to the success of a plan of economic development which lays stress on rapid industrialisation.” Accordingly, the allocation on the transport sector was quite high during the first three plans, viz., between 25 and 28 per cent. The allocations in the next successive Plans on the transport sector declined gradually. The Eighth Plan outlay, for instance, was only 13 per cent of the total outlay. But the lower allocation in the last three plans does not mean that the transport sector had been fully developed.

There is the resource crunch on the one side and there is increasing importance given to energy and industrial sectors, on the other.

**Growth of Transport System since 1951**

Rail and road transport systems dominate but other forms of transport are also important within their specialised areas considering the size of the country and its geographical features. Table 13 shows that the transport sector has recorded a substantial growth since the introduction of economic planning in 1950-51. Railways have recorded a growth of 3 per cent per annum in freight originating tonnage, though the growth in route length was indeed low. The road network has expanded at an annual rate of 5 per cent while road transport fleet has increased by 7 per cent per annum in respect of goods vehicles. About 70 per cent of the Indian villages have been connected by a net work of rural roads and over 40 per cent of our villages are served by all weather roads. Shipping tonnage has increased by an impressive 11 per cent while coastal shipping could register only a meagre rise of 1.4 per cent. Airlines passenger traffic has risen smartly by 9 per cent per annum. The traffic handled by major ports has increased from 19 million tonnes to 562.7 million tonnes between 1951 and 2010, at an annual rate of over 5 per cent. The growth of the transport sector in general is indeed quite impressive and it reflects the enormous outlay allocated to the development of the transport system during the planning period.

**Problems of Transport Development in India**

Since 1950-51 transport systems have registered impressive progress but there are many bottlenecks, constraints and difficulties. Inadequacies and imbalances in transport threaten to constrain economic growth and the quality of life in urban as well as rural India.

(a) **Transport bottlenecks** : The capacity of the entire transportation system including the road network continues to fall short of demand for transportation. For instance, capacity constraints in railways have led to the movement of bulk commodities like coal, over long distances, by road, at high cost to the economy. The acute shortage of wagons had affected almost all industries in the country. The scarcity of coal experienced throughout the country with enough coal at the pit-heads, the piling up of stocks of cement with manufacturers but with the scarcity of cement everywhere, scarcity of fertilisers and foodgrains, and so on, were often due to shortage of railway facilities. The inefficiencies, the delays and the corruption prevalent in the railway staff had driven manufacturers to make use of the services of road transporters for the movement of their products. The railway bottlenecks have largely been now removed.

Even now 30 per cent of villages in our country still lack road connection. The road transport system is under heavy strain, with inadequacy of capacity and sub-standard infrastructure. This has led to excessive transit delays, fuel wastage and higher operating costs. Similar problems are to be met with in the case of shipping also.
Table 7: Growth of the Transport System

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<th></th>
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<tbody>
<tr>
<td>1. Railways:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route length ('000 km)</td>
<td>53,600</td>
<td>59,800</td>
<td>63,300</td>
<td>64000</td>
</tr>
<tr>
<td>Freight Traffic originating (million tonnes)</td>
<td>93</td>
<td>196</td>
<td>680</td>
<td>888</td>
</tr>
<tr>
<td>2. Roads:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total length ('000 km)</td>
<td>400</td>
<td>915</td>
<td>2,713*</td>
<td>4,236**</td>
</tr>
<tr>
<td>Surfaced</td>
<td>160</td>
<td>400</td>
<td>1,510*</td>
<td>2,090**</td>
</tr>
<tr>
<td>No. of goods vehicles ('000)</td>
<td>82</td>
<td>343</td>
<td>4,782</td>
<td>NA</td>
</tr>
<tr>
<td>3. Shipping:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ports traffic in m. tonnes</td>
<td>0.2</td>
<td>2.2</td>
<td>7.0</td>
<td>9.7</td>
</tr>
<tr>
<td>Overseas shipping (million tonnes GRT)</td>
<td>19</td>
<td>–</td>
<td>424</td>
<td>562.7</td>
</tr>
<tr>
<td>4. Civil Aviation: Number of passengers (lakhs)</td>
<td>–</td>
<td>26</td>
<td>318</td>
<td>569</td>
</tr>
</tbody>
</table>

Ministry of Shipping Annual Report 2009-10. N.A-Not Available
* For the year 2003-04 ** For 2007-08

(b) Poor planning of transport system: In the formulation of transport plans, sufficient attention was not given to spatial and economic features which influence the pattern of transport demand in the country. For instance, population and economic activities tend to concentrate in major cities and towns. Massive volumes of traffic are concentrated in certain regions of the country and hence there is tremendous pressure on rail and road transport systems in the cities and certain regions. Alternative routes should be developed or there should be balanced development of regions.

There is bound to be substantial build up of transport demand in the years to come. Such increase in transport demand cannot be met always by expansion in transport services. Careful transport planning should include greater dispersal of industries, balanced regional development, generation of thermal power, development of other sources of energy, etc.

Another aspect of poor transport planning is that in the urban areas, lack of adequate mass transport, complete absence of demand management and policy distortions in the areas of fuel pricing and bank finance have resulted in an explosion of personalised transport comprising mainly of scooters and cars. This has contributed to high levels of pollution and alarming rates of accidents. On the other side, a large number of villages lack a reliable all-weather transport connection with nearby markets and towns.

Yet another aspect of poor transport planning in India is that North East and Jammu & Kashmir have not been adequately linked with the rest of the country and as a result, they have remained physically and emotionally isolated.

Finally, certain environment-friendly and socially cost effective means of transport like coastal shipping, inland water transport and non-mechanised transport have remained largely underdeveloped.

(c) Rail-road coordination: Rail and road transport are the dominant modes of transport in the country and they would continue to be so in the future too. However, the modal mix of transport has been continually shifting against the railways. For instance, in 1950-51, the road transport accounted for 11 per cent of the freight traffic and 26 per cent of the passenger traffic; but now, its share had increased to 60 and 80 per cent respectively. This continuing shift in favour of the road transport system is undesirable from economic as well as environment angles. A continuously mounting energy import bill is one of the direct consequences. The Seventh Plan argues in this connection: “Ideally, the Railways should have adequate capacity to clear all train and wagon load traffic for long and medium loads particularly for bulk commodities while the road transport would cater essentially for small lot, short haul traffic for which it is the more efficient mode.”
(d) **Overaged and obsolete assets**: The transport infrastructure in India suffers from over-aged and obsolete assets. This is true of all modes of transport. For instance, in the case of Indian railways, about 25 per cent of the total route length, 80 per cent of the equipment in railway workshops and a large portion of the rolling stock have to be renewed and replaced. Nearly 80 per cent of the buses operated by the SRTUs, nearly half of the shipping tonnage and one-third of the aircraft of our airline corporations would come up for replacement. This problem of replacement has assumed enormous proportions and it is now generally realised that this cannot be done during a single plan.

(e) **Technology Upgradation**: Transport technology has a great influence on the productivity and safety of the transport sector. Modernisation of the transport system and the use of emerging technologies are essential elements of transport planning — these, however, should be based on the local needs and not imitation of those used in developed countries. Even though, every five year plan has talked about technology upgradation as a thrust area, the actual progress has been painfully slow: engine design, multi-axle vehicles, construction of roads, cargo handling equipment at the ports, navigational and communication facilities at the airports, modernisation of rolling stock and signalling system in the railways—all these continue to be primitive. Unless attention is given to these aspects, the productivity of operation and the quality of service, besides making the transport system more safe and reliable.

Despite impressive expansion over the years, the entire Indian transport network is characterised by many deficiencies and a major exercise in expansion of capacity and modernisation and technological upgradation is necessary. The Tenth Plan (2002-07) has proposed a comprehensive transport policy to tackle the above diverse problems facing the transport sector. The problems in the transport sector are so huge and the financial resources required are so vast—estimated at ₹ 2,00,00 crores—that transport plan programmes of the Tenth Plan are bound to be just paper plans and nothing more.

**Growth of Indian Railways**

The Indian Railways had modest beginnings in 1853 when the first railway train journeyed a distance of 22 miles between Bombay and Thana. From a modest beginning in 1853, the railway development was very rapid and by 1900 there were nearly 25,000 miles of railway line. Railway construction slackened and in next 50 years, only 10,000 miles of railway lines were added making up a total of a little more than 34,000 miles, of railway line in 1950.

Originally, the Railways were operated by private companies owned by Englishmen. The Government gave certain concessions such as free grant of land, guarantee of a minimum return on capital etc. There were criticisms and complaints against private ownership and management. In 1925, the Government of India took over the first railway company. Gradually, the other companies were also taken over; by 1950 the railways in the former princely States were also taken over by the Government of India.

The Indian railways have now become a unified State-enterprise. It is the country’s biggest nationalised enterprise and one of the largest railway systems of the world with a capital base of about ₹ 58,000 crores, 63,000 route Kms, approximately 8,000 diesel and electric locomotives, 42,000 passenger coaches, 2,22,000 wagons and employing nearly 1.6 million staff. For long haul freight movement in the bulk and long distance passenger traffic, and for mass rapid transportation in suburban areas, railways occupy a unique position in the Indian economy.

**Railway Development Under the Plans**

As the Indian Railways constitute the largest transport agency intimately connected with the development of the national economy, the main objective of planning in Railways in the past was to expand railway traffic in such a way as to avoid bottlenecks in the production process and to ensure an efficient rail transport system. The total outlay on Railways in the first seven plans was ₹ 24,000 crores. Apart from the general objective of an efficient rail transport system, each Plan had a special objective, as for example,
Notes
(i) First Plan: rehabilitation and replacement of over-aged assets;
(ii) Second Plan: particular emphasis to prepare the Railways for carrying the traffic generated by the new steel plants and the increased production of coal;
(iii) Third Plan: Building up additional capacity so as to be ahead of the traffic demand and to prevent bottlenecks;
(iv) Fourth Plan to Seventh Plan: Modernisation of the system to improve efficiency of operations; and high priority to the development of freight terminals to facilitate the free and smooth movement of wagons; accelerate the conversion of steam locomotives to diesel and electric traction.
(v) Eighth and Ninth Plans: The main thrust was on capacity generation, man-power planning and energy conservation, safety, and customer satisfaction through reliable and better quality of services.
(vi) Tenth Plan: The Tenth Plan (2002-07) emphasized, as under previous plans, capacity expansion through modernization and technological upgradation of the railway system, improvement in quality of service, rationalization of tariff and improvement in safety and reliability of railway services.

During the first three years of the Tenth Plan, the Indian Railways were in a bad shape. But there was a spectacular increase in productivity in the last two years of the Tenth Plan which resulted in quantum expansion in capacity augmentation, increase in railway receipts, control of railway expenditure and huge surpluses.

Roads and Road Transport System in India

Importance of Road Transport for the Indian Economy

As compared to the railways, the road transport system has definite advantages:
(i) Motor transport as well as road construction have contributed significantly to the growth of the gross national product all over the world, but India has remained significantly backward in this regard. Besides, there is tremendous scope for creating employment through road construction and maintenance. Further, India needs increased road mileage, specially to open up the vast areas which cannot be reached except through roads.
(ii) Road transport is quicker, more convenient and more flexible. It is particularly good for short distance travel as well as for movement of goods. Motor vehicles can easily collect passengers and goods from anywhere and take them to wherever they want to be dropped. Door-to-door collection and delivery are possible in the case of road transport. But in the case of railways, the lines are fixed and the railways do not have the flexibility of the roadways. Passengers and goods will have to be taken to the railway station.
(iii) Roads are a necessary complement to railways. India is a country of villages and it is only roads which can connect villages; Railways can connect towns. The railway stations will have to be properly served by a network of feeder roads. Only through these roads the railways can receive their passengers and goods. If railways are essential for the movement of goods and people for long distances, road transport is essential for such movement for short distances. Roads and railways are, therefore, not competitive but are complementary.
(iv) Road transport is of particular advantage to the farmers. Good roads help the farmers to move their produce, particularly the perishable products, like vegetables, quickly to the mandis and towns. Only by developing the road system, the farmer can be assured of a steady market for his products. This assumes great importance in the context of the green revolution. Besides, good roads reduce the strain on the draught animals During the monsoon season, it may be impossible for the villagers to move out of their villages unless there are good roads. In this connection, it is important to recognise that it is the road system which brings the villagers into contact with the towns and the new ideas and the new system which emanate from the towns.
(v) Roads are highly significant for the defence of the country. We have explained earlier that in a vast country like India, it is necessary that the troops should be moved quickly from one place
to another in times of emergency. The railways are useful here. But more important than the railways is the road transport. Now-a-days the army has to move its troops, its tank and armoured cars, its field guns, and so on. For the movement of these, roads are essential. The great importance given to the construction of border roads to facilitate the movement of troops for the protection of the northern borders against the Chinese aggression is an example of the great importance of roads in the defence of the country.

The Seventh Plan (1985-90) brings out the importance of roads as follows: “Since the country’s economy is still largely agrarian in character and the settlement pattern is rural-oriented, roads constitute a critical element of the transportation infrastructure. Road construction and maintenance generate sizeable employment opportunities, a factor that has assumed considerable importance with demographic expansion and the growth of the labour force. Better roads also achieve fuel economy and improve the overall productivity of the road transport sector. Road development will thus continue to play an important role in the Seventh Plan.”

**Rail-Road Co-Ordination**

Railways and roads are complementary to each other much more than other modes of transport and are mutually helpful. The road system links up the cultivators with the local market and the nearest railway station. The Railways, on the other hand, provide the connecting links between the area of production and the consumers at a distance and between the manufacturers in the town and the cultivators in the village. The Railways cannot collect for transport enough produce, unless there are good and sufficient roads. At the same time, even the best of roads cannot place the producers of agricultural produce, iron and steel, cement, coal and other bulky commodities in touch with the final consumers. Road and railways are thus complementary. However, they have become competitive everywhere. In India, too, such a competition has been taking place. In the last three decades or more, there has been an effort to eliminate competition and bring about co-ordination between the two transport services.

**The Natural Superiority of Road Transport**

The bus and lorry companies can out-compete the railways in attracting passengers as well as goods traffic. Motor transport can provide certain services which the railways can never provide—as for instance, door-to-door collection and delivery, highly flexible time table, speedy transport, etc. These advantages of road transport have made this form of transport very popular among the mercantile community, “particularly for less than wagon load consignments.” According to David Hughes, “Road delivery has in many instances halved our cost and slashed delivery time. Yet there is also another potent advantage of road over rail delivery and that is the absence of pilferage. No loss, no ill-will and no unduly expensive method of packing is involved.” According to Hughes, “road transport companies are taking up as much as 80 to 90 per cent of the small parcel traffic in South India.” While the transport of goods by rail is full of complaints such as denial of wagon facilities, long delays in booking, the unconsciously long time taken in transportation, loss through pilferage, and so on, transport of goods by road is speedier, suffers less from pilferage and has the advantage of direct delivery from door to door.

**Protection of Railways Against Road Competition**

In the 1930s a number of committees went into question of competition between railways and road transport. One important suggestion was that the railway should improve their services and face road competition effectively. For instance, the Railways should run show trains, make time table adjustments, provide cheap return tickets, season tickets, etc. In the matter of goods transport, the Railways should introduce express goods trains, more expeditious handling of goods, simplification of clerical formalities, door-to-door collection and delivery services, etc. Most of these suggestions have been implemented by the Indian Railways.

The Motor Vehicles Act of 1939 made it compulsory for all motor vehicles to get licence and made them observe specified conditions with regard to maintenance of vehicles, avoidance of over-crowding, speed, etc. The Act of 1939 imposed restrictions on the free transport of goods. Permits were valid for
particular regions and special permission had to be taken for plying beyond the region of origin. The object of the Motor Vehicles Act was to protect the Railways from the unhealthy competition of motor transport.

In 1945, the Government of India issued to the State Governments “A Code of Principles and Practices” for the regulation of road transport. This Code sought the free carriage of all goods other than those of perishable or fragile nature to a distance of only 75 miles and that beyond this distance permits should only be issued if the Railways were not able to handle the traffic.

It is thus clear that throughout the Government has been seeking to control road transport with the object of protecting the railways. This was given clear expression to by Masani Committee: “In respect of railways and roads, the principle of rail-road co-ordination was accepted long ago, but in the opinion of the Committee it has not been fairly applied and has been working in a one-sided way so as to restrict road transport.”

Should Railways be protected against Road Transport?

The Government has always protected the interests of railways against the competition of motor transport. Important reasons for this attitude are:

(i) Railways are the predominant system of land transport and they are a vital factor in respect of Central finance.

(ii) Without effective co-ordination, there would be wasteful duplication with adverse effects on Central finances.

(iii) Railways are publicly owned, managed and controlled; Road transport should also be publicly controlled.

(iv) There are two obligations on the railways which do not apply to the roads, viz., (a) obligation to carry everything that is offered, and (b) prohibition of undue preference and prejudice.

(v) The railway rates are based on the principle what the traffic can bear and not on maximisation of profit.

(vi) The railways carry two types of goods, viz., high rate traffic and low-rate traffic. The low-rate traffic consists of cheap raw materials such as coal, cement, mineral ores, fertilisers, etc., which are important for industrial and agricultural production. The railways make up their loss on such traffic through profit on high rate traffic. If road traffic is allowed to take away the cream of traffic, then the inevitable result will be the pushing up of the freight rates on lower-rate goods. This will adversely affect industrial development of the country, and will also have serious repercussions on regional development as well as exports.

(vii) Above all, the railways have to serve certain vital and national needs even at a loss. This is so when they have to open up strategic lines and give special travel concessions for social and national purposes.

Water Transport in India

There are two kinds of water transport—inland water transport or river transport and coastal or marine transport.

Inland Water Transport (IWT)

Inland water transport (IWT) comprising a variety of rivers, canals, backwaters, creeks etc. is the cheapest mode for certain kinds of traffic, both over long and short levels, provided the points of origin and destination are located on water front and no transhipment of goods is involved. Besides, IWT is one of the most efficient modes of transport from the point of view of energy consumption. Unlike in other modes of transport, there is practically no investment needed. IWT is also a labour intensive mode of transport and benefits weaker sections of the community. The only requirement is navigable water.

At one time, river and canal transport played an important part in the transport system of the country but since the middle of the last century inland water transport suffered because of the emphasis
placed on railway transport and the diversion of river water for irrigation purposes. As a result, inland water transport (IWT) forms a small part of the total transport network of the country. Out of a total freight traffic of about 550 million tonnes by all modes of surface transport, IWT carries about 17 million tonnes—which is only 0.15 per cent of domestic transportation and there are opportunities for considerable growth.

Inland river transport is important in Assam West Bengal and Bihar. Out of the 25 lakhs tonnes of traffic between Assam and Calcutta, river transport accounts for half and the Railways and road transport account for the rest. Inland transport is highly important in Kerala where rivers and backwaters are used for transporting goods and people. Inland transport is also of some importance in Orissa, Andhra and Tamil Nadu.

Total navigable waterways comprising a variety of rivers, canals, backwaters, etc extend to 14,500 kms of which only about 5,200 kms of major rivers and 488 kms of canals are suitable for operation of mechanise crafts. Even where waterways are available, the potential has not been fully exploited on account of various constraints.

**Thrust Areas and Strategy in the Tenth Plan**

(i) Development of IWT in the regions where enjoys natural advantages.

(ii) Improvement in productivity of assets, through modernisation and upgradation of technology.

(iii) Building up of trained and skilled manpower for IWT operations.

In order to achieve these objectives, the Ninth Plan is adopting the following measures:

(a) Two national waterways — Ganga and Brahmaputra — are being developed. These would include dredging and conservancy works to attain and maintain adequate depth and width of channels, providing adequate navigation aids and setting up integrated terminals to enable navigation throughout the year and 24-hour navigation on selected stretches.

(b) Modernisation of IWT vessels and replacement of overaged ones, development of specific vessels to meet the requirement of different types of cargo to suit different waterways.

(c) Private entrepreneurs will continue to be given interest subsidy for acquisition of better designed vessels and improved country crafts. Private participation would also be encouraged in setting up of terminals.

**Indian Shipping**

Before Independence, Indian shipping companies did not succeed because of severe competition from foreign shipping companies and lack of support by the foreign rulers in India. It was only the Scindia Steam Navigation Company which could face foreign competition. At the time of India’s Independence, there were only 42 ships with less than 1,00,000 tonnes of GRT gross registered tonnage). It was only after Independence that Indian shipping became predominant in India’s coastal trade and got some share in foreign trade. Indian ships carried only 2 per cent of the volume of India’s diverseas trade.

**Civil Aviation in India**

Air transport has a significant role to play. It offers saving in time that cannot be matched by surface transport over long distances. Air transport helps optimise technological, managerial and administrative skills in a resource scarce economy.

In 1950, the Air Transport Enquiry Committee known as Rajadhyaksha Committee, was appointed. The Committee recommended the integration of all companies into four companies so as to remove cut-throat competition and secure scientific and zonal distribution of work. But since the private companies did not voluntarily integrate, the Government had to nationalise civil aviation on three grounds:

(a) Nationalisation would raise operational efficiency;

(b) it would result in better organisation of civil aviation and would enable the Government to get trained technicians, pilots, etc.; and
In 1953 the Parliament passed the Air Transport Corporation Act under which the Indian Airlines Corporation was to run internal services and Air India International was to run external services. Since nationalisation, improvements in all directions have taken place. New aerodromes have been constructed. Both internal and external services have been extended.

Airports

There are a number of agencies which are involved in providing civil aviation services in India. While Air India, Indian Airlines and Vayudoot provide air services, International Airports Authority of India (IAAI) and Director General of Civil Aviation (DGCA) provide infrastructural facilities. IAAI looks after the development of the four international airports; DGCA is responsible for maintenance and development of civil aerodromes, civil enclaves and aeronautical communication stations.

There has been rapid growth in air travel due to acceleration in economic activity in recent years. The Planning Commission anticipated air traffic to grow at the rate of 18 percent per annum. But during the Tenth Plan period, the actual growth rate was between 24 to 28 percent. As a result, airlines have been facing infrastructure constraints due to limited landing slots, inadequate parking bays and congestion during peak hours. Moreover, there is considerable suppressed demand for domestic air travel because many regional domestic airports have not been upgraded. The 11th Plan has given high priority for provision of infrastructural facilities at a much faster pace.

The Government of India has selected two joint venture companies (JVCs) to modernize, upgrade and operate Delhi and Mumbai airports. This step to restructure and modernize the Mumbai and Delhi airports through the joint venture route has been taken despite stringent opposition from the left parties. It has been estimated that capital invested to the extent of nearly `7,960 crores and `6,130 crores would be required for Delhi and Mumbai airports. The Government has decided, in principle, to modernize Chennai Airport through JV route. It may also be mentioned here that construction work at greenfield airports of international standards at Bangalore and Hyderabad has already commenced. The two airports are expected to be operational in 2008. “In principle” approvals have already been given to construct greenfield airports of international standards in Goa, Ahmedabad and Trivandrum.

Five Year Plans and Civil Aviation

The Seventh, Eighth and Ninth Plans have kept certain important considerations while planning for investment in civil aviation. In the first place, they have planned for rationalisation of air services and of tank structure. Secondly, some of the tourist routes served the domestic services were showing heavy losses incating the need to strengthen tourist promotion and development programmes. Thirdly, indiscriminate pansion of air services had resulted in increasing haul operations and raising fuel consumption. Fourth Vayudoot services have been integrated with the service of Indian Airlines and are operated as feeders to the non service centres of Indian Airlines. Finally, the Seven Plan emphasised the need to set up a separate organisation for running helicopter services to meet the requirement of helicopters by ONGC for air transport support for the operations.

The five year Plans included specific programmes for the different agencies providing civil aviation devices in India. The programme for Indian Airlines included acquisition of aircraft, modernisation of work shop facilities, etc. The programme for Air India included acquisition of additional aircraft, increased capacity for freight traffic, strengthening of workshop training facilities, etc. The programme of IAAI include completion of international terminal phase II at Bombay international phase I at Delhi and Madras domestic terminal complex. DGCA programme included instation of flight safety equipments such as air route surveillance radar etc.

The Communication System in India

The communication system comprises posts and telegraphs, telecommunication systems, broadcasting, television and information services. By providing necessary information about the markets and also
supplying necessary motivation, the communication system helps to bring buyers and sellers together effectively and helps to accelerate the growth of the economy. Accordingly, the modern communication system has become an integral part of the development process.

Postal System in India
Since 1950-51, the postal network has been expanded throughout the country, and in recent years, with special emphasis on the rural, hilly and remote tribal areas. With more than 1.5 lakh post offices, the postal network in India is the largest in the whole world. The long term objective of the Department of Postal Services of the Government of India is to locate a post office within three Kms of every village and to provide the facility of a letter box in every village with a population of over 500. At present, it is estimated that there are approximately 1,10,000 Gram Panchayat villages which do not have a post office. The Postal Department seeks to provide basic postal services on a contractual basis by utilising the existing infrastructure of Panchayats in these areas. This scheme—known as the Panchayat Sanchar Sewa Scheme,—has been recently introduced by the Government and it has the twin advantage of (a) providing postal services to needy areas with less Government expenditure and (b) generating employment opportunities in such areas.

Indian Telegraphs
Indian telegraphs is one of the oldest Government-owned public utility organisations in the world. The number of telegraph offices has increased from 8,200 in 1951 to over 30,000 now. The phonogram service for sending and receiving telegram by telephone, telex service to send and receive printed message directly from one centre to another, the tremendous expansion of telephone facilities and direct trunk dialling—all these facilities are available to the general public.

Telecommunications
Telecommunication is a vital input for global competition and for India’s success in the international markets. It is important not only because of its role in bringing the benefits of communication to every corner of India but also in serving the new policy objectives of improving the global competitiveness of the Indian economy and stimulating and attracting foreign direct investment.

There has been a phenomenal growth in the telecommunication sector after 1995. The telecommunications network of the public sector (BSNL and MTNL) is one of the largest telecommunication network in Asia with a capacity of 50 million lines and over 40 million working connections comprising 35,510 telephone exchanges in the country (by end - December 2002). The annual growth rate of providing new telephone connections has been increasing steadily from about 10 percent in 1988-89 to 30 per cent in 1999-2000 and 17 per cent during 2001-02. The number of new telephone connections provided during 2003-04 alone was 22 million which was equal to the total number of phones installed as of 1999.

There has been a shift in importance towards the private sector and towards wireless telephony with falling tariff rates for cellular phones, there has also been a phenomenal increase in the number of cellular subscribers. At the time of independence, there were only two phones per ten thousand of population. By the year 2009, there were more than four phone connections per 10 persons. Today a customer, who wishes to own a phone can get the same in minutes. Prior to advent of mobility companies, it used to take 8 to 15 years to get a phones connection. By March 2009, there were nearly 43 crores telephone connections, out of which around 90 percent were mobile connections. Cellular telephony has become the most preferred mode of communication among the Indian public, as capital costs of mobile telephony are lower. Today an ordinary worker can an is affording a mobile phone. Today a mobile in the hand of a Plumber, Carpenter, Electrician, Autorikshaw drive is a common feature.

From the data provided in table 19, we can make a review of the growth of infrastructure investment in the post-reform period.
19.5 Urban Infrastructure

Urban infrastructure includes water supply and sanitation which are important basic needs for improvement of the quality of life and enhancement of the productive efficiency of citizens. Generally, State Governments and Union Administrations, with financial and technical assistance from the Central Government, have planned and executed various schemes for providing drinking water and sanitation. The Government of India launched the National Water Supply and Sanitation Programme in the First Plan itself with an outlay of `49 crores (which was 1.5 per cent of the total Plan outlay) at that time; and this outlay had increased to `16,700 crores in the Eighth Plan (3.8 per cent of the total outlay).

With steady increase in urban population on account of rapid industrialisation, natural growth of population and migration from rural areas, the magnitude of the water supply and sanitation problem in our bulging cities and towns is assuming a critical dimension in the background of depleting ground water resources, environmental pollution, poor water supply and sanitation in slum areas and non-availability of proximate sources of water supply. In spite of the enormity of the problem, the Government of India has set bold targets of covering 100 per cent of the drinking water requirements of the urban population and 75 per cent of their sanitation needs.

Most urban infrastructure services are provided by Municipal Corporations and Municipalities who fund their requirements largely by loans and grants from Central and State Governments. In order to supplement the efforts of urban development, the Government of India has depended upon the following agencies:

(a) Life Insurance Corporation of India (LIC) which invests in urban infrastructure projects — like water supply, drainage, housing, power and transport — as a part of its statutory requirements;

(b) The Housing and Development Corporation Ltd. (HUDCO) is given the task of financing urban infrastructure. HUDCO provides infrastructure loans to State Urban Finance Corporations, Water Supply and Sewerage Boards, Municipal Corporations, Improvement Trusts, etc; and

(c) The Infrastructure Leasing and Finance Services Ltd which also finances urban infrastructure projects.

Many states in India are now inviting private sector participation in the provision of infrastructure services on a more cost-effective basis — e.g., contracting out the management of urban services such as construction and maintenance of toilets, garbage collection and disposal, solid waste conversion and maintenance water supply systems, etc, BOT franchises and provision of services through voluntary organisation community organisations and common interest group.

Urban Transport

Another important problem of our cities, particularly in our metropolitan cities is the extreme inadequate of public transport facilities, as a result of which number of personalised vehicles has increased rapidly urban areas in the last few decades. In many cities, vehicle population has reached alarming proportions relation to the road and network available. With his density of population, and scarcity of land, there almost no scope for accommodating more vehicles are meet the growing demand for transport. Besides, contract of energy consumption in order to check dangerous growing urban pollution point out to the need for increase in public transport and rail-based transport.

Metro Rail

Metro rail projects in Delhi and some of metropolitan cities have started gaining momentum. The approvals and commissioning of metro routes in NCR Delhi, Mumbai, Banglore, Chennai, Kolkata, etc. given in Table 8.
Table 8: Metro Rail Project Approved by the Government of India

<table>
<thead>
<tr>
<th>Project</th>
<th>Length (km)</th>
<th>Commissioning schedule range (Years)</th>
<th>Cost (£ Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Capital Region</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delhi MRTS Phase II</td>
<td>54.7</td>
<td>6/2008 to 6/2010</td>
<td>11.68</td>
</tr>
<tr>
<td>Extension of Delhi Metro to Gurgaon</td>
<td>14.5</td>
<td>3/2010</td>
<td>1.58</td>
</tr>
<tr>
<td>Extension of Delhi Metro to NOIDA</td>
<td>7.0</td>
<td>11/2009</td>
<td>8</td>
</tr>
<tr>
<td>Central Secretariat at Badarpur</td>
<td>20.2</td>
<td>9/2010</td>
<td>4.02</td>
</tr>
<tr>
<td>Metro Link (Dwarka Sector-9 to Sector-21)</td>
<td>2.8</td>
<td>9/2010</td>
<td>32</td>
</tr>
<tr>
<td>Airport metro Express Link</td>
<td>22.7</td>
<td>9/2010</td>
<td>3.82</td>
</tr>
<tr>
<td>Total for Delhi &amp; NCR</td>
<td>187.0</td>
<td></td>
<td>32.9</td>
</tr>
<tr>
<td>Metro rail project other than Nation capital Region</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangalore Metro</td>
<td>42.3</td>
<td>9/2012</td>
<td>8.18</td>
</tr>
<tr>
<td>Kolkata East-West Metro Corridor</td>
<td>14.7</td>
<td>1/2015</td>
<td>4.8</td>
</tr>
<tr>
<td>Chennai Metro</td>
<td>45</td>
<td>2014-15</td>
<td>14.6</td>
</tr>
<tr>
<td>Mumbai Metro Line-1</td>
<td>11.1</td>
<td>10/2010</td>
<td>23</td>
</tr>
<tr>
<td>Mumbai Metro Line-2</td>
<td>31.9</td>
<td></td>
<td>7.6</td>
</tr>
<tr>
<td>Total outside NCT</td>
<td>145</td>
<td></td>
<td>37.6</td>
</tr>
<tr>
<td>Grand total (NCT + outside NCT)</td>
<td>331.8</td>
<td></td>
<td>70.5</td>
</tr>
</tbody>
</table>


Science and Technology

Science and Technology are ideas and the means with which man seeks to change his environment. While science represents “accumulation of knowledge”, technology represents “refinement in tools”. Over the last two hundred years or so, science and technology have helped to improve the quality of human life. For rapid economic progress, the application of science and technology (S and T) to agriculture, industry, transport and to all other economic and non-economic activities has become essential. S and T are changing in other countries like USA, Russia, Germany, Japan etc., and new knowledge and new technologies are being used in every line of production and these countries have experienced tremendous economic progress. The recent progress in agriculture and the green revolution it has ushered in has demonstrated to our people the promise of fulfilling the basic human needs and improving the quality of life of our people.

Nehru and S & T

Jawaharlal Nehru believed in the spread of scientific temper. He was responsible for the setting up of a chain of national laboratories devoted to basic and applied research, develop indigenous technology and processes and help industrial enterprises in solving their technological problems. The Council of Scientific and Industrial Research (CSIR) as well as the Department of Atomic Energy were set up. The Indian Council of Agricultural Research (ICAR) was strengthened. Then came the Department of Electronics, Department of Space Technology, the Indian Space Research Organisation (ISRO) etc., In 1958 the Science Policy Resolution was adopted to provide positive incentives for the development and utilisation of S and T in nation building activities. The major aims of this policy were:

(i) to foster, promote and sustain by appropriate means the cultivation in science and scientific research in all its aspects-pure, applied and educational;
Notes

(ii) to ensure an adequate supply within the country of research scientists of higher quality and recognise their work as an important component of the strength of the nation; and

(iii) to encourage and initiate with all possible speed programmes for the training of scientific and technical personnel on a scale adequate to fulfil the country’s needs in regard to science and education, agriculture, industry and defence; and

(iv) to ensure for the people of the country all the benefits that can accrue from the acquisition and application of scientific knowledge.

This 1958 Resolution gave explicit recognition to the importance of research and development in the economic growth of India.

19.6 Private Investment in Infrastructure: Outlook and Prospects

The Government of India has increasingly realised that infrastructure need not be a public sector monopoly. In the past, the responsibility for providing infrastructure services was vested with the Government—the reasons being: heavy capital investments, long gestation periods, externalities, high risks and low rates of return on investment. The infrastructure under government ownership and management has, however, proved thoroughly inefficient and corrupt. The demand for infrastructure facilities and services has always outpaced supply; besides, the quality of the existing supply is extremely poor. The consequent shortfalls in capacity and inefficiencies in infrastructure facilities are patent in the increasingly congested roads, chronic transport bottlenecks, frequent power failures and load shedding, long waiting lists for installation of telephones and shortage of drinking water. The widening gap between demand and supply of infrastructure and the extremely poor quality of the existing supply raises important questions concerning the sustainability of economic growth of the country in the coming years.

In order to sustain an annual GDP growth rate of 7 per cent, it is imperative to accelerate the rate of investment in infrastructure. According to the Finance Ministry’s Expert Group on Commercialisation of Infrastructure Projects (June 1996) the total infrastructure investment requirements would be about ₹ 40,000 crores to ₹ 45,000 crores during 1996-2001 and another ₹ 75,000 crores during the next 5 years (2001-06). This order of massive investment requirements is clearly beyond the capacity of the Government. The financial resources available to the Government are very limited. At the same time, public debt and other government liabilities are increasing by leaps and bounds. Accordingly, the creation of quality infrastructure will need the infusion of private capital, both domestic and foreign. At the same time, technological and organisational innovations have made it possible for the private sector to enter the infrastructure.

Since 1991, Government strategy attaches high priority to the development of efficient infrastructure and towards creating an enabling environment for private participation in the infrastructure sector. Besides, public-private partnership can also encourage better risk sharing, accountability, cost recovery and management of infrastructure. Some of the important steps in this direction are:

(a) The Government set up the Infrastructure Development Finance Company in January 1997, under the Indian Companies Act, with an authorised capital of ₹ 5,000 crores.

(b) The Government has announced a tax holiday to companies developing, maintaining and operating infrastructure facilities, such as roads, bridges, new airports, ports and railway projects and also those dealing with water supply, sanitation and sewerage projects.

(c) The Government has permitted income tax exemption on dividend, interest or long term capital gains earned by funds or companies set up to develop, maintain and operate an infrastructure facility.

(d) The Government has raised the corpus of the National Highways Authority of India Ltd (NHAI) by ₹ 200 crores to enable it to leverage funds from the domestic and international capital markets.

(e) The Government has enhanced tax rebate limits for investments in shares and debentures offered by infrastructure companies; this is to channelise domestic savings into such investments.
Infrastructure investments are, by their very nature, long gestation activities. If private participation has to be encouraged to enter the infrastructure, there is the need to develop domestic capital markets which will make funds available for long periods through long term debt instruments. The Asian Development Bank (ADB) has provided a loan of $ 300 million for the Public Sector Infrastructure Facility (PSIF) in order to support private sector infrastructure projects through the development of the long-term debt market. The money will be borrowed by ICICI, IFCI and SCICI for onlending to infrastructure companies through long term debt instruments — viz., bonds and debentures, for a minimum of 15 year maturity.

In many developed and developing countries, contractual savings in the form of pension and provident funds are being tapped for infrastructure financing, since these savings are long term in nature and could act as a source of funds for debt instruments with long term maturities. The Government will have to introduce appropriate reforms in public provident funds, pension funds and insurance companies so that the private sector can have access to these funds for infrastructure development. The Government of India has announced various measures to attract foreign investment in infrastructure.

For instance, the Government has allowed automatic approval for foreign equity participation upto 74 per cent in key infrastructure industries such as electricity generation and transmission, non-conventional energy generation and distribution, and construction activities in the area of roads, bridges, railbeds, ports and harbours.

In recent years, the Government has undertaken many sector-specific reform measures. For instance, telecom projects are to be treated as infrastructure and are to receive all the fiscal concessions available for infrastructure projects — like tax holiday and concessional project import duty. The Government of India has promulgated an ordinance to facilitate private investments in the transmission of electricity, as distinct from generation and distribution of electricity. The Government has also announced guidelines for private investment in highway development through the Build-Operate-Transfer (BOT) route - these would provide more financial concessions and also facilitate the preparation of detailed feasibility reports, clearance for the right of way of land, relocation of utility services resettlement and relocation of the affected establishments, environmental clearance and equity participation in the highway sector. Similar guidelines have been given for private participation in ports.

The Expert Group on Commercialisation of Infrastructure Projects has also recommended the setting up of an autonomous regulatory body for each infrastructure sector on the lines of SEBI to ensure fair competition among public and private operators, protect consumer interests, particularly the needs of vulnerable and weaker sections, ensure public safety, environmental sustainability, etc.

What will be the future role of public sector enterprises in the field of infrastructure, after the entry of the private sector? The public sector enterprises will continue to shoulder the major burden of providing critical infrastructure services but public sector reforms would be necessary to broad-base their management, to upgrade their technology, to improve their performance and quality of services and to generate adequate investible resources through rationalisation of service charges and better recovery of costs.

**Public Private Partnership and Infrastructure**

Given the need of mega infrastructure required, public sector cannot cope with the need of the hour. Though the Government has been emphasizing the importance of infrastructure for the development of the economy, we witness a cut back in the investment by the government in the infrastructure, both at the central and state level. In the last few years, public private partnership in the infrastructure sector is gaining importance.

Economic Survey 2009-10, underlines the importance of PPP projects and says, “PPPs offer a number of advantages in terms of leveraging public capital to attract private capital and undertake a larger number of infrastructure projects, introducing private-sector expertise and cost-reducing technologies as well as bringing in efficiencies in operation and maintenance. Hence, more than their fiscal implications, PPPs are tools to fulfill the basic obligations of Governments to provide better...
infrastructure services (with large externalities), by increasing the accountability of the private sector as a service provider.”

But it is not an automatic or easy task. Economic Survey further says, “A key pre-requisite is to lay down a policy, legal and regulatory framework that assures a fair return for investors, protects the interests of users, especially the poor, and assures quality supply at reasonable cost. For this purpose, it is important that issues related to the adopted, procurement strategies and templates to be employed and mechanisms for financial structuring to be considered, are clearly outlined ab initio at the level of the sponsoring agencies, including State Governments.”

Sector wise description of PPP both at state and central level projects is given in Table 9.

Table 9: Sector-wise PPP project

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number</th>
<th>Below ₹ 250 crore</th>
<th>Between ₹ 251 to 500 crore</th>
<th>More than ₹ 500 crore</th>
<th>Value of contacts (in crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airports</td>
<td>5</td>
<td>0</td>
<td>303</td>
<td>18,808</td>
<td>19,111</td>
</tr>
<tr>
<td>Energy</td>
<td>24</td>
<td>734</td>
<td>2,669</td>
<td>13,708</td>
<td>17,111</td>
</tr>
<tr>
<td>Ports</td>
<td>43</td>
<td>1,066</td>
<td>2,440</td>
<td>62,993</td>
<td>66,499</td>
</tr>
<tr>
<td>Roads</td>
<td>271</td>
<td>8,689</td>
<td>32,862</td>
<td>60,454</td>
<td>102,005</td>
</tr>
<tr>
<td>Urban Development</td>
<td>73</td>
<td>2,753</td>
<td>2,404</td>
<td>10,132</td>
<td>15,288</td>
</tr>
<tr>
<td>Other sectors</td>
<td>34</td>
<td>1,613</td>
<td>905</td>
<td>1,644</td>
<td>4,162</td>
</tr>
</tbody>
</table>

Economic Survey, 2009-10

Infrastructure in the 11th Plan: An Overview

The Planning Commission has openly accepted the fact that lack of infrastructure is a major constraint in India’s economic performance. The development of rural infrastructure is a high priority in the 11th Plan with critical targets for irrigation, rural road connectivity, rural drinking water etc. There are huge gaps in general infrastructure encompassing power, roads, railways, ports, airports, telecommunications and the 11th Plan has proposed to address these vigorously. The 11th Plan, for instance, will raise total expenditure on infrastructure to 9.0 percent of GDP as against 4.5 percent in the Tenth Plan. Consistent with the above projection, the investment in physical infrastructure alone during the Eleventh Five Year Plan has been estimated to about ₹ 2,002 thousand crores (at 2006-07 prices) which is equivalent to about US $ 500 billion. Of this amount, the share of the Central government is estimated to be 37 percent, of the state governments to be about 33 percent and that of the private sector to be 30 percent. Obviously, the Government has adopted the strategy of public private partnership in the infrastructure structure.

The power sector is critical for industrial growth and the real problem is the distribution system, which in the hands of State Governments. Top priority should therefore, be given, to improve the performance distribution companies.

Finally, PPPs have become the preferred mode construction and operation of infrastructure service such as highways, airports, ports etc. They offer significant advantages in attracting private capital in construction of public infrastructures as well as in improving efficiencies in the provision of services to users.

During recent years, the UPA Government at the Centre has adopted such an approach in the construction of roads, ports, airports and in railways. Naturally, the people would expect state governments too to adopt similarly transparent approach to ensure that the projects succeed.

However, public private partnership can some times run into controversy if the private sector partner seen to have received unduly favourable treatment. In essential that the general public is convinced that PPP are in the public interest. This can be done by ensure that :

(a) the terms of concession agreements are transparent and protective of public interest; and
(b) there is robust competition in bidding for the project so that least cost options are chosen.
Self-Assessment

1. Choose the correct option:

   (i) The Keynesian theory of employment provides the solution of?
       (a) Frictional unemployment  (b) Disguised unemployment
       (c) Cyclical unemployment  (d) Seasonal unemployment

   (ii) The concept of disinvestment was introduced by?
       (a) Friedman  (b) Kaldor
       (c) Keynes  (d) Myrdal

   (iii) Full employment is a situation when?
       (a) Cyclical unemployment is zero  (b) Frictional unemployment is zero
       (c) Seasonal unemployment is zero  (d) Disguised unemployment is zero

   (iv) The coal production including lignites rose from 32 million tones to -------- between 1951 and 2010:
       (a) 566 million tones  (b) 400 million tones
       (c) 800 million tones  (d) None of these

19.7 Summary

- The prosperity of a country depends directly upon the development of agriculture and industry. Agriculture production, however, requires irrigation, power, credit, transport facilities, etc.
- In the last 200 years or more industrial and agricultural revolutions in England and other countries were accompanied by a revolution transport and communications, the extensive use of cargo and later oil as source of energy, tremendous expansion in banking, insurance and other financial institute to finance production and trade, an explosion knowledge of science and technology, and so on.
- Indian planners were fully aware of the link between infrastructural facilities and general economic development and, accordingly, they gave high priority the rapid expansion of these facilities right from the First plan itself.
- The most important single factor which can act as a constraint on economic growth of a country is the availability of energy. India is both a major energy producer and consumer. Currently, India ranks as the world’s seventh largest energy producer and fifth largest energy consumer.
- Broadly, there are two sources of energy, viz., commercial energy and non-commercial energy. Commercial energy, or more correctly, commercial sources of energy, consist of coal, petroleum and electricity.
- The Government has also launched a scheme for utilisation of agricultural biomass available at Taluka level for decentralised power generation to meet the power requirements of the people locally.
- The Government of India has announced various policy measures to encourage direct foreign investments and collaborations. NRIs particularly are taking up projects such as wind, farms and solar plants in the states of Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh and Kerala, totalling an aggregate capacity of 450 MW.
- National Bio-Fuel Board is being set up to promote the use of bio-fuels. The short term target is to encourage jatropha farming, suitable adoption of vehicle engines to use bio-fuels along with minimal oil and target bio-fuel consumption to 20 percent by the end of the 12th Plan (i.e. by the Year 2017).
- Electric power, which is one form of energy, is an essential ingredient of economic development and, it is required for commercial and non-commercial uses. Commercial uses of power refer to the use of electric power in industry, agriculture and transport.
It may be observed that the consumption of power by domestic consumers has increased rapidly. However, consumption of electricity by railways and for public lighting as a proportion of total consumption has declined.

Power development during the last 50 years has been significant. The total installed generating capacity from all sources — utilities and non-utilities — had increased from 2,300 MW in 1950 to 1,43,800 MW by 2005-06.

The Government of Orissa was the first to initiate reform of the State power sector with substantial restructuring of SEB to make the operation of the sector more efficient and financially viable.

In India, as in all developing countries, power generation and distribution have been a government monopoly.

Ever since the Narasimha Rao Government announced its new power policy for private power, this country has witnessed one of the most acrimonious debates on various aspects of the policy.

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

Indian planners gave high priority to the development of transport, for in their opinion “an efficient and well developed system of transport and communications is vital to the success of a plan of economic development which lays stress on rapid industrialisation.”

Rail and road transport systems dominate but other forms of transport are also important within their specialised areas considering the size of the country and its geographical features.

Since 1950-51 transport systems have registered impressive progress but there are many bottlenecks, constraints and difficulties. Inadequacies and imbalances in transport threaten to constrain economic growth and the quality of life in urban as well as rural India.

Despite impressive expansion over the years, the entire Indian transport network is characterised by many deficiencies and a major exercise in expansion of capacity and modernisation and technological upgradation is necessary.

The Indian Railways had modest beginnings in 1853 when the first railway train journeyed a distance of 22 miles between Bombay and Thana. From a modest beginning in 1853, the railway development was very rapid and by 1900 there were nearly 25,000 miles of railway line.

As the Indian Railways constitute the largest transport agency intimately connected with the development of the national economy, the main objective of planning in Railways in the past was to expand railway traffic in such a way as to avoid bottlenecks in the production process and to ensure an efficient rail transport system.

Before 1924, Railway finances formed part of the Central Government finances. But from 1924, the Railway finances were separated from the general finances of the Central Government.

Although the railway in India is the cheapest mode of transport from any other mode, Indian Railways has never incurred massive losses.

Today railways requires urgent efforts for expanding railway lines, new engine factories, coach factories and other types railways infrastructure.

The Seventh Plan (1985-90) brings out the importance of roads as follows: “Since the country’s economy is still largely agrarian in character and the settlement pattern is rural-oriented, roads constitute a critical element of the transportation infrastructure.

Road development in India was neglected in the past for various reasons. In the first place, the governments — Central and State — did not appreciate the importance of developing the road system.

Railways and roads are complementary to each other much more than other modes of transport and are mutually helpful. The road system links up the cultivators with the local market and the nearest railway station.

There are two kinds of water transport — inland water transport or river transport and coastal or marine transport.
Inland water transport (IWT) comprising a variety of rivers, canals, backwaters, creeks etc. is the cheapest mode for certain kinds of traffic, both over long and short levels, provided the points of origin and destination are located on water front and no transhipment of goods is involved.

Before Independence, Indian shipping companies did not succeed because of severe competition from foreign shipping companies and lack of support by the foreign rulers in India. It was only the Scindia Steam Navigation Company which could face foreign competition.

Air transport has a significant role to play. It offers saving in time that cannot be matched by surface transport over long distances. Air transport helps optimise technological, managerial and administrative skills in a resource scarce economy.

The Government of India has selected two joint venture companies (JVCs) to modernize, upgrade and operate Delhi and Mumbai airports. This step to restructure and modernize the Mumbai and Delhi airports through the joint venture route has been taken despite stringent opposition from the left parties.

The Seventh, Eighth and Ninth Plans have kept certain important considerations while planning for investment in civil aviation. In the first place, they have planned for rationalisation of air services and of tank structure.

The communication system comprises posts and telegraphs, telecommunication systems, broadcasting, television and information services. By providing necessary information about the markets and also supplying necessary motivation, the communication system helps to bring buyers and sellers together effectively and helps to accelerate the growth of the economy.

Indian telegraphs is one of the oldest Government-owned public utility organisations in the world. The number of telegraphs offices has increased from 8,200 in 1951 to over 30,000 now.

The Government introduced the Communication Convergence Bill, 2001 in Parliament, with the purpose of promoting and facilitating the carriage and content of communications (including broadcasting, telecommunications and multimedia) in an orderly manner.

Urban infrastructure includes water supply and sanitation which are important basic needs for improvement of the quality of life and enhancement of the productive efficiency of citizens.

Given the need of mega infrastructure required, public sector cannot cope with the need of the hour. Though the Government has been emphasizing the importance of infrastructure for the development of the economy, we witness a cut back in the investment by the government in the infrastructure, both at the central and state level.

The Planning Commission has openly accepted the fact that lack of infrastructure is a major constraint in India’s economic performance.

During recent years, the UPA Government at the Centre has adopted such an approach in the construction of roads, ports, airports and in railways. Naturally, the people would expect state governments too to adopt similarly transparent approach to ensure that the private projects succeed.

19.8 Key-Words

1. Infrastructure: The term infrastructure has been used since 1927 to refer collectively to the roads, bridges, rail lines, and similar public works that are required for an industrial economy, or a portion of it, to function. The term also has had specific application to the permanent military installations necessary for the defense of a country. Perhaps because of the word’s technical sound, people now use infrastructure to refer to any substructure or underlying system. Big corporations are said to have their own financial infrastructure of smaller businesses, for example, and political organizations to have their infrastructure of groups, committees, and admirers. The latter sense may have originated during the Vietnam War in the use of the word by military intelligence officers, whose task it was to delineate the structure of
the enemy's shadowy organizations. Today we may hear that conservatism has an infrastructure of think tanks and research foundations or that terrorist organizations have an infrastructure of people sympathetic to their cause. The Usage Panel finds this extended use referring to people to be problematic, however. Seventy percent of the Panelists find it unacceptable in the sentence FBI agents fanned out to monitor a small infrastructure of persons involved with established terrorist organizations.

2. Non-commercial energy: Non-commercial (also spelled noncommercial) refers to an activity or entity that does not in some sense involve commerce, at least relative to similar activities that do have a commercial objective or emphasis. For example, advertising-free community radio stations are typically nonprofit organizations staffed by individuals volunteering their efforts to air a wide variety of radio programming, and do not run explicit radio advertisements, included in the United States specific grouping of "non-commercial educational" (NCE) public radio stations. Some Creative Commons licenses include a "Non-Commercial" option, controversial in definition and application.

19.9 Review Questions

1. Discuss the role of infrastructure in economic development.
2. Explain the availability of primary energy in India.
3. What are the non-conventional sources of energy? Discuss.

Answers: Self-Assessment

1. (i) (c) (ii) (c) (iii) (a) (iv) (a)

19.10 Further Readings

Books

1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
Objectives
After reading this Unit students will be able to:
• Explain the Indian Financial System.
• Describe about the Monetary Policy.

Introduction
At present, the institutional structure of the financial system is characterised by (a) banks, either owned by the Government, RBI or private sector (domestic or foreign) and regulated by the RBI; (b) development financial institutions and refinancing institutions, set up either by a separate statute or under Companies Act, either owned by Government, RBI, private or other development financial institutions and regulated by the RBI and (c) non-bank financial companies (NBFCs), owned privately and regulated by the RBI.

Reforms of 1990s have altered the organisational forms, ownership pattern and domain of operations of Financial Institutions (FIs) on both the asset and liability fronts. Drying up of low cost funds has led to an intensification of the competition for resources for both banks and FIs. At the same time, with banks entering the domain of term lending and FIs making a foray into disbursing short-term loans, the competition for supply of funds has also increased. Besides, FIs have also entered into various fee-based services like stock-broking, merchant banking, advisory services and the like.

20.1 Indian Financial System: Money Market
In a broad sense, finance refers to funds or monetary resources needed by individuals, business houses and the Government. Individuals and households require funds essentially for meeting their current requirements or day-to-day expenses or for buying capital goods (commonly known as investment).

A business unit — a factory or a workshop — needs funds for paying wages and salaries, for buying raw materials, for purchasing new machinery or replacing an old one, etc. Traders require finance for buying and stocking goods in their shops and godowns.

Farmers require finance for short periods of 12 to 15 months for cultivation purposes, such as for buying seeds, manure, fodder for cattle, etc. Such short-period loans are normally paid off after the harvest has been collected. The farmers may need finance for medium term and long-term — say, for periods up to 5 to 10 years — for the purchase of livestock, agricultural machinery and implements, digging wells, making permanent improvements on land, etc.
Finally, the government needs funds to meet its expenditure on goods and services (revenue expenditure) and finance its development programmes (capital expenditure).

**The Structure of the Financial System**

The financial system of India refers to the system of borrowing and lending of funds or the demand for and the supply of funds of all individuals, institutions, companies and of the Government. Commonly, the financial system is classified into:

(a) **Industrial finance**: Funds required for the conduct of industry and trade;

(b) **Agricultural finance**: Funds needed and supplied for the conduct of agriculture and allied activity;

(c) **Development finance**: Funds needed for development; actually it includes both industrial finance and agricultural finance; and

(d) **Government finance**: Relates to the demand for and supply of funds to meet Government expenditure.

India’s financial system includes the many institutions and the mechanism which affects the generation of savings by the community, the mobilisation of savings and the effective distribution of the savings among all those who demand the funds for investment purposes. Broadly, therefore, the Indian financial system is composed of:

(a) The banking system, the insurance companies, mutual funds, investment funds and other institutions which promote savings among the public, collect their savings and transfer them to the actual investors; and

(b) The investors in the country composed of individual investors, industrial and trading companies and the government—these enter the financial system as borrowers.

Apart from these two broad categories of institutions which promote savings on the one side and investment on the other, there are certain other essential institutions of the Indian financial system which are actually *facilitators*.

**The Function of the Indian Financial System: Promotion of Capital Formation**

The Indian financial system performs a crucial role in economic development of India through saving investment process, also known as capital formation. It is for this reason that the financial system is sometimes called the financial market. The purpose of the financial market is to mobilise savings effectively and allocate the same efficiently among the ultimate users of funds, *viz.*, investors.

A high rate of capital formation is an essential condition for rapid economic development. The process of capital formation depends upon:

(a) Increase in savings, that is, the resources that would have been normally used for consumption purposes, should be released for other purposes;

(b) Mobilisation of savings—domestic savings collected by banking and financial institutions and placed at the disposal of actual investors; and

(c) Investment proper, which is the production of capital goods.

The third stage or process is the real capital formation but this stage cannot arise or exist without the first two processes. Thus, the general public should save and be prepared to release real resources from consumption goods to capital goods. The savings of the people should be mobilised by banking and financial institutions. Finally, the savings of the people should be made available to investors to produce capital goods. All these three steps or processes, though independent of each other, are necessary for accumulation of capital. The importance of banking and financial institutions in the capital formation process arises because those who save and those who invest in India are generally not the same persons or institutions. The financial institutions and the banks act as intermediaries to bring the savers and investors together.
Composition of the Indian Financial System

The Indian financial system which refers to the borrowing and lending of funds or to the demand for
and supply of funds, consists of two parts, viz., the Indian Money market and the Indian Capital market.
The Indian money market is the market in which short-term funds are borrowed and lent. The capital
market in India, on the other hand, is the market for medium-term and long term funds.

Usually, we classify the Indian money market into organised sector and the unorganised sector. The
organised sector of the money market consists of commercial banks in India, which includes private
sector and public sector banks and also foreign banks. The unorganised sector consists of indigenous
bankers including the non-banking financial companies (NBFCs). Besides these two, there are many
sub-markets in the Indian money market, as we shall see later.

The Composition of the Indian Banking System

The organised banking system in India can be broadly divided into three categories, viz., the central
bank of the country known as the Reserve Bank of India, the commercial banks and the co-operative
banks. Another and more common classification of banks in India is between scheduled and non-
scheduled banks. The Reserve Bank of India is the supreme monetary and banking authority in the
country and has the responsibility to control the banking system in the country. It keeps the cash
reserves of all scheduled banks and hence is known as the “Reserve Bank”.

Scheduled and Non-Scheduled Banks

Under the Reserve Bank of India Act, 1934, banks were classified as scheduled banks and non-
scheduled banks. The scheduled banks are those which are entered in the Second Schedule of RBI
Act, 1934. Such banks are those which have a paid-up capital and reserves of an aggregate value of
not less than ₹ 5 lakhs and which satisfy RBI that their affairs are carried out in the interests of their
depositors. All commercial banks—Indian and foreign, regional rural banks and State co-operative
banks—are scheduled banks. Non-scheduled banks are those which have not been included in the

Chart 1: Scheduled Banking Structure in India

[Central Bank and supreme monetary of the country]

Scheduled Banks

- Scheduled Commercial Banks
  - Public Sector Banks (27)
  - Private Sector Banks (25)
  - Foreign Banks in India (39)
  - Regional Rural Banks (357)

- Scheduled Co-operative Banks
  - Nationalised Banks (19)
  - State Bank of India & its Associates (8)
  - Old Private Banks (17)
  - New Private Banks (8)
  - Scheduled Urban Cooperative Banks (53)
  - Scheduled State Cooperative Banks (31)

[As March 31, 2007]

Second Schedule of RBI Act, 1934. At present, there are only three non-scheduled banks in the country.
Scheduled banks are divided into commercial banks and cooperative banks. Commercial banks are
based on profit, while cooperative banks are based on cooperative principle.
20.1.1 The Indian Capital Market

The Indian capital market is the market for long-term capital; it refers to all the facilities and institutional arrangements for borrowing and lending “term funds” — medium-term and long-term funds. The demand for long-term money capital comes predominantly from private and public manufacturing industries, trading and transport units, etc and agriculture too requires some funds for long-term purposes. The Central and State Governments raise substantial amounts from the capital market. The supply of funds for the capital market comes largely from individual savers (they supply through banks and insurance companies), corporate savers, commercial banks insurance companies, public provident funds and other, specified agencies. The capital market in India can be classified into:

(a) Gilt-edged market or market for Government and semi-government securities;
(b) Industrial securities market;
(c) Development financial institutions; and
(d) Non-banking financial companies.

The gilt-edged securities market is the market for Government and semi-government securities which carry fixed interest rates. The industrial securities market is the market for equities and debentures of companies of the corporate sector. This market is further classified into (a) new issue markets for raising fresh capital in the form of shares and debentures, (commonly referred to as primary market) and (b) old issues market (or secondary market) for buying and selling shares and debentures of existing companies — this market is commonly referred to as the stock market or stock exchange.

1. The Composition of the Indian Money Market

A money market is not a market for money but it is a market for “near money”; or it is the market for lending and borrowing of short-term funds. It is the market where the short-term surplus investible funds of banks and other financial institutions are demanded by borrowers comprising individuals companies and the Government. Commercial banks are both suppliers of funds in the money market and borrowers. The composition of the Indian money market is given in Chart 2:

The Indian money market consists of two parts: the unorganised and the organised sectors. The unorganised sector consists of indigenous bankers who pursue the banking business on traditional lines and non-banking financial companies (NBFCs). The organised sector comprises the Reserve Bank, the State Bank of India and its associate banks, the 20 nationalised banks and private sector banks, both Indian and foreign.

The organised money market in India has a number of sub-markets such as the treasury bills market, the commercial bills market and the inter-bank call money market.

The Indian money market is not a single homogeneous market but is composed of several sub-markets, each one of which deals in a particular type of short term credit.

Call Money Market

One important sub-market of the Indian money market is the Call Money Market, which is the market for very short-term funds. This market is also known as money at call and short notice. This market has actually two segments, viz. (a) the call market or overnight market, and (b) short notice market. The rate at which funds are borrowed and lent in this market is called the call money rate.

Call money rates are market determined, i.e., by demand for and supply of short term funds. The public sector banks account for about 80 per cent of the demand (that is, borrowings) and foreign banks and Indian private sector banks account for the balance of 20 per cent of borrowings. Non-banking financial institutions such as IDBI, LIC, GIC, etc enter the call money market as lenders and supply up to 80 per cent of the short-term funds. The balance of 20 per cent of the funds is supplied by the banking system. While some banks operate both as lenders and borrowers, others are either only borrowers or only lenders in the call money market.
Chart 2: Indian money market

<table>
<thead>
<tr>
<th>Organised Banking Sector</th>
<th>Unorganised Banking Sector</th>
<th>Sub-markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call money market</td>
<td>Bill market</td>
<td>364 days bill market</td>
</tr>
<tr>
<td>Commercial Bills</td>
<td>Treasury Bills (90 days)</td>
<td>Certificates of Deposits (CDs)</td>
</tr>
<tr>
<td>Commercial paper (Cps)</td>
<td></td>
<td>Commercial paper (Cps)</td>
</tr>
</tbody>
</table>

**Bill Market in India**

The bill market or the discount market is the most important part of the money market where short term-bills—normally up to 90 days—are bought and sold. The bill market is further subdivided into commercial bill market and treasury bill market.

The market for commercial bills has not become popular in India, unlike in London and other international money markets where commercial bills are extensively bought and sold (i.e., discounted).

The 91-day treasury bills are the most common way the Government of India raises funds for the short period. Some years ago, the government had introduced the 182-day treasury bills which were later converted into 364-day treasury bills. In 1997, the Government introduced the 14-day intermediate treasury bills.

**The Indian Money Market and RBI**

Over all these institutions of the Indian money market, there is RBI which, as the ultimate authority and controller of monetary and banking conditions in the country, is the accepted leader of the money market. RBI has the responsibility to guide and control the institutions of the money market and towards this end, it is armed with both qualitative and quantitative weapons of credit control.

2. **Features and Defects of the Indian Money Market**

   (i) **Existence of Unorganised Money Market**: The major defect of the Indian money market has always been the existence of the indigenous bankers who do not distinguish between short-term and long-term finance, nor even between the purposes of finance (as the Hundi does not indicate whether it is a genuine trade bill or a financial paper). Many attempts were made by RBI to bring the indigenous bankers under its direct influence and control. During the last 50 years, there is a whole lot of non-banking financial companies (NBFCs) who raise funds from the general public but who are generally outside the control and supervision of RBI. To the extent these bankers/NBFCs are outside the organised money market, RBI’s control over the money market is limited.

   (ii) **Absence of Integration**: An important defect of the Indian money market at one time was the division of the money market into several segments or sections, loosely connected to each other. Each section of the money market—such as the State Bank of India and its subsidiaries, the foreign exchange banks, the urban co-operative banks and indigenous bankers—limited itself broadly to a particular class of business and remained independent in its own sphere. Moreover, the relations between the various sections of the money market were not cordial. This is so even now between Indian banks and foreign banks. With the passage of the Banking Regulation, Act, 1949, all banks have been treated equally by RBI as regards licensing, opening of branches, share capital, the type of loans and advances to be given, etc. Accordingly, the Indian money market is getting closely integrated.

   RBI is now fully effective in the organised sectors of the money market, as it is in a position to control the operations of the organised sector. Both commercial and; cooperative banks
have come to rely increasingly on the rediscounting and borrowing facilities provided by RBI, especially during the busy season. Besides, RBI guides and directs them in their lending policies and regularly; inspects the books of scheduled commercial banks.

However, RBI’s control and monitoring of the commercial banking sector are not always fully effective. This is clear from Harshad Mehta scam in 1992 and Ketan Parekh scam in 2001.

(iii) **Diversity in Money Rates of Interest**: Another defect of the Indian money market related to the existence of too many rates of interest—the borrowing rate of the government, the deposit and lending rates of commercial banks, deposit and lending rates of cooperative banks, the lending rates of DFI’s, etc. The basic reason for the existence of so many rates of interest simultaneously is the immobility of funds from one section of the money market to another. In recent years the different money rates of interest have been promptly adjusting to changes in the bank rate.

(iv) **Seasonal Stringency of Money**: A very striking characteristic of the Indian money market was the seasonal monetary stringency and high rates of interest during a part of the year—during the busy season from November to June when funds were required to move the crops from the villages and up country districts to the cities and ports. During the off-season (July to October) or slack season, banks have large surplus funds and the rates of interest reach low levels. There are even now wide fluctuations in the money rates of interest from one period of the year to another. RBI attempts to lessen the seasonal fluctuations in the money market by pumping money into the money market during busy seasons and withdrawing the same during off seasons. This feature of the money market—seasonal stringency or glut—is present even now.

(v) **Absence of the Bill Market**: Another defect of the Indian money market was the absence of a commercial bill market or a discount market for short term commercial bills. A well organised bill market is necessary for linking up the various credit agencies ultimately and effectively to RBI. No bill market was developed in India due to certain historical accidents—such as the practice of banks keeping a large amount of cash for liquidity purposes, preference of industry and trade for borrowing rather than rediscounting bills, the improper drafting of the bazar hundi, the system of cash credit as the main form of borrowing from banks, the preference of cash transactions in certain lines of activity, the absence of warehousing facilities for storing agricultural produce and the high stamp duty on usance bills.

The commercial bill market has not been fully developed, even though there is general appreciation of the need for such a market:

(a) Commercial bills, along with bank credit, are an important source of finance for business and industrial houses;

(b) Banks with surplus funds like to buy (that is, discount) commercial or trade bills, as they yield a good rate of return; they are for a short period (90 days) and they are self-liquidating, that is, the drawee of the bills would pay off at the time of maturity.

(c) Commercial bills are useful to RBI for its open market operations. In times of monetary shortage, RBI can buy bills from the market and pump in additional funds and help create more bank credit. In times of glut of funds in the money market, RBI can sell bills in the market and absorb the surplus funds with banks.

RBI introduced a bill market scheme known as the New Bill Market Scheme in 1970 under which RBI rediscounted genuine trade bills. The Scheme was not developed fully as was anticipated. Basically, the development of a bill market would depend on whether industry and trade are prepared to recover their receivables through the medium of bills and whether the buyers of goods are prepared to bind themselves to the discipline of the bills, that is, pay the amount due on the specified date mentioned on the bills.

Development of a bill market is extremely useful to the country from the point of expanding credit as well as from the point of monetary policy.
Highly volatile call money market: As explained earlier, the call money market is the market for short term funds, known as “money at call and short notice”. The rate at which funds are borrowed in this market is called the call money rate. Call money rates are market-determined, i.e., by demand for and supply of short term funds. Despite all the efforts made by RBI to moderate the fluctuations in the call money rates, the latter have continued to be highly volatile. The highest and lowest quotations of the call money rate during the past few years were as follows:

Table 1: Inter Bank Call Money Rates in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Highest</th>
<th>Lowest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-91</td>
<td>70.00</td>
<td>4.00</td>
</tr>
<tr>
<td>1993-94</td>
<td>17.00</td>
<td>0.25</td>
</tr>
<tr>
<td>2000-01</td>
<td>14.00</td>
<td>4.00</td>
</tr>
<tr>
<td>2007-08</td>
<td>55.0</td>
<td>6.15</td>
</tr>
<tr>
<td>2008-09</td>
<td>23.0</td>
<td>1.0</td>
</tr>
<tr>
<td>2009-10</td>
<td>9.00</td>
<td>0.50</td>
</tr>
</tbody>
</table>


The high rates reflect the huge demand for short term funds by the banking system specially to meet the RBI requirement of minimum CRR. RBI attempts to moderate the fluctuations through supporting the market with additional funds - by buying securities from the market when there is short supply of funds and high call rates and absorbing the additional funds when the call market has large surplus funds - through selling securities. In general, however, RBI has only a limited success in its efforts to check the high volatility of the call money market in India in the past.

Absence of a well-organised banking system: Another major defect of the Indian money market was the absence of a well-organised banking system. Branch banking was extremely slow before bank nationalisation in 1969. There are only a few big banks in the country and they have concentrated themselves in large towns and mandi towns. The extreme sluggishness in the movement of funds and the existence of different interest rates in different regions are the result of slow branch banking in the country.

Since Independence and specially after the passing of the Banking Regulation Act, 1949, the Reserve Bank has been exercising considerable influence and control over the banking system. Through mergers and amalgamations the number of banks has been considerably reduced. Besides, branch banking has been speeded up since 1969.

In spite of the various steps taken to strengthen the Indian banking system, RBI has failed to really control and guide it. In this connection, we may refer to three instances.

(a) Harshad Mehta engineered securities scam in 1992 by using funds from well-known banks, both foreign and Indians.

(b) Ketan Parekh used the funds of urban co-operative banks and those of Bank of India and UTI to manipulate the prices of shares of a few companies in which he was interested. This led to a virtual crash of the Indian stock market as a whole in 2001; and

(c) C.M. Agarwal of Home Trade used the funds of urban cooperative banks and of pension funds to play in the gilt-edged market in March 2002.

The failure of RBI to prevent these abuses of the banking system proves clearly that the Indian banking system is still far from being a well organised and efficiently supervised system:
(viii) **Availability of credit instruments**: Till 1985-86, the Indian money market did not have adequate short-term paper instruments. Apart from the call money market, there was only the treasury bill market. At the same time, there were no specialist dealers and brokers dealing in different segments of the Indian money market and in different kinds of paper instruments.

### 20.2 Monetary Policy

Monetary policy, in general, refers to the action taken by the monetary authorities to control and regulate the demand for and supply of money with a given purpose. Monetary policy is one of the two most powerful tools of economic control and management of the economy. The various aspects of monetary policy have been discussed in a theoretical framework in different previous chapters, especially the effect of different kinds of monetary policies on the aggregate production, interest rate and the price level. In this section, we will discuss monetary policy in detail. The major aspects of the monetary policy discussed include:

(i) Meaning and scope of monetary policy;
(ii) Monetary policy instruments and target variables;
(iii) Role of monetary policy in achieving macroeconomic goals;
(iv) Effectiveness and limitations of monetary policy; and
(v) Monetary vs Fiscal policy controversy.

These aspects of monetary policy are discussed in theoretical tone with brief inputs from India’s monetary policy.

#### Meaning and Scope of Monetary Policy

The economists have defined monetary policy in different words. For example, Harry Johnson defines monetary policy as a “policy employing central bank’s control of the supply of money as an instrument of achieving the objectives of general economic policy.” G. K. Shaw defines monetary policy as “any conscious action undertaken by the monetary authorities to change the quantity, availability or cost ... of money.”

Monetary policy is essentially a programme of action undertaken by the monetary authorities, generally the central bank, to control and regulate the supply of money with the public and the flow of credit with a view to achieving predetermined macroeconomic goals.

The objectives of monetary policy are generally the objectives of macroeconomic policy, viz. growth, employment, stability of price and foreign exchange, and the balance-of-payment equilibrium. The macroeconomic goals are determined on the basis of the economic needs of the country. Once macroeconomic goals are determined, then the monetary authorities will have to decide accordingly whether to increase or decrease the supply of money. Then the next step is to make the choice of instruments that can effectively increase or decrease money supply with the public.

#### Scope of Monetary Policy

The scope of monetary policy spans the entire area of economic transactions involving money and the macroeconomic variables that monetary authorities can influence and alter by using the monetary policy instruments. The scope of monetary policy depends, by and large, on two factors:

(i) the level of monetization of the economy, and
(ii) the level of development of the Financial market.

In a fully monetized economy, the scope of monetary policy encompasses the entire economic activities. In such an economy, all economic transactions are carried out with money as a medium of exchange. In that case, monetary policy works by changing the supply of and demand for money and the general price level. It is therefore capable of affecting all economic activities—production, consumption, savings and investment. The monetary policy can influence all major macro variables—GDP, savings and investment, employment, the general price level, foreign trade and balance of payments.
Another factor that matters in determining the scope and the effectiveness of the monetary policy is how developed and integrated is the capital-market. Some instruments of monetary control (bank rate and cash reserve ratio) work through the capital market. Where capital market is fairly developed, monetary policy affects the level of economic activities through the changes in the capital market. It works faster and more effectively in an economy with a fully developed financial market. Incidentally, a developed financial market is one which has the following features: (i) there exists a large number of financially strong commercial banks, financial institutions, credit organizations, and short-term bill market, (ii) a major part of financial transactions are routed through the banks and the capital markets, (iii) the working of capital sub-markets is inter-linked and interdependent, and (iv) commodity sector is highly sensitive to the changes in the capital market. Monetary weapons like bank rate and cash reserves ratio work through the commercial banks. Therefore, for the monetary policy to have a widespread impact on the economy, other capital sub-markets must have a strong financial link with the commercial banks.

Instruments of Monetary Policy

The instruments of monetary policy refer to the economic variables that the central bank is empowered to change at its discretion with a view to controlling and regulating the supply of and demand for money and the availability of credit. The instruments are also called ‘weapons of monetary control.’ Samuelson and Nordhaus call them ‘The Nuts and Bolts of Monetary Policy.’ Monetary instruments are generally classified under two categories:

(i) General credit control measures, and
(ii) Selective credit controls.

The General Credit Control Measures

The general measures of monetary control include the monetary weapons that aim at controlling the aggregate supply of and demand for money, given the objective of the monetary policy. As noted in the previous chapter, general credit control measures, also called as traditional measures of monetary control are following.

(i) Bank rate
(ii) Cash Reserve Ratio (CRR), and
(iii) Open Market Operations

In addition to these traditional measure of monetary control, Reserve Bank of India has introduced an extra-ordinary measure, named Statutory Liquidity Ratio (SLR) to facilitate the government borrowing from the banks. We describe here briefly the meaning and working of these monetary measures. While discussing these aspects, brief references will be made to the RBI approach. A detailed discussion follows in the forthcoming section.

(i) Bank Rate Policy: ‘Bank rate’ is the rate at which central bank lends money to the commercial bank and rediscounts the bills of exchange presented by the commercial banks. The RBI Act 1935 defines ‘bank rate’ as the “standard rate at which (the bank) is prepared to buy or rediscount bills of exchange or other commercial papers eligible for purchase under this Act.” The RBI rediscounts only the government securities, approved bills and the ‘first class bills of exchange.’ When commercial banks are faced with shortage of cash reserves, they approach the central bank to borrow money for short term or get their bills of exchange rediscounted. It is a general method of borrowing by the commercial banks from the central bank, the ‘lender of the last resort’. The central bank rediscounts the bills presented by the commercial bank at a discount rate. This rate is traditionally called bank rate. Thus, bank rate is the rate which central bank charges on the loans and advances made to the commercial banks.

The central bank can change this rate—increase or decrease—depending on whether it wants to expand or reduce the flow of credit from the commercial banks. When it wants to increase the credit creation capacity of the commercial banks, it reduces the discount rate and when it decides to decrease the credit creation capacity of the banks, it increases the bank rate. This policy action by the central bank is called the bank rate policy.
The bank rate policy was first adopted by the Bank of England in 1839. It was the only and the most widely used weapon of credit control until the open market operation, first used in 1922 in the US, emerged as a more powerful instrument of monetary control. In India, the RBI has been using the bank rate as monetary control measure, though infrequently, since its inception in 1935. The bank rate remained constant at 3% till 1950. In 1951, it was increased to 3.5% and to 4% in 1956, and remained in force till 1962. In the subsequent year, the bank rate was increased more frequently and it was raised to 12% in 1992 and was maintained till 1997. With growing need for credit facility with economy growing at 5-6% and also decreasing rate of inflation, the bank rate was reduced gradually to 6.5% in 2001, which was lowest since 1973. The bank rate was reduced to 6 percent in 2004 which was maintained till 2006-07. However, bank rate was raised to 7.5 percent in 2008 with the objective of controlling inflation which was as high as 11.5 percent in July 2008.

The **working of the bank rate policy** is simple. When the central bank changes the bank rate, commercial banks change their own discount rate accordingly with a difference of generally one percent. The change in the bank rate affects the flow of bank credit to the public. For example, if the central bank wants to reduce the money supply by reducing the flow of credit from the banks to the public, it will raise the bank rate. Raising bank rate reduces credit flow in three ways.

**One**, a rise in the bank rate (virtually the interest rate) reduces the net worth of the government bonds (the Treasury Bills and Promissory Notes) against which commercial banks borrow funds from the central bank. This reduces commercial banks’ capacity to borrow from the central bank. As a result, commercial banks find it difficult to maintain a high cash reserve. This reduces the credit creation capacity of the commercial banks. So the flow of credit is reduced.

**Two**, when the central bank raises its bank rate, commercial banks raise their discount rate too. Rise in the discount rate raises the cost of bank credit which discourages business firms to get their bill of exchange discounted. Also, a rise in the bank rate pushes the market interest rate structure up. If demand for credit is interest-elastic, the demand for funds decreases too.

**Three**, bankers’ lending rate is quickly adjusted to deposit rates. Therefore, a rise in the bank rate causes a rise in the deposit rate. Therefore, savings flow into the banks in the form of time deposits and money with public decreases. This is called **deposit mobilization effect**.

Exactly reverse happens when the central bank cuts down the bank rate.

### Selective Credit Control Measures

The **general credit control methods** of monetary controls affect, when they are effective, the entire credit market in the same direction. They lead either to expansion or to contraction of the total credit as intended by the monetary authorities. Besides, their impact on all the sectors of the economy is uniform. This may not be always desirable or intended by the policy-makers. The monetary authorities are often required to take policy actions for (a) rationing of credit for different sectors of the economy, (b) diverting the flow of credit from the non-priority sectors to the priority sectors, and (c) curbing speculative tendency based on the availability of bank credit. These objectives of credit control are not well served by the quantitative measures of credit control. The monetary authorities resort, therefore, to **qualitative or selective credit controls**. Some of the common selective credit controls are discussed below.

**(i) Credit Rationing** : When there is a shortage of institutional credit available for the business sector, the highly developed and financially strong sectors and industries tend to capture the lion’s share in the total institutional credit. As a result, priority sectors and essential industries are starved of necessary funds, while the bank credit goes to the non-priority sectors. In order to curb this tendency, the central bank resorts to credit rationing measures. Generally, two measures are adopted: (a) imposition of upper limits on the credit available to well-developed industries and large-scale firms, and (b) charging a higher or progressive interest rate on bank loans beyond a certain limit. This is done with a view to making bank credit available to the essential and priority sectors.
(ii) **Change in Lending Margins**: The banks advance money more often than not against the mortgage of some asset or property—land, building, jewelry, share, stock of goods, and so on. The banks provide loans only up to a certain percentage of the value of the mortgaged property. The gap between the value of the mortgaged property and amount advanced is called ‘lending margin.’ For example, if value of stock is Rs. 10 million and the amount advanced is only Rs. 6 million, the lending margin is 40 percent. Since 1956, the RBI has made an extensive use of this method with a view to preventing speculation in scarce agricultural products, namely, food grains, cotton, oil seeds, vegetable oil (vanaspati), sugar, Khandsari and gur, and cotton textiles and yarns. The speculative rise in the price of scarce agricultural products had taken place because high price of such goods could secure higher loans through mortgaging. Higher loans provided more funds to buy and accumulate the stock of the scarce agricultural commodities to be mortgaged for further borrowing. This created a kind of artificial scarcity which pushed the prices further up. By increasing the lending margin, the RBI could curb this kind of speculative borrowing. This method is no more used widely in India.

**Notes**

Did you know? The central bank is empowered to increase the lending margin with a view to decreasing the bank credit. This method was used for the first time by the RBI in 1949 with the objective of controlling speculative activity in the stock market.

(iii) **Moral Suasion**: The moral suasion is a method of persuading and convincing the commercial banks to advance credit in accordance with the directives of the central bank in overall economic interest of the country. This method is adopted in addition to quantitative and other qualitative methods, particularly when effectiveness of other methods is doubtful. Besides, quantitative and qualitative methods are, in fact, ineffective in the underdeveloped countries with underdeveloped money and credit markets. Under this method, the central bank writes letter to and hold meetings with the banks on money and credit matters.

(iv) **Direct Controls**: When all other methods prove ineffective, the monetary authorities resort to direct control measures with clear directive to carry out their lending activity in a specified manner. There are, however, rare instances of use of direct control measures.

**The Limitations and Effectiveness of Monetary Policy**

The effectiveness of monetary policy, in practice, depends on the following factors, known as the limiting factors of monetary policy.

(i) **The Time Lag**: The first and the most important limitation in effective working of monetary policy is the time lag, i.e., the time taken in chalking out the policy action, its implementation and response time. The time lag is divided into two parts: (i) ‘inside lag’ or preparatory lag, and (ii) ‘outside lag’ or response lag. The **inside lag** refers to the time lost in (a) identifying the nature of the problem, (b) identifying the sources of the problem, (c) assessing the magnitude of the problem, (d) choice of appropriate policy action, and (d) implementation of policy actions. The **outside lag** refers to the time taken by the households and the firms to react to the policy action taken by the monetary authorities.

If preparatory and operational lags are long, not only the nature and the magnitude of the problem may change rendering the policy ineffective, but also it may worsen the situation. It has been the experience of many countries including developed ones that both inside and outside lags have been unduly long, making monetary policy less effective than expected. The time lag of monetary policy, particularly its response lag, has been found to be generally longer than the time lag of fiscal policy. However, the issue of time lag in case of monetary policy is controversial. Friedman and Schwartz find an average time lag of 18 months between peaks (troughs) of money supply and peaks (troughs) of business cycle. Their findings have been questioned by the findings of other economists. However, ‘the evidence from several sources suggest that the lag associated with monetary policy is long and possibly variable’ and ‘the consensus seems to be that the lag is about 12 to 16 months long.’

(ii) **Problems in Forecasting**: The formulation of an appropriate monetary policy requires that the magnitude of the problem—recession or inflation—is correctly assessed, as it helps in determining the dose of the medicine. What is more important is to forecast the effects of
monetary actions. In spite of advances made in the forecasting techniques, reliable forecasting of macroeconomic variables remains an enigma. In this regard, it is interesting to quote Stephen McNees.

“How can forecasters go wrong? They may not predict’ disturbances (the Gulf War, for example); they may misread the current state of the economy and hence base their forecasts on a wrong picture of the present situation; and they may misjudge the timings and the vigour of the government’s monetary and fiscal responses to booms or recessions. The fact is that forecasting has not reached perfection, particularly at major turning points in the economy,”....”

Because of the low degree of reliability of forecasting, prediction of the outcome of a policy action and hence formulation of an appropriate monetary policy has remained an extremely difficult task. This point has been adequately evidenced by unpredictability of recession in the US economy and inflation in India, both in 2008. An inappropriate policy based on guesswork is bound to be unsatisfactorily effective. There is a large empirical evidence to support this point of view.

(iii) Growth of Non-banking Financial Intermediaries: Apart from the above limitations of the monetary policy, the structural change in the financial market due to rapid growth of non-banking financial intermediaries has reduced the scope of effectiveness of this policy. The proliferation of non-banking financial intermediaries including industrial financial corporations, industrial development banks, mutual saving funds, insurance companies, chits and funds, and so on, have reduced the share of the commercial banks in the total credit. Although financial intermediaries cannot create credit through the process of credit multiplier, their huge share in the financial operations reduces the effectiveness of monetary policy which works through the banking finance.

(iv) Underdeveloped Money and Capital Markets: In addition to the factors discussed above, the effectiveness of monetary policy in the less developed countries is reduced considerably because of the underdeveloped character of their money and capital markets. The money and capital markets are fragmented, while effective working of monetary policy requires a fairly developed money market and that money market and the sub-markets of the capital market are interactive and work interdependently.

Monetary Policy of India

We have discussed above the meaning, scope, instruments and working mechanism of monetary policy in a general framework and have also used examples of monetary measures adopted by the RBI. In this section, we take a look at India’s monetary policy including its objectives, instruments and targets.

The RBI, the central monetary authority of India, has been changing the objectives and their priorities of its monetary policy from time to time in accordance with the needs of the country. The RBI has, in fact, managed monetary affairs of the country, especially the control, regulation and allocation of bank credit as and when required by the needs of the country. However, RBI’s monetary policy has not been found to be working very effectively. The reason was that the RBI was severely constrained by the growing deficit financing by the Government of India. A comprehensive knowledge of India’s recent monetary policy and its working can be had from the Chakravarty Committee Report, the writings of C. Rangarajan, a former Governor of RBI and Rakesh Mohan, Deputy Governor of RBI.

Monetary Policy Objectives

As already noted above, monetary policy being an organ of the overall economic policy, its objectives could not be different from or be in conflict with the overall objectives of other economic policies of the country. The three major objectives of India’s overall economic policy have been (i) economic growth, (ii) social justice, i.e., an equitable distribution of income, and (iii) price stability. Of these objectives, growth and price stability have been in general the objectives of India’s monetary policy. Of these two objectives, however, Chakravarty Committee considered promoting price stability as ‘the dominant objective of the monetary policy’ (Report). For, in the Committee’s opinion, “It is price
stability which provides the appropriate environment under which growth can occur and social justice can be ensured”. “The case for price stability as the dominant objective of monetary policy began to assume importance in the early 1990s”.... In essence [however], monetary policy aims to maintain a judicious balance between price stability and economic growth”.

However, macroeconomic conditions of the country – especially the financial structure of the country, demand for and supply of money and the nature of monetary management needs of the country – have been changing over time. Therefore, the objectives of monetary policy and instruments of monetary control and management issues have also been changing, though price stabilization remained the central theme of India’s monetary policy. In simple words, with changing economic conditions of the country, the RBI has been changing monetary policy objectives, and it has been using a combination of monetary policy instruments to achieve its targets. We discuss here briefly the objectives of monetary policy and instruments adopted by the RBI to achieve its objective.

**Monetary Measures**

The RBI has been using various monetary measures from time to time including some non-traditional measures for price stabilization and other monetary policy objectives. We give here a brief description of the measures adopted by the RBI, and also their effectiveness.

1. **Bank Rate**: The bank rate has been one of the important instruments used by the RBI to control inflation, whenever required. As mentioned above, the bank rate remained unchanged at 3 percent during 1935-1950. Since 1951, however, bank rate has been frequently changed — mostly increased — as shown in Table 2. As can be seen in Table 2, the RBI was using bank rate infrequently as a weapon of monetary control till mid-1990s with the purpose of mitigating mounting inflationary pressure in the country. After mid-1990s, however, inflation rate declined with rise in the growth rate of the economy, due mainly to economic reforms. As a result, the RBI started reducing bank rate from the year 1997 which continued till May 2008. However, the RBI started enhancing the bank rate and raised it to 7.5 percent in July 2008 due to rate of inflation crossing double digit. However, due to fall in the inflation rate in late 2008, the bank rate was cut down to 6 percent in January 2009. This rate is likely to be maintained in fiscal year 2008-09.

<table>
<thead>
<tr>
<th>Year</th>
<th>Bank Rate (%)</th>
<th>Month and Year</th>
<th>Bank Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1935</td>
<td>3.0</td>
<td>April 1997</td>
<td>11.0</td>
</tr>
<tr>
<td>1951</td>
<td>3.5</td>
<td>June 1997</td>
<td>10.0</td>
</tr>
<tr>
<td>1957</td>
<td>4.0</td>
<td>October 1997</td>
<td>9.0</td>
</tr>
<tr>
<td>1963</td>
<td>4.5</td>
<td>October 1999</td>
<td>8.0</td>
</tr>
<tr>
<td>1964</td>
<td>5.0</td>
<td>April 2000</td>
<td>7.0</td>
</tr>
<tr>
<td>1965</td>
<td>6.0</td>
<td>October 2001</td>
<td>6.5</td>
</tr>
<tr>
<td>1975</td>
<td>9.0</td>
<td>April 2003</td>
<td>6.0</td>
</tr>
<tr>
<td>1981</td>
<td>10.0</td>
<td>April 2004</td>
<td>6.0</td>
</tr>
<tr>
<td>1991</td>
<td>11.0</td>
<td>March 2005</td>
<td>6.0</td>
</tr>
<tr>
<td>1992</td>
<td>12.0</td>
<td>June 2008</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July 2008</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>August 2008</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>January 2009</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**Source**: CMIE, *Basic Statistics Relating to the Indian Economy* — August 1993 and various issues of *Economic Surveys*, MQF, GOI.
As regards the effectiveness of bank rate as an instrument of monetary control, India’s experience, and also that of other countries, shows that the bank rate has not proved to be an effective method of controlling money supply. The reason is that banks do not depend on the RBI greatly for their financial requirements. Besides, even if commercial banks borrow from the RBI, their total borrowing accounts for a small proportion of the total credit created by the commercial banks, especially when there are other sources of credit.

2. **Cash Reserve Ratio (CRR)**: The CRR is another traditional monetary tool that RBI has been using to control inflation in the country, and also to restrain credit flow to the business sector. Recall that CRR refers to the percentage of net demand and time liabilities (NDTL) which commercial banks are required to maintain in the form of ‘cash reserves’. The NDTL are essentially the net demand and time deposits. The cash reserves are practically divided under two heads: (i) ‘required reserves (RR)’, and (ii) ‘excess reserve’. The **required reserve** is the cash reserve that commercial banks are statutorily required to maintain with the RBI. Incidentally, this is a non-traditional method. The RBI was empowered in 1956 to impose the ‘statutory cash reserve ratio’ between 3 percent and 15 percent of bank’s demand and time deposits. The *required reserve* is calculated fortnightly (on the second Friday of the month) on the basis of average daily deposits. The *excess reserve* is the cash reserve which banks maintain as ‘cash in hand’ with the purpose of meeting the currency demand by the depositors. The excess reserves are determined generally by the bank’s own experience regarding the ‘currency drain’.

As regards the use of the CRR method as monetary control, till 1973, the RBI used this method only once in 1960. However, As shown in Table 3, since 1973, the RBI has been using CRR quite frequently as a major instrument of controlling the excess supply of money. The RBI raised the statutory CRR from 3 percent fixed in 1935 to 5 percent in 1960 and raised it further frequently. As a result, the bank rate had gone up to 15 percent in July 1989. This rate was maintained till 1994. But, since 1995, the CRR has been regularly reduced by the RBI until January 2006, as shown below. However, due to inflationary pressure in the economy, the RBI began to raise the CRR and raised it 8.75% in July 2008. With inflation rate declining, the RBI cut down the CRR to 5 percent in June 2009.

### Table 3: Changes Made in CRR

<table>
<thead>
<tr>
<th>Month and Year</th>
<th>CRR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994-95</td>
<td>15.00</td>
</tr>
<tr>
<td>November 1995</td>
<td>14.50</td>
</tr>
<tr>
<td>December 1995</td>
<td>14.00</td>
</tr>
<tr>
<td>May 1996</td>
<td>13.00</td>
</tr>
<tr>
<td>July 1996</td>
<td>12.00</td>
</tr>
<tr>
<td>January 1997</td>
<td>10.00</td>
</tr>
<tr>
<td>February 2001</td>
<td>7.50</td>
</tr>
<tr>
<td>March 2001</td>
<td>7.00</td>
</tr>
<tr>
<td>October 2001</td>
<td>6.50</td>
</tr>
<tr>
<td>October 2002</td>
<td>6.25</td>
</tr>
<tr>
<td>June 2003</td>
<td>4.50</td>
</tr>
<tr>
<td>March 2005 to Jan. 2006</td>
<td>5.00</td>
</tr>
<tr>
<td>April 2007</td>
<td>6.50</td>
</tr>
<tr>
<td>July 2008</td>
<td>8.75</td>
</tr>
</tbody>
</table>

3. **Statutory Liquidity Ratio (SLR)**: In addition to CRR, the RBI was empowered to impose ‘statutory cash reserve ratio’ (SLR) to control and regulate the credit creation by the banks for the private sector and the availability of finance to the government. Under the SLR scheme, the
commercial banks are required by statute to maintain a certain percentage of their total daily demand and time deposits in the form of liquid assets. Liquid assets, as specified by the RBI, include (i) excess reserves, (ii) unencumbered government securities, e.g., bonds of IDBI, NABARD, Development banks, cooperative debentures, debentures of port trusts, etc., and (iii) current account balance with other banks. The method of determining the SLR can be specified as follows.

\[ SLR = \frac{ER + GS + CB}{DD + TD} \]

where \( ER = \) excess reserves, \( GS = \) Government (unencumbered) securities, \( CB = \) current account balance with other banks, \( DD = \) demand deposits, and \( TD = \) time deposits.

The basic purpose of using SLR was to prevent the commercial banks from going for liquidating their assets when CRR was raised to control money supply. When CRR was raised, what commercial banks used to do was to convert their liquid assets into cash to replenish the fall in their funds due to the rise in the CRR and maintained their credit creation ability. This made monetary policy ineffective. The SLR, as a tool of monetary control, works in two ways: (i) it provides an alternative to the borrowing of the government from the RBI, and (ii) it affects banks’ freedom of buying and selling the government bonds. In both ways, it affects the money supply, depending on whether the RBI wants to control or enhance the money supply. When the intention is to increase money supply, the RBI reduces the SLR and when it wants to reduce the money supply with the public, it increases the SLR.

The SLR was first imposed in 1949, and was fixed at 20 percent, and remained unchanged till August 1964. In September 1964, the SLR was raised to 25 percent and was maintained at the same level till September 1970. Since then, the SLR has been raised quite frequently as shown below. The SLR was raised in September 1990 to 38.5 percent — very close to the prescribed upper limit of 40 percent. The SLR, as a tool of monetary control, has, in fact, been used as a monetary-fiscal tool. The deficit financing method — a fiscal measure — led to rapid increase in money supply which continued to build inflationary pressure in the economy. The RBI now used the SLR for controlling the short-term money supply. The use of SLR restricted the flow of funds from the banks to the private sector. Since 1992, however, the SLR has been gradually reduced. It was reduced to 25 percent in April 1992, mainly because the rate of inflation had declined to around 5 percent in the early 1990s. The SLR continues to be maintained at 25 percent.

<table>
<thead>
<tr>
<th>Year</th>
<th>SLR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>25.0</td>
</tr>
<tr>
<td>1972</td>
<td>30.0</td>
</tr>
<tr>
<td>1973</td>
<td>32.0</td>
</tr>
<tr>
<td>1974</td>
<td>33.0</td>
</tr>
<tr>
<td>1978</td>
<td>34.0</td>
</tr>
<tr>
<td>1990</td>
<td>34.5</td>
</tr>
<tr>
<td>1992</td>
<td>25.0</td>
</tr>
<tr>
<td>2009</td>
<td>25.0</td>
</tr>
</tbody>
</table>

4. **Open Market Operations (OMO):** In developed countries like the USA and the UK, open market operation is considered to be a very powerful and efficient tool of monetary management. But in India, the open market operation has not been until recently a successful instrument of monetary management for the following reasons.

(i) In India, the security market, especially the Treasury bill market, is not yet well developed and fully organized, and the Government securities market is almost non-existent; and

(ii) The government bonds were earlier not very popular because of low rate of return. The rates were much lower than the market rate of interest.
Notes

It is for these reasons that open market operation was not used until the mid 1980s to control money supply, nor was this tool effective when used. In fact, open market operation was not used during the 1970s and the first half of the 1980s. The open market operation failed not only in India but also in other developing economies. In a nutshell, open market operation did not prove to be a very successful tool of monetary control. However, some important changes were made in India on the recommendations of the Chakravarty Committee (1985). The interest rate on Government securities was raised during the late 1980s and scheduled commercial banks were granted freedom to determine their own prime lending rates. These two factors made open market operation a fairly effective tool to control short-term credit.

After the economic reforms of 1991–92, OMO was assigned a greater role in monetary management. “Since the onset of reforms, the Reserve Bank reactivated open market operations (OMO) as an instrument of monetary management.... Active use of OMO for mitigating inflationary pressures was undertaken during 1993-1995 in the wake of unprecedented capital flows.”

5. The Repo Rate: A New Monetary Tool Till the late 1980s, the RBI had been using the traditional methods of monetary control. However, as mentioned above, on the recommendations of the Chakravarty Committee (1985), some important changes were made in the monetary policy. However, some major changes were introduced in the monetary policy only after the foreign exchange crisis of 1990 and subsequent economic reforms. But the major problem that the RBI continued to face was to control and regulate the high rise in money supply. The high rise in money supply throughout was mainly due to monetization of the government’s deficit financing. It was in 1991 that the World Bank and the IMF — the World Bodies that bailed India out of the foreign exchange crisis — exerted pressure on the government to make certain major economic reforms including monetary reforms. Some major monetary reforms and some new tools of monetary management were introduced including the repo rate. We describe here briefly a new monetary tool that is often used by the RBI, i.e., Repurchase Operation Rate — the repo rate.

In April 1997, the RBI introduced a new system, called Repurchase operation rate (abbreviated as repo rate), to manage the short-run liquidity of the banking system. As mentioned above, under the SLR system, the commercial banks are required to invest a certain percentage of their demand and time deposits in government securities. This system blocks the bank money with the RBI, often causing liquidity problem. The repo system provides a solution to this problem of liquidity. Under the repo system, the RBI buys securities back from the banks and, thereby provides funds to the banks. It is a form of lending money to the banks for a short period 1—14 days. The rate of interest at which the RBI lends money to the bank is the repo rate. In contrast, there is reverse repo rate. The reverse repo rate is the rate at which the banks can buy the securities or deposit money with the RBI.

The operational rule of the repo rate is quite simple. When the central bank aims at increasing liquidity or money supply, it buys back the securities at a low repo rate. This increase the funds with commercial banks which can be used to create credit. On the other hand, when the objective is to control the money supply, the RBI uses the reverse repo rate and increases the repo rate. In June 1998, the repo rate was fixed at 5 percent. However, due to anticipated increase in liquidity via Resurgent India bonds and East Asian crisis, the repo rate was raised to 8 percent in August 1998. But it was later reduced gradually to 4.5 percent in 2004, to 5 percent on April 28, 2005, and to 6.25 percent on October 26, 2006. However, due to mounting inflationary pressure in the economy, repo rate was increased to 7.25 percent m 2006-07. Along with the changes made in the repo rate, the reverse repo rate was also simultaneously raised. In 2008, the Indian economy was facing a 13-year high rate of inflation which was touching 12 percent. With the objective of controlling inflation, the RBI kept increasing the repo rate. On July 29, 2008, the RBI raised the repo rate from 8.5 percent in the previous week to 9 percent.

Evaluation of India’s Monetary Policy

At the end of the discussion, the question that arises about the monetary measures undertaken by the RBI is: Has the monetary policy of India been successful? This question takes us to the evaluation of
monetary policy. Monetary policy, or any policy for that matter, has to be evaluated by examining whether its objectives have been achieved over time. As mentioned above, on the recommendation of the Chakravarty Committee, the RBI had adopted ‘price stability’, i.e., controlling inflation, as the ‘dominant objective of the monetary policy’, while at the same time, maintaining an adequate liquidity in the economy. The question arises here is: Price stability at what rate of inflation? This question arises because some inflation is inevitable in a growing economy like India. It is, perhaps, in view of this fact that the Chakravarty Committee had recommendation price stability at 4 percent rate of inflation. Even other economists have suggested, on empirical basis, that a 3-5 percent annual inflation is desirable for a developing economy.

Examined against the price stability objective, India’s monetary policy appears to be only partially successful. Instead of looking at annual variation in the inflation rate, let us look at decennial rate of inflation to examine the effectiveness of monetary policy.

In India, inflationary pressure started building up during the 1960s, due to the Chinese war in 1962, the Pakistan war in 1965, and near-famine conditions in 1965-66. As a result, inflationary pressure started mounting from 1962-63, and inflation rate shot up to 13.9% in 1966-67. The decennial average rate of the 1960s was worked out at 6.4 percent.

The things were much worse in the 1970s. The inflation rate during the 1970s was much higher — the highest rate during the period was 25.2 percent in 1974-75. This has been the highest rate of inflation in India so far. The decennial average inflation rate was 9 percent, due mainly, to the failure of the kharif crop and rise in oil prices. Incidentally, these aspects fall outside the scope of monetary controls.

During the 1980s, things improved marginally. The decennial rate of inflation declined from 9 percent in the 1970s to 8 percent in the 1980s, with the highest inflation rate of 18.2 percent in 1980-81. However, there was an upsurge of inflationary pressure during the first five years of 1990s. The average rate of inflation during the period from 1990-91 to 1995-96 was worked out at 10.6 percent. Thereafter, however, the inflation rate declined considerably. The inflation rate varied between 3.4 percent in 2002-03 and 6.4 percent in 2004-05. The annual average rate of inflation during the period from 1995-96 to 2006-07 works out to be 5 percent. This was quite close to the economically and socially desirable rate of inflation.

If one compares the high rate of inflation (varying between 6% and 10%), one would conclude that during the entire period from 1960-61 to 1995-96, i.e., during a period of 35 years, the monetary policy was unsuccessful in achieving its objectives. Although inflation rate was quite within the desirable limit 4-5% during the period from 1995-96 to 2006-07, it can hardly be attributed to the monetary policy. The lower rate of inflation was mainly due to high growth rate — 7-9 percent. The only point that goes in favour of the monetary policy is the fact that things might be much worse in the absence of monetary controls adopted by the RBI. What is alarming is the fact that, in spite of all monetary measures, inflation rate shot up to about 12 percent — to be precise, 11.98 percent — in June-July 2008. However, had RBI not adopted a monetary policy with prime objective of price stabilization, inflation rate could have been much higher.

It may be added at the end that inflation rate has been within the desirable limit (5%) during the period from 1995-96 to 2006-07, which can be attributed to the monetary policy. It may be argued that the lower rate of inflation was mainly due to high growth rate. But then maintaining a reasonably high growth rate was also the second most important objective of the monetary policy. It may be this be concluded that monetary policy of India has been only fairly successful.

Self-Assessment
1. Choose the correct option:

   (i) For implementing a comprehensive Khadi Reform Programme, a financial aid of $ 1 million over a period of three years has recently been tied up with?
   (a) International Monetary Fund   (b) International Development Agency
   (c) Asian Development Bank       (d) International Finance Corporation
Notes

(ii) The measure of the degree of association between the values of two random variables is called?
(a) Correlation  (b) Association
(c) Regression     (d) Covariance

(iii) In any set of numbers, the geometric mean exists only when all numbers are?
(a) Positive  (b) Negative
(c) Zero      (d) Positive, zero or negative

(iv) Through open market operations, the Federal Reserve buys and sells government securities to influence the supply of bank reserves. When the Fed wants to increase reserves, it does what?
(a) Sells securities  (b) Nothing
(c) Buys securities

(v) Which of these is NOT a monetary policy tool?
(a) Reserve requirements  (b) Open market operations
(c) Balance accounts   (d) Discount rate

(vi) Federal Reserve Board of Governors members serve .......... terms to help insulate them from political influence.
(a) 7 year  (b) Lifetime
(c) 25 year  (d) 14 year

(vii) Monetary policy refers to what the Federal Reserve does to influence the amount of .......... and .......... in the U.S. economy.
(a) Taxes and revenue  (b) Currency and gold reserves
(c) Interest and debt   (d) Money and credit

20.3 Summary

• In a broad sense, finance refers to funds or monetary resources needed by individuals, business houses and the Government. Individuals and households require funds essentially for meeting their current requirements or day-to-day expenses or for buying capital goods (commonly known as investment).

• The financial system of India refers to the system of borrowing and lending of funds or the demand for and the supply of funds of all individuals, institutions, companies and of the Government. Commonly, the financial system is classified into:

• The Indian financial system performs a crucial role in economic development of India through saving investment process, also known as capital formation. It is for this reason that the financial system is sometimes called the financial market.

• The Indian financial system which refers to the borrowing and lending of funds or to the demand for and supply of funds, consists of two parts, viz., the Indian Money market and the Indian Capital market.

• The Indian capital market is the market for long-term capital; it refers to all the facilities and institutional arrangements for borrowing and lending “term funds” — medium-term and long-term funds. The demand for long-term money capital comes predominantly from private and public manufacturing industries, trading and transport units, etc.

• A money market is not a market for money but it is a market for “near money”; or it is the market for lending and borrowing of short-term funds. It is the market where the short-term surplus investible funds of banks and other financial institutions are demanded by borrowers comprising individuals companies and the Government.

• One important sub-market of the Indian money market is the Call Money Market, which is the market for very short-term funds.
• An evaluation of the various characteristics and defects of the Indian money market which we have described above will show clearly that the Indian money market is relatively undeveloped and cannot be compared with such advanced money markets as the London and New York money markets.

• While describing the characteristics of the Indian money market, we pointed out to the important steps taken by RBI to correct some of those defects. For example, RBI has considerably reduced the differences which existed between the different sections of the money market.

• Monetary policy, in general, refers to the action taken by the monetary authorities to control and regulate the demand for and supply of money with a given purpose. Monetary policy is one of the two most powerful tools of economic control and management of the economy.

• The scope of monetary policy spans the entire area of economic transactions involving money and the macroeconomic variables that monetary authorities can influence and alter by using the monetary policy instruments.

• The instruments of monetary policy refer to the economic variables that the central bank is empowered to change at its discretion with a view to controlling and regulating the supply of and demand for money and the availability of credit.

• We have discussed above the instruments, ‘the nuts and bolts’ of monetary policy. In this section, we discuss how changes made in the monetary policy instruments affect the monetary and real sectors and the economy as a whole.

• We have discussed above the meaning, scope, instruments and working mechanism of monetary policy in a general framework and have also used examples of monetary measures adopted by the RBI. In this section, we take a look at India’s monetary policy including its objectives, instruments and targets.

20.4 Key-Words

1. Urban infrastructure : Infrastructure is the basic physical and organizational structures needed for the operation of a society or enterprise, or the services.

2. Monopoly : The exclusive possession, control, or exercise of something: "men don’t have a monopoly on unrequited love".

20.5 Review Questions

1. What do you mean by the term Indian Capital Market? Discuss.
2. Discuss the features of the Indian Money.
4. Write a short note on the Monetary Policy of India.
5. What are the objectives of Monetary Policy?

Answers: Self-Assessment

1. (i) (c)  (ii) (a)  (iii) (a)  (iv) (b)  (v) (b)  
   (vi) (d)  (vii) (d)

20.6 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Unit 21: Capital Market in India and Working of SEBI

CONTENTS
Objective
Introduction
21.1 Capital Market in India
21.2 Development Financial Institutions (DFIs)
21.3 Non-Banking Finance Companies (NBFCs)
21.4 Stock Exchange in India
21.5 SEBI and Capital Market Reforms
21.6 Summary
21.7 Key-Words
21.8 Review Questions
21.9 Further Readings

Objectives

After reading this Unit students will be able to:
• Explain the Capital Market in India and Working of SEBI.
• Discuss the Working of SEBI.

Introduction

The capital market is a market for long-term debt as well as equity shares as compared to the money market which is a market for short-term debt. This market issues debt and equity instruments to the public as well as placed privately to a select group of investors. This market includes stock exchanges also where most of these instruments are traded. Here, we have broadly two segments: primary market and secondary market. The market for new issues of these securities is called the primary market. After the securities are issued, they are traded in the secondary market. We have three main categories of participants in the capital market. While the issuers are the borrowers or deficit savers, who issue securities to raise funds, the investors, who are surplus savers, deploy their savings by subscribing to these securities. The third category is the intermediaries who are the agents who match the needs of users and suppliers of funds for a commission. In the primary market, the corporate sector as well as the Central Government and State Governments issue securities. The secondary market provides the much needed liquidity and information on asset prices for the investor. In India, the regulatory authority that regulates both the primary and secondary markets is the Securities and Exchange Board of India (SEBI). SEBI protects the interests of the investors in securities and to promote the development of the securities market. In India, stock market has a history of over 200 years but the first organised stock exchange was set up in Bombay in 1875.

21.1 Capital Market in India

Capital market is the market for long-term funds, just as the money market is the market for short-term funds. It refers to all the facilities and the institutional arrangements for borrowing and lending term funds (medium-term and long-term funds). It does not deal in capital goods but is concerned with the raising of money capital for purposes of investment.

The demand for long-term money capital comes predominantly from private sector manufacturing industries and agriculture and from the Government largely for the purpose of economic development.
As the Central and State Governments are investing not only on economic overheads as transport, irrigation and power development but also on basic industries and sometimes even consumer goods industries, they require substantial sums from the capital market.

Chart 1: Capital market in India

- Government Securities (Gill-edged market)
  - New Issues Market
    - IFCI
    - Merchant Banks
  - Old Issues Market [Stock Exchange]
    - ICICI
    - Mutual Funds
    - SFCs
    - Leasing Companies
    - IDBI
    - Venture Capital Companies
    - IIBI
    - UTI
    - Other
  - Development Financial Institutions (DFIs)
    - Financial Intermediaries
      - LIC
      - GIC
      - Provident Funds
      - Special institutions set up since Independence, viz., IFCI, ICICI, IDBI, UTI, etc. - generally called development financial institutions (DFIs) — aim at supplying long-term capital to the private sector.
      - There are financial intermediaries in the capital market, such as merchant bankers, mutual funds, leasing companies etc. which help in mobilising savings and supplying funds to investors.

The supply of funds for the capital market comes largely from individual savers, corporate savings, banks, insurance companies, specialised financing agencies and the government. Among institutions, we may refer to the following:

(a) Commercial banks are important investors, but are largely interested in government securities and, to a small extent, debentures of companies;

(b) LIC and GIC are of growing importance in the Indian capital market, though their major interest is still in government securities;

(c) Provident funds constitute a major medium of savings but their investments too are mostly in government securities;

(d) Special institutions set up since Independence, viz., IFCI, ICICI, IDBI, UTI, etc. — generally called development financial institutions (DFIs) — aim at supplying long-term capital to the private sector.

(e) There are financial intermediaries in the capital market, such as merchant bankers, mutual funds, leasing companies etc. which help in mobilising savings and supplying funds to investors.

The Government Securities (G-SEC) Market VS Industrial Securities Market

The Government Securities Market, also known as the gilt-edged market differs from the industrial securities market in many important respects:

(i) There are no uncertainties regarding yield, management, additions to capital, etc, and, therefore, there is much less speculation in this market.

(ii) The investors in government securities are predominantly institutions which are often compelled by law to invest a certain portion of their funds in these securities. The commercial banks, the LIC, the GIC and the provident funds come under this category; these are often referred to as the captive market for Government securities.

(iii) The average value of the transactions in the Government securities market is very much larger than in the case of shares and debentures of companies. Often a single transaction in government securities may run into several crores or even hundreds of crores of rupees.

(iv) The Government securities market, unlike the market for shares, is not an auction market but an “over the counter” market. The average size of the transactions is so large that each transaction has to be negotiated.

(v) LIC, GIC and the provident funds rarely sell more than a small percentage of their holdings, but commercial banks may engage in considerable buying and selling, depending upon their deposit resources on the one hand and their policies on the other.
Finally, RBI plays a dominant role in the gilt-edged market through its open-market operations which are governed by the twin objectives of monetary stability and of ensuring the success of government’s borrowing programme.

Besides gilt edged market and variable yield industrial securities, the Indian capital market includes development financial institutions and financial Intermediaries.

**Indian Capital Market before Independence**

The Indian capital market was not properly developed before Independence. The growth of the industrial securities market was very much hampered since there were very few companies and the number of securities traded in the stock exchanges was still smaller. Most of the British enterprises in India looked to the London capital market for funds than to the Indian capital market. A large part of the capital market consisted of the gilt-edged market for government and semi-government securities.

Before independence, individual investors were very few and limited to the affluent classes in the urban and rural areas. Besides, the Government had placed many restrictions on the institutional savers such as banks and insurance companies which necessarily had to prefer government securities and only to a small extent to the fixed interest-bearing debentures.

Specialised issue houses, so common in Western countries were not developed in India, and the managing agency system, a peculiar institution in pre-Independence India, performed to some extent the functions of promotion, issue and underwriting of new capital issues. Finally, there were no specialised intermediaries and agencies to mobilise the savings of the public and channelise them to investment. Such institutions were started only after Independence.

**The Indian Capital Market since Independence**

Since Independence and particularly after 1951, the Indian capital market has been broadening significantly and the volume of saving and investment has shown steady improvement. All types of encouragement and tax relief exist in the country to promote savings. Besides, many steps have been taken to protect the interests of investors. A very important indicator of the growth of the capital market is the growth of joint stock companies or corporate enterprises. In 1951 there were about 28,500 companies both public limited and private limited companies with a paid-up capital of ₹ 775 crores; in 2000, there were over 70,000 companies with a paid-up capital of over ₹ 200,000 crores.

The rate of growth of investment has been phenomenal in recent years, in keeping with the accelerated tempo of development of the Indian economy under the impetus of the Five Year Plans. The growth of public borrowings for investment purposes is also an indicator of the growth of the capital market. By 2003-04, there were 250 non-departmental public enterprises of the Central Government alone with capital investment of ₹ 150,000 crores.

In the last two decades alone, the capital market in India has witnessed rapid growth. The volume of capital market transactions has increased sharply; its functioning has been diversified. New financial instruments, such as fully and partly paid convertible debentures (FCDs and PCDs) 364-day treasury bills, commercial paper, CDs have appeared. These reflect the growing diversification and a measure of sophistication of the financial services in the capital and money markets. The volume of new issues was ₹ 31,800 crores during 1994-95, though it declined in the subsequent years (₹ 12,900 crores during 1996-97). The number of shareholders runs into several millions indicating the growth of the cult of equity.

**21.2 Development Financial Institutions (DFIs)**

Soon after Independence, the Government of India set up a series of financial institutions to be of special help to the private sector industries in the matter of finance. IFCI was the first of these institutions (1948). It was followed by SFCs (set up by State Governments with cooperation of RBI and other banks) to provide long term finance to small and medium industrial units. ICICI (1955), IDBI (1964) and UTI (1964) followed soon after. LIC was set up in 1956 to mobilise individual savings and to invest part of the savings in the capital market. Many more specialised financial institutions were set up and are commonly called public sector financial institutions. These institutions have
been doing very useful work in subscribing to the shares and debentures of new and old companies, in giving loan assistance, in underwriting new issues, and so on. At present, many of them have become powerful shareholders in many prominent companies. LIC and UTI mobilise resources from the public and place them at the disposal of the capital market. On the other hand, the development financial institutions (DFIs) are engaged in providing funds to the private sector enterprises. The structure of public sector financial institutions is shown in chart 3 next page.

1. **Industrial Finance Corporation of India (IFCI)**

The Government of India set up the Industrial Finance Corporation of India (IFCI) in July 1948 under a special Act. The Industrial Development Bank of India, scheduled banks, insurance companies, investment trusts and co-operative banks are the shareholders of IFCI. The Union Government had guaranteed the repayment of capital and the payment of a minimum annual dividend. The Corporation was authorised to issue bonds and debentures in the open market, to borrow foreign currency at from the World Bank and other organisations, accept deposits from the public and also borrow from the Reserve Bank.

The IFCI performed three important functions:

(a) It granted loans and advances to industrial concerns and subscribed to the debentures floated by them.

(b) It guaranteed loans raised by the industrial concerns in the capital market.

(c) It underwrote the issue of stocks, shares, bonds and debentures of industrial concerns. It also subscribed to the equity and preference shares and debentures of companies.

IFCI was authorised to give long and medium-term finance to companies engaged in manufacturing, mining, shipping and generation and distribution of electricity.

IFCI had played a pioneering role in financing private sector investment and had a big hand in the rapid industrial development of India. The loans sanctioned by IFCI increased from Rs 210 crores in 1980-81 to Rs 2,430 crores in 1990-91 and 1,860 crores in 2000-01. This was partly due to the mobilization of large financial resources by IFCI (in fact, by all public sector financial institutions such as IDBI and ICICI) and also due to the rapid development of industries during this period. But the same time, IFCI was plagued by the accumulation of non-paying assets (NPAs) mainly because it was forced to lend to wrong parties. Accordingly IFCI is no more a development financing institution.

2. **State Financial Corporations**

The scope of assistance provided by the Industrial Finance Corporation of India was limited since it dealt with large public limited companies and co-operative societies which were engaged in manufacturing, mining, shipping and generation and distribution of electricity. But there were both small-scale and medium-sized industries which require financial assistance and for this purpose the State Governments desired to set up State Financial Corporations. The Government of India passed the State Financial Corporations Act in 1951 and made it applicable to all the states. The authorised capital of a State Financial Corporation is fixed by the State Government within the minimum and maximum limits of Rs 50 lakhs and Rs 5 crores and is divided into shares of equal value which are taken by the respective State Governments, the Reserve Bank of India, scheduled banks, co-operative banks, other financial institutions such as insurance companies and investment trusts and private parties. The shares are guaranteed by the State Government. A State Financial Corporation can augment its funds through issue and sale of bonds and debentures.

All types of industrial concerns can get accommodation from State Financial Corporations. A State Financial Corporation can:

(a) guarantee loans raised by industrial concerns which are repayable within a period not exceeding 20 years and which are floated in the public market; (b) underwrite the issue of stocks, shares, bonds or debentures of industrial concerns; (c) grant loans or advances to industrial concerns repayable within a period not exceeding 20 years; and (d) subscribe to debentures floated by industrial concerns.
Industrial Credit and Investment Corporation of India (ICICI)

The Industrial Credit and Investment Corporation was sponsored by a mission from the World Bank for the purpose of developing small and medium industries in the private sector. It was registered in January, 1955 under the Indian Companies Act. The aim of I.C.I.C.I. was to stimulate the promotion of new industries, to assist the expansion and modernisation of existing industries and to furnish technical and managerial aid so as to increase production and afford employment opportunities. The Corporation granted:

(a) long-term or medium-term loans, both rupee loans and foreign currency loans;
(b) participated in equity capital and in debentures and underwrote new issues of shares and debentures,
(c) guaranteed loans from other private investment sources.
(d) provided financial services such as deferred credit, leasing credit, instalment sale, asset credit and venture capital.

There was a remarkably significant increase in financial assistance by ICICI in recent years:

Table 1: Financial Assistance by ICICI

<table>
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<th>1980-81</th>
<th>1990-91</th>
<th>2000-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans sanctioned</td>
<td>310</td>
<td>3,740</td>
<td>55,820</td>
</tr>
<tr>
<td>Disbursements</td>
<td>180</td>
<td>1,970</td>
<td>31,660</td>
</tr>
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</table>

In a matter of 20 years, loans between, 1981 and 2001 sanctioned by ICICI had increased from ₹310 crores to over ₹55,820 crores and loans disbursed had increased from ₹180 crores to ₹31,660 crores.

The Corporation assisted industrial concerns with loans and guarantees either in rupees or in any foreign currency. Besides, it underwrote ordinary and preference shares and debentures and it also subscribed directly to ordinary and preference shares issues. A significant function performed by the Corporation was the provision of foreign currency loans and advances to enable Indian Industrial concerns to secure essential capital goods from foreign countries.

ICICI commenced leasing operation in 1983. It provided leasing assistance for computerisation, modernisation/replacement, equipment of energy conservation, export orientation, pollution control etc. The industries helped under leasing included textiles, engineering, chemicals, fertilizers, cement, sugar, etc.

ICICI had set up a Merchant Banking Division which was working very creditably. ICICI had joined with J.P. Morgan & Co. to set up ICICI Securities and Finance Co. Ltd. (I-SEC) to offer services in areas relating to issue management and credit syndication services. ICICI has also set up ICICI Asset Management Co Ltd. in June 1993 to operate the schemes of the ICICI Mutual Fund— this was later called Prudential ICICI Mutual Fund. Yet another subsidiary called ICICI Investors Services Ltd (March 1994) and ICICI Banking Corporation Ltd. (January 1994) were also set up.

Apart from these, ICICI had promoted the following companies and institutions in recent years:

(a) Credit Rating Information Services of India Ltd. (CRISIL), set up by ICICI in association with Unit Trust of India (UTI) to provide credit rating services to the corporate sector;
(b) Technology Development and Information Company of India Ltd. (TDICI), promoted by ICICI, to finance the transfer and upgradation of technology and provide technology information - this was christened as ICICI Venture Funds in 1988.
(c) The SCICI Ltd. (formerly Shipping Credit and Investment Company of India Ltd.) specialised in giving loans for acquisition of ships. It had diversified its operations to cover all sectors of the economy with focus on sectors of special significance to exports and infrastructure. As a
result of this diversification of activities, SCICI Ltd. lent to a variety of industries, besides shipping and fishing industries such as automobiles and its ancillaries, chemicals and petrochemicals, electronics, information technology, power generation, and distribution, steel and steel products, other metals, textiles and food processing. However, shipping and fishery industries continued to be the priority for the SCICI Ltd. Till the end of March 1996, SCICI had sanctioned a total assistance of ₹12,750 crores. SCICI was, however, merged with ICICI in April 1996.

Of all the development financial institutions set up by the Indian Government after Independence, ICICI registered the most spectacular success. In fact, the financial assistance sanctioned and disbursed by ICICI rose tremendously during the 1990’s and had exceeded the assistance extended by IDBI which was the apex institution in the field of development finance.

Another pioneering event was the reverse merger of ICICI with its subsidiary the ICICI Bank in March 2002 and the creation of the first universal bank in India. With this merger, ICICI was no more a development financial institution.

The Industrial Development Bank of India (IDBI)

The Industrial Development Bank of India was set up since 1947 to provide long-term finance to industry. IFCI, the SFCs, ICICI, and the Refinance Corporation of India were functioning for several years provided direct plans, subscribed to shares and bonds and to guarantee loans and deferred payments. The volume of long-term finance provided by these institutions were substantial and were steadily increasing too, but it was found inadequate to meet the requirements of new and growing industrial enterprises. On the one side, the needs of rapid industrialisation necessitated the establishment of a new institution with large financial resources. On the other side, there was the need to co-ordinate the activities of all agencies which are concerned with the provision of finance for industrial development. It was to fulfil this two-fold objective that the Government establish the Industrial Development Bank of India (IDBI) which formally came into existence in July 1964.

IDBI was a wholly-owned subsidiary of the Reserve Bank of India till 1976. The general direction, management and superintendence of IDBI was vested in a Board of Directors, which was the same as the Central Board of Directors of the Reserve Bank of India. The Governor and Deputy Governor of the Reserve Bank were the Chairman and Vice-Chairman of IDBI. The Finance Ministry of the Government of India, however, wanted direct control and direction of IDBI. Accordingly, IDBI was delinked from the Reserve Bank of India and was taken over by the Finance Ministry in 1976.

Functions of IDBI

The main function of IDBI, as its name suggests was to finance industrial enterprises such as manufacturing, mining, processing, shipping, and other transport industries and hotel industry. IDBI granted direct assistance by way of project loans, underwriting of and direct subscription to industrial securities, soft loans, technical refund loans and equipment finance loans. The Bank guaranteed loans raised by industrial concerns in the open market from scheduled banks, the State cooperative banks, I.F.C.I. and other “notified” financial institutions. It could assist industrial concerns in an indirect manner also, that is, through other institutions. It could refinance term loans to industrial concerns given by the IFCI, the State Financial Corporations, scheduled banks or State co-operative banks.

The Industrial Development Bank of India Act, 1964, had provided for the creation of a special fund known as the Development Assistance Fund. This Fund was used to assist those industrial concerns which were not able to secure finances in the normal course because of low rate of return.

IDBI became the most important institution assisting industrial units till 2000-01.

IDBFs loan sanctions had increased from ₹1,280 crores in 1980-81 to ₹26,830 crores in 2000-01; and during the same period disbursements had increased from ₹1,010 crores to ₹17,480 crores — also reflecting the rapid industrial and business growth of the country on the one side and the corresponding increase in the mobilisation of resources by the development financial institutions on the other. In this, IDBI had a leading role as it was the apex financial institution of the country.
### Table 2: Financial Assistance by IDBI

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</thead>
<tbody>
<tr>
<td>Loans sanctioned</td>
<td>1,280</td>
<td>6,250</td>
<td>26,830</td>
<td>5,470</td>
</tr>
<tr>
<td>Disbursements</td>
<td>1,010</td>
<td>4,460</td>
<td>17,480</td>
<td>4,820</td>
</tr>
</tbody>
</table>

As in the case of other public sector term lending institutions, IDBI registered steep decline in loans sanctioned and disbursed since 2000-01. For instance, the financial assistance sanctioned by IDBI declined from ₹ 26,830 crores in 2000-01 to ₹ 5,470 crores in 2004-05. Disbursements by IDBI declined from ₹ 17,480 crores to ₹ 4,820 crores between 2001 and 2005. This was mainly due to heavy accumulation of NPAs and paucity of funds.

IDBI, like other public development financial institutions, managed by the Finance Ministry of the Union Government, collapsed and was merged with IDBI Bank in October 2004. With that, the chapter on development banks was closed for ever.

### Small Industries Development Bank of India (SIDBI)

The Small Industries Development Bank of India (SIDBI) was set up by the Government of India under a special Act of the Parliament in April 1990 as a wholly-owned subsidiary of IDBI. SIDBI took over the outstanding portfolio of IDBI relating to the small scale sector worth over ₹ 4,000 crores. SIDBI is now the principal financial institution for promotion, financing and development of small scale industries in the country. It coordinates the functions of existing institutions engaged in similar activities. Accordingly, SIDBI has taken over the responsibility of administering Small Industries Development Fund and National Equity Fund which were earlier administered by IDBI.

While extending financial assistance to the small units scattered all over the country, SIDBI makes use of the existing banking and financial institutions, such as the commercial banks, cooperative banks and RRBs, SFCs, and SIDCs which have a vast network of branches 111 over the country. As many as 870 institutions are eligible for assistance from SIDBI.

The important functions of SIDBI are as follows:

(i) SIDBI refinances loans and advances extended by the primary lending institutions to small scale industrial units, and also provides resources support to them;
(ii) SIDBI discounts and rediscounts bills arising from sale of machinery to or manufactured by industrial units in the small scale sector;
(iii) SIDBI extends soft loan assistance under National Equity Fund, Mahila Udyam Nidhi and Mahila Vikas Nidhi and seed capital schemes through specified lending agencies;
(iv) SIDBI grants direct assistance as well as refinance loans extended by primary lending institutions for financing export of products manufactured by Industrial concerns in the small scale sector;
(v) SIDBI provides services like leasing, factoring etc. to industrial concerns in the small scale sector;
(vi) SIDBI extends financial support to State Small Industries Development Corporations for providing scarce raw materials to and marketing the end-products of industrial units in the small scale sector; and
(vii) SIDBI provides financial support to National Small Industries Corporation for providing, leasing, hire-purchase and marketing support to industrial units in the small scale sector.

### Industrial Investment Bank of India (IIBI)

At one time, several industrial units, particularly in the Eastern Region, were in severe difficulties and were on the verge of closing down. Lack of adequate demand, managerial imprudence, labour troubles, shortage of raw materials and import restrictions were some of the reasons responsible for this state of affairs. In view of their importance to the national economy and the needs of employment of a large work force, these units had to be assisted financially. The Government of India set up the
Industrial Reconstruction Corporation of India (IRCI) in April 1971 under the Indian Companies Act mainly to look after special problems of ‘sick’ units and provide assistance for their speedy reconstruction and rehabilitation, if necessary, by undertaking the management of the units and developing infrastructure facilities like those of transport, marketing etc.

Since its inception in 1971 till the end of March 1984, IRCI had sanctioned reconstruction assistance of ₹ 266 crores to 242 sick or closed industrial units and had disbursed ₹ 185 crores. Textiles, engineering, mining and foundry industries were assisted by IRCI which had paid special attention to the units located in the classified backward areas as also to those in the small scale sector. The Corporation had also charged concessional rate of interest.

In 1984 the Finance Ministry of the Government of India renamed the Industrial Reconstruction Corporation of India (IRCI) as Industrial Reconstruction Bank of India (IRBI) and made it as the principal all-India credit and reconstruction agency for industrial revival, rehabilitation and promotion of sick units. In 1995, the Finance Ministry again renamed IRBI as Industrial Investment Bank of India (IIBI). Despite all these changes in names, the financial assistance rendered by this institution was meagre and could be rendered by other development financial institutions : IIBI is currently being wound up.

Investment Institutions : The Unit Trust of India

The Unit-Trust of India was formally established in February 1964. The initial capital of the Trust was ₹ 5 crores which was subscribed fully by the Reserve Bank of India, the Life Insurance Corporation, the State Bank of India and the scheduled banks and other financial institutions. The general superintendence, direction and management of the affairs and business of the Trust is vested in a Board of Trustees.

The primary objective of the Unit Trust was two-fold : (a) stimulate and pool the savings of the middle and low-income groups, and (b) to enable them to share the benefits and prosperity of the rapidly growing industrialisation in the country.

These two-fold objectives were to be achieved through a three-fold approach : (i) by selling Units of the Trust among as many investors as possible in different parts of the country; (ii) by investing the sale proceeds of the Units in industrial and corporate securities; and (iii) by paying dividends to those who have bought the units of the Trust.

The operations of the Trust picked up conspicuously almost from the very begining. The total number of unit holders registered with the Trust at one time exceeded 25 million with mobilised funds exceeding ₹ 73,000 crores (in June 2000).

The Trust had built up a portfolio of investments which was balanced between the fixed income-bearing securities and variable income-bearing securities—the main objective of the Trust was to maximise income consistent with safety of capital.

The Trust had invested in securities of about 300 sound concerns, which were on regular dividend paying basis. Barring investment in bonds of public corporations, the Trust funds were invested in financial, public utility and manufacturing enterprises.

Apart from subscribing to the shares and debentures of companies, UTI sanctioned loans to the corporate sector.

The commencement of sales of units by the Unit Trust from July 1964 was acclaimed as a landmark in the development of India’s capital market. In principle, the aim of the Unit Trust was praiseworthy since it sought to mobilise the community’ s savings for investment in trade and industry. The Trust, being a public sector enterprise, created confidence among the general public. Besides, it received a number of tax concessions from the Government. Not only the capital was safe but it was highly liquid in the sense that any Unit holder could return his/her Units and get back cash from the Trust.

The operation of the Unit Trust during the first three decades showed that the returns for unit holders were reasonable. On an average UTI paid annual dividend at 20 per cent. The response of investors especially of the small and medium income groups, to the Unit scheme was very encouraging and it seemed that the Unit Trust had met the genuine needs of a large number of investors by providing a
form of investment which was safe, which brought in steady income and which was liquid enough. “Two crore investors come to UTI with safety and income expectations”, stated the last CMD of UTI.

The whole edifice of UTI, however, crumbled in September-October 1998 when the prestigious Unit Scheme 1964 called US 64 came under serious trouble because of a serious depression in the Indian Stock market.

UTI finally collapsed during 2001-02. An institution built on the confidence and faith of crores of savers from lower and middle income groups was been callously ruined by scheming and petty politicians colluding with incompetent and corrupt bureaucrats on the one side and unscrupulous business houses and stock exchange brokers on the other. There were many reasons for the failure and collapse of UTI.

(a) UTI was forced—top officials of UTI and of the finance ministry were heavily bribed — to invest in the shares of scheming business houses and fly-by-night operators. These shares lost their value or, some cases, they became worthless pieces of paper. UTI was made to lose thousands of crores of rupees in this way.

(b) The management of UTI was again bribed heavily by leading business houses to extend loans to them or to their subsidiaries; these loans were not repaid and became NPAs.

(c) While the basic purpose of UTI was to mobilise the savings of the poor and the middle classes, the Finance Ministry used these funds it as an instrument to support and influence the stock exchange. The UTI funds were extensively borrowed by unscrupulous stock brokers — Ketan Parekh was one-to manipulate the stock exchange, often against the interests of UTI itself.

(d) Finally, the former Finance Minister, Mr. Yashwant Sinha and the Finance Ministry officials, killed public confidence in UTI through their wrong and misleading statements about the ownership and management of UTI. They allowed large corporate members to withdraw their investments in US-64 units at high prices, when they had the secret information that UTI was about to collapse.

The complete failure of UTI was yet another glaring example of the interference and mismanagement of financial institutions by ill-qualified and corrupt Finance Ministry officials of the Government of India.

LIC and GIC

Apart from the Unit Trust of India which mobilises the savings of the public to specifically invest in the industrial securities, there are two other, investment institutions in the country — the Life Insurance Corporation of India (LIC) and the General Insurance Corporation of India (GIC). These two institutions specially LIC collect large amounts of funds from the general public to provide insurance cover but they use part of their funds to give long term loans to the corporate sector or to acquire industrial securities (shares and debentures) from the market. Because of the large funds they are able to mobilise, these two institutions have become powerful operators in the stock exchange.

During 2006-07, LIC had disbursed term finance and other financial assistance amounting to ₹ 27,000 crores to the corporate sector.

DFIs and the Corporate Sector

It is useful to remember that the public sector financial institutions, specially IDBI, ICICI and IFCI sanctioned direct financial assistance to newly established companies to meet their block capital requirements. In the case of existing companies, direct financial assistance was made available on account of expansion of existing capacities, modernisation plans, etc.

Apart from the fact that there was considerable increase in the volume of loans sanctioned and the amount disbursed by the term-lending institutions, till 2000-01 there was a noticeable rising scale of financial assistance rendered by them to the small-scale industries, to projects in backward districts and to new/small entrepreneurs. For example, in case of projects located in backward districts, sanctions and disbursements by term-lending institutions had increased substantially in recent years.

The DFIs were set up and developed to meet specifically the requirements of industry for term finance and equity capital and foreign currency resources. They were expected to overcome the inadequately
developed state of the capital market and the traditional preference of the banking sector in India to meet only the working capital requirements of industry and trade. In the last four decades, the DFIs had largely succeeded in meeting their primary objective of providing funds for industrial investment. They had also tried to channel increasing flow of assistance to industrially less-developed and backward areas. Besides, they had attempted a wide range of promotional activities including:

(a) a major thrust towards entrepreneurship development programmes;
(b) identifying industrial promotion needs of deserving segments of the industrial sector and evolving measures for their growth; and
(c) providing avenues for commercialisation of indigenous resources.

Broadly, all-India development financial institutions looked after the needs of large industrial enterprises; and state level institutions (SFCs and SIDCs) were meeting the financial requirements of the small and medium sector enterprises in the respective areas of their jurisdiction.

DFIs accounted for a major share of corporate debt, with increasing reliance of the corporate sector on them, DFIs had representation in the boards of management and also had a say in internal management of companies.

DFIs had been increasing their share in the equity of the private corporate sector, through the use of the convertibility clause and through their underwriting commitments. Along with investment institutions (LIC, GIC and UTI) their equity holdings in most major companies were considerable. They could and often did influence mergers and acquisitions.

21.3 Non-Banking Finance Companies (NBFCs)

In recent years, non-banking finance companies variously called as “finance corporations”, “Loan Companies”, “Finance Companies”, etc., have mushroomed all over the country. These finance companies, with very little capital of their own — often less than ₹ 1 lakh — have been raising deposits from the public by offering attractive rates of interest and other incentives. They advance loans to wholesale and retail traders, small-scale industries and self-employed persons. Bulk of their loans are given to parties which do not either approach commercial banks or which are denied credit facilities by the latter. The finance companies give loans which are generally unsecured and the rate of interest charged by them may range anywhere between 24 to 36 per cent per annum. Besides giving loans and advances to the small sector, NBFCs, incorporated under the companies Act 1956, run chit funds, purchase and discount hundis, and have also taken up merchant banking, mutual funds, hire-purchase, leasing, etc.

Historically, after Independence, all-India financial institutions like IFCI, ICICI, IDBI and others played, a very important role in providing medium and long term credit to various sectors of the economy.

By the beginning of the 21st century, these financial institutions - called variously as public sector term lending financial institutions, development financial institutions, etc. - declined in importance and some of them disappeared (ICICI and IDBI) and some were wound up (IDBI). Some specialized lending and refinance institutions like Import Export Bank of India, National Housing Bank (NHB), NABARD, SIDBI and Tourism Finance Corporation of India have continued to grow in importance by generally providing refinance to banks and other financial companies. LIC is also a financial institution which deploys its assets largely in marketable securities. State Finance Corporations (SFCs) and State Industrial Development Corporation (SIDCs) and North Eastern Development Finance Corporation Ltd. (NEDFI) are notified public sector financial corporations. All these non-banking financial institutions are mostly government-owned and they have been providers of long-term project loans.

Other non-banking institutions include wide variety of intermediaries such as insurance companies, non-banking financial companies, primary dealers, capital market intermediaries such as mutual funds.

RBI itself accepts the attractiveness of NBFCs: “Simplified sanction procedures, orientation towards customers, attractive rates of return on deposits and flexibility and timelines in meeting the credit
needs of specified sectors (like equipment leasing and hire purchase) are some of the factors enhancing
the attractiveness of this sector.”

Essentially, these finance companies are banks, since they perform the basic twin functions of attracting
deposits from the public and making loans. RBI again argues: “... The rapid growth of NBFCs especially
in the nineties, has led to a gradual blurring of dividing lines between banks and NBFCs, with the
exception of the exclusive privilege that commercial banks exercise in the issuance of cheques.”

Since NBFCs are not regarded as banking companies, they did not come under the control of RBI,
there is no minimum liquidity ratio or cash ratio, no specific ratio between their owned funds and
deposits. That the depositors of these companies are subject to extreme insecurity is clear from the
fact that:
(a) bulk of their loans are unsecured and are given to very risky enterprises and hence their charging
high rates of interest;
(b) the loans, though given for short periods, can be and are renewed frequently and thus become
long-term loans;
(c) as there is no exchange of communication between different companies, it is possible for a
person or party to borrow from more than one finance company; and
(d) the deposits of the public with the finance companies are not protected by the Deposit Insurance
Corporation.

Chart 2 shows how RBI has classified the non-banking sector in the country under three categories,
viz.: non-banking financial companies (NBFCs), mutual benefit financial companies (MBFCs) and
miscellaneous non-banking companies (MNBCs). Properly speaking, only the first really qualifies to
be called NBFCs — namely, those receiving deposits from the public under any scheme and lending
in any manner. MBFCs and MNBCs are now regulated by the Department of Company Affairs,
Government of India and are not considered as NBFC.

| Chart 2: Types of Non-banking Financial Institutions (Regulated by RBI) |
|-------------------------------|-------------------------------------------------|
| **Institution** | **Principal Business** |
| I Non-banking Financial Company (NBFC) : | The principal business is receiving deposits from the public under any scheme and lending in any manner. |
| (a) Equipment Leasing Company* | Equipment leasing or financing of such activity. |
| (b) Hire Purchase Finance Company* | Hire purchase transactions or financing of such transactions. |
| (c) Investment Company | Buying and selling of securities. These include Primary Dealers (PD who deal in underwriting and market making for government securities. |
| (d) Loan Company | Making loans or advances for an activity other than its own. |
| (e) Residuary Non-banking Company (RNBC) | Receives deposits from the public under any scheme but it does not belong to any of the categories mentioned above (under NBFC). |
| II. Mutual Benefit Financial Company (MBFC) : | Any company which is notified by the Central Government as a Nidhi company under Section 620A of the Companies Act, 1956. |
| III. Miscellaneous Non-banking Company (MNBC) : | Manages conducts and supervises chit funds. |

* Under a new classification adopted by RBI in 2006, these are called “Asset Finance Companies (AFCs)
In a sense, NBFC resembles a banking company since it receives deposits from the public and lends the same to ready parties. It is not, however, a bank because it is not incorporated as a bank and is not governed by the provisions of the Banking Regulation Act, 1949—hence it is called a non-banking financial company.

The RBI has mentioned 5 kinds of NBFCs (see chart - 2 ). Of these, there are four clearly defined categories of NBFCs, viz. (a) Leasing Finance Companies, (b) Hire-Purchase Finance Companies, (c) Loan Finance Companies and (d) Investment Finance Companies. The RBI mentions one more NBFC - the fifth category which cannot be classified under any of the first four categories. Hence the RBI has called them Residuary Non-Banking Companies (RNBCs). According to the RBI, there are only four such companies registered under section 451 A of the RBI Act, 1934 (amended in 1997).

Legislative Control of NBFCs

NBFCs do not have any specific legislation governing them. Instead, they come under three different authorities :

(a) Being limited liability companies, NBFCs are governed by the Companies Act, 1956 which does not even contain the definition of a finance company. Application of general provisions of this Act, perforce, has invited avoidable violations by NBFCs.

(b) In the matter of deposits, NBFCs are governed by Non-banking Financial Companies (Reserve Bank) Directions, 1997.

(c) NBFCs which engaged in merchant banking and portfolio management services are governed by SEBI.

NBFCs have thus been working under a complex web of directives and guidelines formulated from time to time. Inevitably, some of the directives are viewed by NBFCs as being formulated in arbitrary manner, and at odds with practical realities. They have demanded separate legislation to guide and control them.

In May 1992, RBI constituted a working group under the chairmanship of Dr. A.C. Shah to conduct a comprehensive study of finance companies and recommend measures to facilitate their healthy growth. In its report submitted in September 1992, the Shah Working Group recommended specific regulations for companies with net owned funds of ₹ 50 lakhs and above and prescribe entry norms for new financial companies. It also prescribed capital adequacy standards, prudential norms for income recognition and provisions for bad and doubtful debts. RBI accepted the group’s recommendations and started implementing them in phases.

In the mean time, instead of accepting their industry’s demand for a separate and comprehensive law for NBFCs, the Government of India enacted the Reserve Bank of India (Amendment) Act, 1997 which confers wide ranging powers on RBI for controlling the functioning of non-banking financial companies.

Salient Features of RBI Amendment Act, 1997

The Act defines a non-banking financial company (NBFC) as a financial institution or as non-banking institution which has, as its principal business, the receiving of deposits under any scheme or arrangement and lending in any manner. Institutions carrying on agricultural or industrial activity as their principal business are excluded from the definition of NBFC.

RBI has taken a series of measures to enhance the regulatory and supervisory standards of the NBFCs and to bring them at par with commercial banks over a period of time. These include :

1. Secure a certificate of registration from RBI, the net owned funds (NoF) should be ₹ 2 crores (initially only ₹ 25 lakhs).
2. There is a quantum of public deposits which can be received by an NBFC, depending upon whether it is a loan and investment company or whether it is a leasing and hire-purchase company, and so on—fixed between 1.5 times to 4 times NoF.
3. NBFCs have to invest at least 5 per cent of their assets in unencumbered approved securities.
4. Every NBFC has to create a reserve fund and transfer at least 20 per cent of its net profit every year to the reserve fund.
5. Prudential norms are fixed for those NBFCs which are raising public deposits. For instance, such NBFCs should maintain Capital to Risks Asset Ratio (CRAR) comprising TIER I and II Capital:
   - 12% for leasing, hire-purchase finance companies.
   - 15% for loan and investment companies, and
   - 12% for RNBCs.
   Certain norms were prescribed for all NBFCs whether they hold or receive public deposits or not.

6. Under RBI regulations, RNBCs are required to invest not less than 80 per cent of aggregate liabilities with the depositors in Government securities, Government-guaranteed bonds, debentures, etc. RBI has reviewed these regulations.

7. All registered NBFCs should submit half yearly returns to RBI at the end of March and September every year. As non-submission of periodic returns to RBI was a common feature, RBI has now decided to impose penalties besides cancellation of certificates of registration and permission to receive deposits from the public.

The RBI is now entrusted with the following powers:
(a) specify from time to time a minimum percentage of investment for NBFCs in unencumbered “approved” securities;
(b) determine their policies and give directions to any or all NBFCs on capital adequacy, provisioning and other prudential norms, as also on the deployment of funds (similar to those applicable to banks);
(c) direct them on balance sheet, profit and loss accounts and disclosure of liabilities,
(d) levy fines and penalty on a NBFC for contravention and default, as also cancel its registration,
(e) prohibit an NBFC from accepting deposits and alienate its assets; and
(f) file a winding up petition for continued violation of the provisions of the Act and / or failure to comply with any direction or orders of the RBI.

Mutual Funds

In recent years, mutual funds are the most important among the newer capital market institutions. Several public sector banks and financial institutions have set up mutual funds on a tax-exempt basis, virtually on the same footing as Unit Trust of India (UTI). Their main function is to mobilise the saving of the general public and invest them in stock market securities. Accordingly, they attracted strong investor support and showed significant progress. There was even diversion of savings of the middle classes from banks to mutual funds. The Government threw the field open to the private sector and joint sector mutual funds.

Regulation of Mutual Funds by SEBI

SEBI has the authority to lay guidelines and supervise and regulate the working of mutual funds. The guidelines, issued by SEBI relate to advertisements and disclosures and reporting requirements. The investors have to be informed about the status of their investments in equity, debentures and government securities. SEBI has introduced a uniform set of regulations governing the mutual funds in the country, known as SEBI (Mutual Fund) Regulations, 1993, under which:
(a) mutual funds have to be formed as trusts and managed by a separate asset management company (AMC) and supervised by a board of trustees;
(b) the AMC must have a minimum net worth of ₹ 6 crores, of which the sponsors must contribute at least 40 per cent;
(c) SEBI should approve the offer documents of schemes of mutual funds;
(d) SEBI prescribes the minimum amounts to be raised by each scheme — a close-ended scheme should raise a minimum of ₹ 20 crores and open-ended scheme should raise a minimum of ₹ 50
crores. In case, the amount collected falls short by the prescribed minimum, the subscription amount must be refunded within a period of six weeks;

(e) the advertisement code prescribes norms for fair and truthful disclosure by the mutual funds in advertisements and publicity materials.

Growth of Mutual Funds

In the 1990s, MFs found it hard to attract investors. The competition for funds was hotting up from banks and the Government. With the Government offering interest rates of nearly 14 per cent for medium term securities — the Government of India proposed to offer 10-year paper on tap with a coupon rate of 14% — and banks pegging short term rates at 12 per cent, investors were focusing on debt instruments which were gaining popularity over equity. HDFC, leading housing finance company was offering 14% interest on fixed deposits; IDBI had decided on a 15.75% for a twin-bond issue.

Under these conditions, it was difficult for mutual funds to rival such high yields on debt instruments. They also found it hard to meet the high expectations of investors who were yet to break out of the get-rich-quick syndrome. Accordingly, the first wave of mutual funds failed.

The performance of mutual funds was not encouraging for many years. Investor confidence in mutual funds was low. This could be attributed partly to lack of confidence and partly to stock market conditions which had affected the perception of investors.

The revival of the MF market since 1995-96 was due to the entry of corporate majors—the Tatas, Birlas, Reliance and SBI. Many others followed with products designed for investor specific needs. They also offered improved liquidity, easy exit routes and regular income flows. All these changes coincided with the revival of the stock market. Sensex, for instance, crossed 6,000 mark in February 2000. Investors left the banking system and flocked to the mutual funds. This period of booming stock exchanges and mutual funds was, however, short lived.

After Ketan Parekh incident, the stock market crashed with sensex touching 2,600 (with 1974-75 = 100) during 2001-02. This led to a two-year period of recession in the MF market. In the mean time, the Unit Trust of India (UTI), the public sector mutual fund went through a crisis and had to be restructured. As a result, the share of the private sector MF companies increased considerably.

The overall assets under management (AUM) declined from 1,02,830 crores to ₹89,240 crores between April 2002 and 2003. but later rose rapidly to ₹3,26,290 crores by March, 2007. The Mutual Fund companies are now mobilising about ₹90,000 crores annually.

21.4 Stock Exchange in India

In a modern capitalist economy, almost all commodities, even the smallest, are produced on a large scale; and large-scale production implies large amounts of capital. The joint stock company or the corporate form of organisation is ideally suited to secure large amounts of capital from all those who have surplus funds and who are willing to take risks in investing in companies. It issues stocks and bonds and enables those with surplus funds to invest them profitably in either of them, according to their convenience and temperament. An investor who puts his savings in a company by buying its securities cannot get the amount back from the company directly. The only way the capital invested in stocks and shares of a joint stock company may be realised by its owner is through the sale of those stocks and shares to others. The stock market or exchange is a place where stocks and shares and other long-term commitments or investments are bought and sold. For the existence of the capitalist system of economy and for the smooth functioning of the corporate form of organisation, the stock exchange is, therefore, an essential institution.

History of Stock Exchanges in India

The first organised stock exchange in India was started in Bombay when the Native Share Stock Brokers’ Association known as the Bombay Stock Exchange (BSE) was formed by the brokers in Bombay. BSE was Asia’s oldest stock exchange. In 1894, the Ahmedabad Stock Exchange was started to facilitate dealings in the shares of textile mills there. The Calcutta Stock Exchange was started in
Notes

1908 to provide a market for shares of plantations and jute mills. The Second World War saw great speculative activity in the country and the number of stock exchanges rose from 7 in 1939 to 21 in 1945. Besides these organised exchanges, there were a number of unorganised and unrecognised exchanges known as kerb markets which functioned under a set of usages and conventions and did not have any set of rules which could be enforced in courts of law. There were also illegal “Dabba’ markets in which stocks and shares were also bought and sold.

Under the Securities Contract (Regulation) Act of 1956, the Government of India has so far recognised 23 stock exchanges. Bombay is the premier exchange in the country. With the setting up of National Stock Exchange, all regional stock exchanges have lost relevance.

How Business is Transacted in a Stock Exchange

A typical investment transaction will consist of four stages:

(a) Placing an order with a broker: A client places his order with a stockbroker who alone is entitled to transact business in a stock exchange either to buy or to sell the shares of a company at fixed prices or at best market prices.

(b) Execution of the order: The broker or his authorised clerk will execute the order and the same will appear in the Stock Exchange Daily Official List which will include the number and price of shares which exchanged hands.

(c) Reporting the deal to the client: As soon as the deal is transacted, the broker sends a contract note to the client giving details of the security bought or sold, the price, the broker’s commission, etc.

(d) Settlement of transactions: There are two methods of settlement of transactions. In the case of ready delivery (or cash) transactions, payment has to be made immediately on the transfer of the securities or within a period of one to seven days. In the case of forward delivery contracts, the settlement is made on a fixed day—it is generally fortnightly, though in some stock exchanges like Chennai, it is weekly. In the case of forward delivery, there is a system of carry-over i.e. post-ponement of delivery or payment involving a payment by one to another. This system of carry-over provides great scope for speculation in the forward market.

Speculation and Stock Exchange

A high degree of speculation is associated with stock exchanges in India. There are two types of transactions in a stock exchange, viz., investment transactions and speculative transactions. Investment transactions refer to purchase or sale of securities undertaken with the long-term prospect relating to their yield and price. An investment transaction normally involves the actual delivery of the security and the payment of its full price. Actually, no stock exchange can operate purely on the basis of investment buying and selling alone, since pure investors cannot provide the requisite volume of business or continuity of business which alone will ensure correct valuation of the shares according to their real worth. Investment transactions are, therefore, supplemented by speculative transactions.

In a speculative transaction—buying or selling—the delivery of securities or the payment of full price are rare; instead, only the differences in prices are paid or received. The predominance of speculative transactions over investment transactions in a stock exchange is due to the fact that the latter involve a larger volume of money (as securities bought have to be paid in full) while speculative transactions are possible with smaller amounts of money (as delivery of securities and payment of full price are rare).

Speculative transactions too are of different types depending upon whether a transaction is settled in spot, ready and forward markets. A spot transaction implies that delivery of and payment for securities will take place on the same day. A ready delivery transaction (also known as cash transaction) is one which is completed in a short period of time, i.e. the delivery of and payment for securities will be completed within a specified period of one to seven days. A forward transaction implies that the delivery of and payment for securities will be made on certain fixed settlement days, coming once in 15 or 30 days. Of these three different types of transactions in the stock exchange, the forward transactions provide the greatest scope for speculation.
Firstly, the settlement of transactions in the forward market involves a long period of time, and therefore, there is an incentive to the speculator to keep his commitments open as long as possible. This often leads to over-speculation and over-trading in stock exchange in India.

Secondly, the dealers in the cash market have only two alternatives before them, viz., (a) to square up their transactions by offering their purchase by sale and their sale by purchase before the expiry of the time limit, or (b) to deliver the securities and accept full payment (for sale) or to take delivery of the securities and make full payment (for purchase).

The dealers in the forward market have, besides the above two alternatives, a third alternative, that is, the postponement of delivery and payment to the next settlement day by mutual consent of the two parties to the contract. This system of carry over, i.e., postponement of delivery and payment usually involves the payment of a consideration by one party to the other. If the buyers (bulls) want postponement—for they have undertaken to buy but do not wish to buy—for they pay a consideration to the sellers, known as contango or the budla. If the sellers (the bears) desire the postponement (they have undertaken to sell but do not wish to sell) they pay a consideration to the buyers for agreeing to accommodate them until the next settlement known as backwardation or undha budla in Indian stock exchanges.

### 21.5 SEBI and Capital Market Reforms

The functioning of the stock exchanges in India has shown many weaknesses, with long delays, lack of transparency in procedures and vulnerability to price rigging and insider trading. To counter these shortcomings and deficiencies and to regulate the capital market, the Government of India set up the Securities Exchange Board of India in 1988. Initially, SEBI was set up as a non-statutory body but in January 1992 it was made a statutory body. SEBI was authorised to regulate all merchant banks on issue activity, lay guidelines and supervise and regulate the working of mutual funds and oversee the working of stock exchanges in India. SEBI, in consultation with the Government, has taken a number of steps to introduce improved practices and greater transparency in the capital markets in the interest of the investing public and the healthy development of the capital markets:

The Capital Issues (Control) Act, 1947 governed capital issues in India so as ensure sound capital structure for corporate enterprises, to promote rational and healthy expansion of the joint stock companies in India and to protect the interests of the investing public from the fraudulent practices of fast operators. The capital issues control was administered by the Controller of Capital Issues (CCI) according to the principles and policies laid down by the Central Government. The Narasimham Committee on the Reform of the Financial System in India (1991) recommended the abolition of CCI and wanted SEBI to protect the investors and take over the regulatory function of CCI. The Government of India accepted this recommendation, repealed the Capital Issues (Control) Act, 1947 and abolished the post of CCI. Companies were allowed to approach the capital markets without prior government permission subject to getting their offer documents cleared by SEBI. In other words, SEBI was given the power to control and regulate the new issue market as well as the old issues market (commonly known the stock exchange).

### Primary Market Reforms in India

SEBI has introduced various guidelines and regulatory measures for capital issues. Companies issuing capital in the primary market are now required to disclose all material facts and specific risk factors with their projects; they should also give information regarding the basis of calculation of premium leaving the companies free to fix the premium. SEBI has also introduced a code of advertisement for public issues for ensuring fair and truthful disclosures.

In order to encourage Initial Public Offers (IPO) SEBI has permitted companies to determine the par value of shares issued by them (i.e. SEBI has now dispensed with fixed par values of ₹10 and ₹100). SEBI has allowed issues of IPOs to go for “book building” - i.e. reserve and allot shares to individual investors. But the issuer will have to disclose the price, the issue size and the number of securities to be offered to the public.
In recent years, **private placement market** has become popular with issuers because of stringent entry and disclosure norms for public issues. Low cost of issuance, ease of structuring investments and saving of time lag in issuance has led to the rapid growth of private placement market. Total resource mobilisation through private placement market had increased sharply from ₹13,360 crores during 1995-96 to nearly ₹50,000 crores during 1998-99.

To reduce the cost of issue, SEBI has made underwriting of issue optional, subject to the condition that if an issue was not underwritten and was not able to collect 90% of the amount offered to the public, the entire amount collected would be refunded to the investors. The lead managers have to issue due diligence certificate which has now been made part of the offer document.

SEBI has raised the minimum application size and also the proportion of each issue allowed for firm allotment to institutions such as mutual funds. SEBI has also introduced regulations governing substantial acquisition of shares and take-overs and lays down the conditions under which disclosures and mandatory public offers have to be made to the shareholders.

Merchant banking has been statutorily brought under the regulatory framework of SEBI. The merchant bankers are now to be authorised by SEBI. They have to adopt the stipulated capital adequacy norms, abide by a code of conduct which specifies a high degree of responsibility towards investors in respect of pricing and premium fixation of issues and disclosures in the prospectus or offer letters for issues. Merchant bankers have now a greater degree of accountability in the offer document and issue process.

In order to induce companies to exercise greater care and diligence for timely action in matters relating to the public issues of capital, SEBI has advised stock exchanges to collect from companies making public issues, a deposit of one per cent of the issue amount which could be forfeited in case of non-compliance of the provisions of the listing agreement and, non-despatch of refund orders and share certificates by registered post within the prescribed time.

SEBI has advised stock exchanges to amend the listing agreement to ensure that a listed company furnishes annual statement to the stock exchanges showing the variations between financial projections and projected utilisation of funds in the offer documents and the actual utilisation. This would enable the share-holders to make comparisons between promises and performance.

The Government has now permitted the setting up of private mutual funds and a few have already been set up. UTI has now been brought under the regulatory jurisdiction of SEBI. All mutual funds are allowed to apply for firm allotments in public issues. To improve the scope of investments by mutual funds, the latter are permitted to underwrite public issues. Further, SEBI has relaxed the guidelines for investment in money market instruments. Finally, SEBI has issued fresh guidelines for advertising by mutual funds.

SEBI vets offer documents to ensure that all disclosures have been made by the company in the offer document. All the guidelines and regulatory measures of capital issues are meant to promote healthy and efficient functioning of the issue market (or the primary market). Despite all these steps, there are flagrant breaches of issue procedures through collusion between unscrupulous promoters and corrupt officials in the lead banks and even of the top officials of SEBI, as was the case of the now famous or infamous M.S. Shoes East Ltd. whose megaissue was literally aborted by SEBI in February-March 1995, soon after the issue was made public and subscribed.

**Global Depository Receipts (GDRs):** Since 1992, the Government of India allowed Indian companies to access international capital markets through dollar and Euro equity shares. Up to January 1995, Indian companies had raised US $3.6 billion through launching GDR issues, and US $1.1 billion through launching Euro Convertible Bonds (ECBs). Initially, the Euro-issue proceeds were to be utilised for approved end uses within a period of one year from the date of issue. Since there was continued accumulation of foreign exchange reserves with RBI and there were long gestation periods of new investment, the Government required the issuing companies to retain the Euro-issue proceeds abroad and repatriate only as and when expenditure for the approved end uses were incurred.

The Government of India has also liberalised investment norms for NRIs so that NRIs and Overseas corporate bodies can buy shares and debentures without prior permission of RBI subject to an upper limit of 10 per cent by any one FI on an Indian entity.
Secondary Market Reforms in India

SEBI has started the process of registration of intermediaries, such as the stock brokers and sub-brokers under the provisions of the Securities and Stock Exchange Board Act, 1992. The registration is on the basis of certain eligibility norms such as capital adequacy, infrastructure, etc. There has been much opposition and resistance to this step of SEBI. SEBI has also made rules for making client/broker relationships more transparent, in particular, segregating client and broker accounts.

SEBI has notified regulations on insider trading under the provisions of SEBI Act. Such regulations are meant to protect and preserve the integrity of stock markets and, in the long run, help inspire investor confidence in the stock exchange. Despite these regulations, insider trading is rampant in our stock exchanges, and, rigging the market and manipulating stock market price quotations are quite common. M.S. Shoes East Ltd. fiasco was an example of market rigging; SEBI could do nothing about it.

Since 1992, SEBI has constantly reviewed the traditional trading systems in Indian Stock Exchanges. It is simplifying procedures and achieving transparency in costs and prices at which customers’ orders are executed, speeding up clearing and settlement, and, finally transfer of shares in the names of buyers.

To make the governing bodies of stock exchanges broad based, the governing body of stock exchanges should have 5 elected members, not more than 4 members nominated by the Government or SEBI and 3 or fewer members nominated as public representatives.

The Government has allowed foreign institutional investors (FIIs) such as pension funds, mutual funds, investment trusts, asset or portfolio management companies etc. to invest in the Indian capital market provided they are registered with SEBI. Till January 1995, as many as 286 FIIs have been registered with SEBI — they were only 10 in January 1993 and 136 in January 1994. The cumulative net investments of FIIs has increased from $200 million in January 1993 to $3 billion in January 1995, reflecting the economic liberalisation policy of the country and to some extent, the prevalence of low rates of interest abroad. The Government of India has now permitted joint venture stock broking companies to have non-Indian citizens on their Board of Directors.

To prevent excessive speculation and volatility in the stock market, SEBI has introduced rolling settlements from July 2, 2001, under which settlement has to be made every day. This, however, has not succeeded extreme volatility in the stock market.

Insurance Reforms

The most notable event during 1999-2000 in the field of contractual savings has been the passing of the Insurance Regulation and Development Authority (IRDA) Act despite stiff opposition from trade unions and the Left parties. The IRDA Act ends the monopoly of the Government in the insurance sector because it seeks to promote the private sector (including limited foreign equity) in the insurance sector. It gives priority in the utilisation of policy holders funds for the development of social and infrastructure sectors. The Government has given licences to a number of private sector companies to do insurance business.

Strengthening of SEBI

In January 1995, the Government of India promulgated an ordinance to amend SEBI Act, 1992 so as to arm SEBI with additional powers for ensuring the orderly development of the capital market and to enhance its ability to protect the interests of the investors. The important features of this ordinance are:

1. To enable SEBI to respond speedily to market conditions and to reinforce its autonomy, SEBI has been empowered to file complaints in courts and to notify its regulations without prior approval of the Government.
2. SEBI is now provided with regulatory powers over companies in the issuance of capital, the transfer of securities and other related matters.
3. SEBI is now empowered to impose monetary penalties on capital market intermediaries and other participants for a listed range of violations. The amendment proposes to create adjudicating
mechanism within SEBI for leaving penalties and also constitute a separate tribunal to deal with cases of appeal against orders of the adjudicating authority.

Earlier the SEBI Act provided for the suspension and cancellation of registration and for the prosecution of intermediaries which led to the stoppage of business. The new system of monetary penalties constitutes an alternative mechanism for dealing with capital market violations.

4. While investigating irregularities in the capital market, SEBI is now given the power to summon the attendance of and call for documents from all categories of market intermediaries, including persons from the securities market. Likewise, SEBI has now the power to issue directions to all intermediaries and persons connected with securities markets with a view to protect investors or secure the orderly development of the securities market.

It was thought that SEBI has all necessary powers to control and regulate the securities market on the one side and effectively protect the interests of the shareholders on the other. However, SEBI failed miserably to prevent a small coterie of brokers in Mumbai to hammer the SENSEX in March 2001 and in May 2004. The stock markets in India went through one of the worst and most prolonged crises in their history.

Self-Assessment

1. Answer the following questions
   (i) What is the name of the organization that regulates the securities markets in India?
   (ii) Stock split increases a company’s equity capital: TRUE or FALSE?
   (iii) Which of the following investments has the highest liquidity: shares, fixed deposit, closed-end mutual funds?
   (iv) What is the income called as that you receive from a company that it may distribute to its shareholders from its profits each year?
   (v) Stock market investments are ideal for what time horizon: long-term or short-term?
   (vi) What is the short form of BSE Sensitive Index?
   (vii) If an investor can invest Rs. 1.0 lac or less in an IPO, that investor is categorized as what?

21.6 Summary

- Capital market is the market for long-term funds, just as the money market is the market for short-term funds.
- The demand for long-term money capital comes predominantly from private sector manufacturing industries and agriculture and from the Government largely for the purpose of economic development.
- The Indian capital market is broadly divided into the gilt-edged market and the industrial securities market. The gilt-edged market refers to the market for government and semi-government securities, backed by the Reserve Bank of India.
- Since Independence and particularly after 1951, the Indian capital market has been broadening significantly and the volume of saving and investment has shown steady improvement.
- Soon after Independence, the Government of India set up a series of financial institutions to be of special help to the private sector industries in the matter of finance.
- The Industrial Development Bank of India was set up since 1947 to provide long-term finance to industry. IFCI, the SFCs, ICICI, and the Refinance Corporation of India were functioning for several years provided direct plans, subscribed to shares and bonds and to guarantee loans and deferred payments.
- The main function of IDBI, as its name suggests was to finance industrial enterprises such as manufacturing, mining, processing, shipping, and other transport industries and hotel industry.
- In recent years, non-banking finance companies variously called as “finance corporations”, “Loan Companies”, “Finance Companies”, etc., have mushroomed all over the country.
In recent years, mutual funds are the most important among the newer capital market institutions. Several public sector banks and financial institutions have set up mutual funds on a tax-exempt basis, virtually on the same footing as Unit Trust of India (UTI).

Venture capital financing is one of the more recent entrants into the capital market. There is significant scope for them in the context of emergence of technocrat entrepreneurs who have technical competence and expertise but lack venture capital. Financial institutions generally insist on greater promoter contribution to investment financing, in which case, the technocrat entrepreneurs need the support of venture capital companies.

21.7 Key-Words

1. Urban infrastructure : Infrastructure is the basic physical and organizational structures needed for the operation of a society or enterprise, or the services.

2. Monopoly : The exclusive possession, control, or exercise of something; "men don't have a monopoly on unrequited love".

21.8 Review Questions

1. What do you mean by the term Indian Capital Market? Discuss.
2. Discuss the features of the Indian Money.
4. Write a short note on the Monetary Policy of India.
5. What are the objectives of Monetary Policy?

Answers: Self-Assessment

1. (i) SEBI (Securities and Exchange Board of India)
   (ii) False
   (iii) Shares
   (iv) Dividend
   (v) Long-term
   (vi) Sensex
   (vii) Retail investor

21.9 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Unit 22: Sectoral Performance III - Foreign Trade and Balance of Payments

CONTENTS
Objective
Introduction
22.1 Foreign Trade
22.2 Balance of Payments
22.3 Summary
22.4 Key-Words
22.5 Review Questions
22.6 Further Readings

Objectives
After reading this Unit students will be able to:
• Explain the Foreign Trade.
• Describe about the Balance of Payments.

Introduction
In the age of globalisation, interdependence between the economies of the world has increased many times. Thus, the external sector in the Indian economy has gained prime importance. It may be noted that both exports and imports contribute to the production process. They can be used in raising the income levels of the people in a developing economy. In addition to flow of goods, increasing flow of services and capital between the nations give rise to payments and receipts in foreign exchange. This, in turn, has an impact on the Balance of Payment’s position for a country. Foreign trade and Balance of Payments, trade policy and various policy measures for rapid growth of exports may help in the economic growth of the country.

22.1 Foreign Trade

It is generally agreed that the status of a country’s economy depends in some measure upon the character of its commercial dealings with other countries. India cannot afford to remain insular in international trade and commerce. Imports and exports are vital for economic growth. In this context, international trade, balance of payments and international monetary system are important. We have discussed the first-two issues in this Section, and covered the third in Section 16.

Foreign/Before Independence

India has had from ancient times a flourishing world trade, particularly with the Mediterranean, the Far East and the Levant. Geographically, India was ideally located for this purpose ‘in the centre of the world.’ But internecine political uncertainties and serious maritime anarchies became two principal deterrents to this trade’s further development during the Muslim period.

With the entrenchment of the British rule, the situation largely changed. Two catalytic factors were: (1) the opening of the British countryside by the proliferation of rail, road and inland shipping networks; and (2) the establishment of a shorter route to Great Britain and Europe via the Suez Canal. In consequence, India’s foreign trade substantially expanded in the second half of the nineteenth century. Between 1860 and 1900 the value of India’s foreign trade went up nearly three-fold. Between 1900 and 1940 there was a further doubling of the value of trade.
Table 1: Expansion of India’s Foreign Trade after 1869

<table>
<thead>
<tr>
<th>Period</th>
<th>Exports (annual average)</th>
<th>Imports (annual average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1864–65 to 1868–69</td>
<td>55.86</td>
<td>31.70</td>
</tr>
<tr>
<td>1894–95 to 1898–99</td>
<td>107.53</td>
<td>73.67</td>
</tr>
<tr>
<td>1924–25 to 1928–29</td>
<td>353.51</td>
<td>251.02</td>
</tr>
</tbody>
</table>


During the British regime, the international trade policy of India had a clear and perceptible orientation. This was to promote exports of raw materials from mining and agronomy to the mills and manufactories in Great Britain, and the import of their finished products like cotton textiles (nearly half of total exports) and engineering goods in to the vast Indian colony. To this end, the Government of both the UK and India continually adjusted all economic machineries like export and import tariffs, customs and excise duties and protection and liberalization.

**Post Independence Thrusts**

A profile of our international trade is indicated in Table 2

Table 2: Foreign Trade: Balance of Trade

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports</th>
<th>Imports</th>
<th>Total value of trade</th>
<th>Balance of trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950–51</td>
<td>606</td>
<td>608</td>
<td>1,214</td>
<td>–2</td>
</tr>
<tr>
<td>1960–61</td>
<td>642</td>
<td>1,122</td>
<td>1,764</td>
<td>–480</td>
</tr>
<tr>
<td>1970–71</td>
<td>1,535</td>
<td>1,634</td>
<td>3,169</td>
<td>–9</td>
</tr>
<tr>
<td>1980–81</td>
<td>6,711</td>
<td>12,549</td>
<td>19,260</td>
<td>–838</td>
</tr>
<tr>
<td>1990–91</td>
<td>32,553</td>
<td>43,198</td>
<td>75,751</td>
<td>–10,645</td>
</tr>
<tr>
<td>1997–98</td>
<td>1,30,100</td>
<td>1,54,176</td>
<td>2,84,276</td>
<td>–24,076</td>
</tr>
<tr>
<td>1998–99</td>
<td>1,39,752</td>
<td>1,78,332</td>
<td>3,18,084</td>
<td>–38,580</td>
</tr>
<tr>
<td>1999–2000</td>
<td>1,59,561</td>
<td>2,15,236</td>
<td>3,74,797</td>
<td>–55,675</td>
</tr>
<tr>
<td>2000–2001</td>
<td>2,03,571</td>
<td>2,30,873</td>
<td>4,34,444</td>
<td>–27,302</td>
</tr>
<tr>
<td>2002–2003</td>
<td>2,55,137</td>
<td>2,97,206</td>
<td>5,52,343</td>
<td>–42,067</td>
</tr>
</tbody>
</table>


Table 2 shows interesting ups and downs in total value of trade. While it had shot up in 1990–91, we have not looked back—the figures rising from ₹75,751 crore in 1990–91 to ₹652,475 crore in 2003–04. While this looks okay on a graph, in actual fact the figure should have quadrupled by now if we had taken care of the contents of our export basket and if the growth of the GDP would have been around 10%.

It will be interesting to enumerate some of the broad features of the growth curve in our international trade:

**Imports**

This shows a galloping rise during the last four decades, as indicated in Table 22.3. The rise has not only been galloping from year to year and from decade to decade, there has also been wide and
perceptible changes in the components of imports—with a high percentage being accounted for by oil and technical hardware (in many cases with technical expertise). In recent years, the percentage of imports of technical expertise in the service sector is getting substantially counter-balanced by export of IT oriented expertise in the service sector and the expanding base of outsourcing.

Table 3: Movement of Imports

<table>
<thead>
<tr>
<th>Period</th>
<th>Total Imports % Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Over base year 1970-71 = 100</td>
</tr>
<tr>
<td>1970-1971</td>
<td>100</td>
</tr>
<tr>
<td>1980-1981</td>
<td>768</td>
</tr>
<tr>
<td>1990-1991</td>
<td>2,644</td>
</tr>
<tr>
<td>1997-1998</td>
<td>9,435</td>
</tr>
<tr>
<td>1998-1999</td>
<td>10,914</td>
</tr>
<tr>
<td>1999-2000</td>
<td>13,172</td>
</tr>
<tr>
<td>2000-2001</td>
<td>14,129</td>
</tr>
<tr>
<td>2001-2002</td>
<td>15,006</td>
</tr>
<tr>
<td>2002-2003</td>
<td>18,189</td>
</tr>
<tr>
<td>2003-2004</td>
<td>21,977</td>
</tr>
</tbody>
</table>

Exports

The rise has been astronomical—from ₹ 1,535 crore in 1970–71 (base year) to ₹ 1,30,100 crore in 1997–98 and ₹ 2,93,367 crore in 2003-04. What is of greater importance is the relative rise in the export of technology, hardware, manufactured commodities and knowledge—spearheaded by IT. The portent of growth is also highly satisfactory. For instance, in the iron and steel sector, while we are still exporting considerable volume of iron ore and pellets to China, Japan and some other countries of South-East Asia and Europe, there are clear indications that during the next decade such export will be largely overtaken by steel and steel products. Such a manifest change in both import and export baskets during the forthcoming decades will be highly encouraging and growth-oriented, and will augur well for our international balance of payments (Table 4).

Table 4: Movement of Exports

<table>
<thead>
<tr>
<th>Period</th>
<th>Total exports % growth with 1970-71 = 100</th>
<th>Growth over the previous year mentioned (% p.a.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-1971</td>
<td>100</td>
<td>9.1</td>
</tr>
<tr>
<td>1980-1981</td>
<td>437</td>
<td>15.9</td>
</tr>
<tr>
<td>1990-1991</td>
<td>2,121</td>
<td>17.1</td>
</tr>
<tr>
<td>1997-1998</td>
<td>8,476</td>
<td>21.9</td>
</tr>
<tr>
<td>1998-1999</td>
<td>9,104</td>
<td>7.4</td>
</tr>
<tr>
<td>1999-2000</td>
<td>10,395</td>
<td>14.2</td>
</tr>
<tr>
<td>2000-2001</td>
<td>13,262</td>
<td>27.6</td>
</tr>
<tr>
<td>2001-2002</td>
<td>13,617</td>
<td>2.7</td>
</tr>
<tr>
<td>2002-2003</td>
<td>16,621</td>
<td>22.1</td>
</tr>
<tr>
<td>2003-2004</td>
<td>19,112</td>
<td>15.0</td>
</tr>
</tbody>
</table>
Foreign Trade Policy, 2004–2009

For India to become a major player in world trade, a comprehensive view is necessary. While increase in exports is of vital importance, we have also to facilitate those imports which are required to stimulate our economy. Thus, independent of the annual EXIM Policy, it is necessary to take an overall view of India’s foreign trade. This is the context of the new Foreign Trade Policy.

The objectives of the new policy are:

1. To double our percentage share of global merchandise trade within the next five years.
2. To act as an effective instrument of economic growth by giving a thrust to employment generation.

These objectives are proposed to be achieved by adopting, among others, the following strategies:

(i) Unshackling of controls and enabling the innate entrepreneurship of our businessmen, industrialists and traders.

(ii) Simplifying procedures and bringing down transaction costs.

(iii) Neutralizing incidence of all levies and duties on inputs used in export products, based on the fundamental principle that duties and levies should not be exported.

(iv) Facilitating development of India as a global hub for manufacturing, trading and services.

(v) Identifying and nurturing special focus areas which would generate employment opportunities, particularly in semi-urban and rural areas, and developing a series of ‘Initiatives’ for each of these.

(vi) Facilitating technological and infrastructural upgradation of all the sectors of the Indian economy, especially through import of capital goods and equipment, thereby increasing value addition and productivity, while attaining internationally accepted standards of quality.

(vii) Avoiding inverted duty structures and ensuring that our domestic sectors are not disadvantaged in the Free Trade Agreements/Regional Trade Agreements/Preferential Trade Agreements that we enter into in order to enhance our exports.

(viii) Upgrading our infrastructural network, both physical and virtual, related to the entire Foreign Trade chain, to international standards.

(ix) Revitalizing the Board of Trade by redefining its role, giving it due recognition and inducting experts on Trade Policy.

(x) Activating our Embassies as key players in our export strategy and linking our Commercial Wings abroad through an electronic platform for real time trade intelligence and enquiry dissemination.

FTP, 2004–2009 envisions a pervasive set of strategies involving different sectors of the economy. Many of these are also integral to our policies of national economic development. It is to be hoped, therefore, that the new FTP will be seriously translated into actual strategic performance in order to optimise our international trade, and that too much to our own advantage.

22.2 Balance of Payments

We have had decades of atrophied balance of payments in our exchange accounts, interlaced with years or periods of revival. That is all a story now. However, our foreign exchange account has become strong, in the trail of the continuing phases of economic reforms.

There has been a current account surplus for three successive years. This has, coupled with an expanding capital account, further strengthened India’s balance of payments account in 2003–04. The year witnessed accumulation of reserves of US $ 31.4 billion (excluding valuation changes, gold, SDRs and Reserve Tranche at the IMF).

Nearly a third of the reserves were contributed by the surplus in current account (Table 5). Rising surpluses in the current account have been one of the distinguishing features of India’s balance of payments in the current decade.
There has been strong growth in merchandise exports. This has been a propellant behind many international trade account indices. Out of this we may mention the current account surpluses, buoyant invisible inflows, particularly private transfers comprising remittances. The strength provided by the surplus in the current account was reinforced by robust capital inflows in 2003–04.

As evident from Table 5, the current account surpluses during the current decade are largely attributable to the buoyant inflows of receipts. Apart from software services, growing volume of private transfers, driven essentially by workers remittances, have been one of the main reasons behind the expanding surpluses in the current account. Besides, in terms of annual average rate of growth, world exports of commercial services, i.e. non-factor services not only increased faster (7%) than such exports of merchandise (5%) between 2000 and 2003, but also accelerated from 7% in 2002 to 13% in 2003. The continuously widening base of outsourcing by many advanced countries—the USA in particular, as also UK, France, Germany and Japan is going to prove an important component of such growth during the next few decades. India in this context should be wary of the Chinese competition.

### Concluding Observations

Our foreign trade is now buoyant and the exchange account is robust. The days of disequilibrium in the exchange counter have gone by.
However, what is disquieting is that our international trade still stands at a level which is less than one per cent of the total world trade. This is precipitated \textit{inter alia} due to the relative low share of hardware in our export basket and large volume of the same in the import basket. The situation is aggravated further by oil. There has to be a whole range of export import strategies in the field. There should be more finished manufacturers and less of ores and grains in export, and a shrinking import basket as far as consumables are concerned. All these hinge on the overall policy of the Government information technology and the widening base of outsourcing but the basic character in our export and import baskets will require drastic overhaul.

What India should aim at is nothing less than a five per cent share—as in the 1950s—by the end of the Eleventh Five-Year Plan and not less than 10% in the decade following. Here again, the exchange account surplus will have to continue to grow steadily from one year to another.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Trade balance and current account.}
\end{figure}

\textbf{Source} : Planningcommission.nic.in

\textbf{Utopian

A tall order! There is, however, no other way out for the economy to be on a galloping growth path with a GDP of 10\% plus in competition with our nearest neighbour China.

\textbf{Use of Reserves

There is a continuing debate in recent years as to whether our expanding exchange reserve should remain \textit{frozen} or some portion of it—may be a small percentage to start with—should be used for socioeconomic development—mainly for planned growth of infrastructure. The issue is highly problematical. For one thing, there may be a sudden erosion in our reserves due to the effects of an international trade cycle. For another, the practice may become habit forming. On the other hand, like a bank balance, investment on a capital infrastructure may earn us positive growth in GDP. It, however, will require deployment of farsighted economic sense.
Self-Assessment

1. Choose the correct options:
   (i) If a citizen could buy £25,000 for $100,000, the rate of exchange for the pound would be
       (a) $40
       (b) $25
       (c) $4

   (ii) Canadian residents demand foreign currencies to
       (a) produce goods and services exported to foreign countries
       (b) pay for goods and services imported from foreign countries
       (c) receive interest payments on investments in Canada
       (d) have foreigners make real and financial investments in Canada

   (iii) A nation's balance of trade is equal to its exports less its imports of
       (a) goods
       (b) goods and services
       (c) financial assets
       (d) official reserves

   (iv) A nation's balance on the current account is equal to its exports less its imports of
       (a) goods and services
       (b) goods and services, plus Canadian purchases of assets abroad
       (c) goods and services, plus net investment income and net transfers
       (c) goods and services, minus foreign purchases of assets in Canada

   (v) The net investment income of Canada in its international balance of payment is the
       (a) interest income it receives from foreign residents
       (b) dividends it receives from foreign residents
       (c) excess of interest and dividends it receives from foreign residents over what it paid to
           them
       (d) excess of public and private transfer payments it receives from foreign residents over
           what it paid to them

   (vi) A nation may be able to correct or eliminate a persistent (long-term) balance of payments
       deficit by
       (a) lowering the barriers on imported goods
       (b) reducing the international value of its currency
       (c) expanding its national income
       (d) reducing its official reserves

   (vii) If exchange rates float freely, the exchange rate for any currency is determined by the
       (a) demand for it
       (b) supply of it
       (c) demand for and the supply of it
       (d) official reserves that back it

   (viii) If a nation had a balance of payments surplus and exchange rates floated freely, the foreign
       exchange rate for its currency would
       (a) rise, its exports would increase, and its imports would decrease
       (b) rise, its exports would decrease, and its imports would increase
       (c) fall, its exports would increase, and its imports would decrease
       (d) fall, its exports would decrease, and its imports would increase

22.3 Summary

• It is generally agreed that the status of a country’s economy depends in some measure upon the
  character of its commercial dealings with other countries. India cannot afford to remain insular
  in international trade and commerce. Imports and exports are vital for economic growth.
India has had from ancient times a flourishing world trade, particularly with the Mediterranean, the Far East and the Levant. Geographically, India was ideally located for this purpose ‘in the centre of the world.’

During the British regime, the international trade policy of India had a clear and perceptible orientation. This was to promote exports of raw materials from mining and agronomy to the mills and manufactories in Great Britain, and the import of their finished products like cotton textiles (nearly half of total exports) and engineering goods in to the vast Indian colony.

This shows a galloping rise during the last four decades, as indicated in Table 22.3. The rise has not only been galloping from year to year and from decade to decade, there has also been wide and perceptible changes in the components of imports — with a high percentage being accounted for by oil and technical hardware (in many cases with technical expertise).

The rise has been astronomical — from ₹ 1,535 crore in 1970–71 (base year) to ₹ 1,30,100 crore in 1997–98 and ₹ 2,93,367 crore in 2003-04. What is of greater importance is the relative rise in the export of technology, hardware, manufactured commodities and knowledge — spearheaded by IT.

From the beginning of the twentieth century (₹ 263 crore in 1904–05) to independence (₹ 652 crore in 1946-47), the value of India’s foreign trade registered a clear rise, but this certainly paled into insignificance when compared to the post independence thrusts.

It is however worth noticing that while exports and imports have grown, the growth in imports has been out of all proportion to exports.

As agronomy and industry picked up, imports of fertilizers, POL and metals also peaked. With a relative rise in purchasing power, imports of edible oils, paper, sugar and cement grew as well. Import of foodgrains had ceased altogether.

The Foreign Trade Policy of 2004 (discussed later) enunciated by the Government of India retains the emphasis on the growth in both quantity and components of exports — so that the same remains ahead of the increasing volume of imports.

India’s exports and imports have been guided, if at all, under different relevant acts and covenants and rules and regulations. It was for the first time in 1988 that an Export-Import Policy — that too for three years — was promulgated.

For India to become a major player in world trade, a comprehensive view is necessary. While increase in exports is of vital importance, we have also to facilitate those imports which are required to stimulate our economy.

We have had decades of atrophied balance of payments in our exchange accounts, interlaced with years or periods of revival. That is all a story now.

There has been strong growth in merchandise exports. This has been a propellant behind many international trade account indices.

Our foreign trade is now buoyant and the exchange account is robust. The days of disequilibrium in the exchange counter have gone by.

There has to be a whole range of export import strategies in the field. There should be more finished manufacturers and less of ores and grains in export, and a shrinking import basket as far as consumables are concerned.

What India should aim at is nothing less than a five per cent share — as in the 1950s — by the end of the Eleventh Five-Year Plan and not less than 10% in the decade following.

There is a continuing debate in recent years as to whether our expanding exchange reserve should remain frozen or some portion of it — may be a small percentage to start with — should be used for socioeconomic development — mainly for planned growth of infrastructure.
22.4 Key-Words

1. Development banks: Such banks are specially meant for giving loans to the business sector for the purchase of latest machinery and equipments. Examples: SFCs (State Financial Corporation of India) and IFCI (Indian Finance Corporation of India).

2. Co-operative banks: These banks are nothing but an association of members who group together for self-help and mutual-help. Their way of working is the same as commercial banks. But they are quite different. Co-operative banks in India are registered under the Co-operative Societies Act, 1965. The cooperative bank is regulated by the RBI.

22.5 Review Questions

1. What is foreign trade? Discuss its status before Independence.
2. Discuss the balance of payments.

Answers: Self-Assessment

1. (i) (c)    (ii) (b)    (iii) (a)    (iv) (c)    (v) (c)
   (vi) (b)    (vii) (c)   (viii) (b)

22.6 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Objectives

After reading this Unit students will be able to:

• Explain the Role of Foreign Capital-FDI.
• Discuss Multinational Corporations.

Introduction

The role of multinational companies for enterprise and capital in the economies of the world has hugely increased with the spread of information technology and recent technological advances. It is more important to understand for a developing Economy because here they are needed to fill investment saving gap; trade gap, and technology gap. This must be regulated. From July, 1991, a large number of high-tech areas have been left open to foreign investment. In India’s context, the response of foreign capital to policy initiatives can only be called a mixed one. It is true there are many proposals and even many approvals but the actual inflows have been limited. Here, the various issues involved in the foreign capital and role of MNCs in this regard is to be discussed. This would provide an understanding about the changing scenario in the economy of the country.

23.1 Role of Foreign Capital - FDI

The foreign capital contributes to gap-filling in an economy. Savings gap, Trade gap and Technology gap are three gaps that can be filled by foreign capital. This would create conditions suitable for fast economic growth. Thus, inflow of capital from abroad is vital for the growth of a developing economy, especially in the initial stages.

Savings Gap: Raising the rate of capital formation is the key to the development. This needs a much higher level of investment than is warranted by the present level of savings in a developing economy. The prevailing low level of income, slow rates of growth and rising consumption needs in these economies limit the scope for a sharp rise in domestic savings. Thus, foreign capital can be used to fill the gap between investment requirements and domestic savings. It may be noted that the availability of foreign capital increases the availability of total resources in the economy. The increase in resources, in turn, influences investment decisions and makes possible construction of many new projects. Moreover, establishment of bigger projects and projects with a high investment component open up new opportunities of investment.
Trade Gap or Foreign Exchange Gap: There are two structural constraints in a developing economy—a minimum requirement of inputs to sustain a given rate of growth of GNP; and an actual or potential ceiling on export earnings. The difference between the required imports and total exports, which is the foreign exchange gap, is represented as:

\[ Mn - Xn = Mo + \beta (Vn - Vo) - Xo (1 + x)n \]

Where, \( Mo = \) Observed initial level of imports,
\( Vn = Vn (1 + r)n, \) \( r \) being the compound growth rate and \( n \) the number of years after \( o \),
\( Xo = \) The initial level of export,
\( \beta = \) The marginal rate of imports per additional unit of GNP,
\( r = \) Rate of growth of exports.

If the foreign exchange gap is dominant, the total import capacity would be

\[ Xn = Xo (1 + x)n \]

It will effectively set the limit to the increase in GNP. The constraint will be more severe if any of the following two situations obtains:

First, it may be noted that Technical conditions of industrialisation require a complement of foreign resources along with domestic resources. Second, some Strategic goods such as capital equipment and technical know-how, are not available locally and could be procured only from external sources. In both cases, the availability of foreign exchange can save an economy from an impasse.

Technological Gap: Technology has played a significant role in economic growth. Its level in a developing economy can be raised through certain steps. For instance, through the internal evolutionary process of education, research, training and experience, or the external process of importing from other countries technology can be stepped up. However, the import of technology is related to two issues, viz., the choice of technology and local adaptation in the country. It may be noted that foreign capital can supply a package of needed resources that can be transferred to their local counterparts by means of training programmes and the process of learning by doing. Three sensitive areas are touched by the foreign capital and these areas are crucial in the development strategy.

23.2 Types of Foreign Capital

Foreign aid and private investment are two types of inflows of capital from abroad. Loans and grants from Foreign Governments and Institutions are included in the foreign aid. Since these may have repayment obligations, this source of foreign capital, especially loans, has a limitation. The supporters of foreign investment have highlighted the beneficial effects in terms of encouragement to the development of technology, integration with the world economy, exports and higher growth, managerial expertise, etc. They have claimed that debt financing generates fixed debt servicing obligations, while equity needs to be serviced only after profits are made. It may be observed that the opponents of foreign investment have drawn attention to several imperfections and adverse effects, including capital intensity of such investment, the possible adverse effects on income distribution, inappropriate technology, transfer pricing and the negative contribution that such investment often makes to the balance of payments of an economy.

Sources of Private Foreign Capital: There are two types of foreign private equity capital flows: (1) portfolio investment (an investor holds shares in a firm in a developing country but is not involved in its management) and (2) foreign direct investment (investment where the investor participates in the management of the firm in which he owns shares); FDI comprises a larger proportion of foreign private capital flows to developing countries than portfolio investment.

(a) Portfolio Investment: Portfolio investment contains the following,

(i) Non-residents hold equity in the joint stock companies of the recipient country,
(ii) Recipient country’s joint stock companies have creditor capital from official sources.
(iii) There is also creditor capital from private sources abroad invested in recipient country’s joint stock companies.

(b) **Foreign Direct Investment**: The Foreign Direct Investment (FDI) in any country abroad is the net inflow of investment (capital or other), in order to acquire management control and profit sharing (10% or more voting stock) or the whole ownership of an accredited company operating in the country receiving investment. The foreign direct investment generally encompasses the transfer of technology and expertise, and participation in the joint venture and management. Highly productive advantages of foreign direct investment have been constantly being harvested by both governmental and private companies and organizations of all over the world.

The foreign direct investment is profitable both to the country receiving investment (foreign capital and funds) and the investor. For the investor company, FDI offers an exclusive opportunity to enter into the international or global business, new markets and marketing channels, elusive access to new technology and expertise, expansion of company with new or more products or services, and cheaper production facilities. While the host country receives foreign funds for development, transfer of new profitable technology, wealth of expertise and experience, and increased job opportunities.

Owing to the ever-increasing globalization of businesses of almost all sectors, liberalization of trade policies, and loosening of foreign investment restrictions, the foreign direct investment (FDI) has been quite revolutionary and vital for faster economic growth of most of the developing and developed countries of all across the world for last few decades. Supported by refinement in the information and telecommunication technology, and the increasing trend of Mergers and Acquisitions, the FDI is to receive tremendous impetus in various sectors in the future times to come, especially in the developing countries of the world. It has been observed that more than two-thirds (2/3th) of direct foreign investment is made in infrastructure, commercial and residential buildings, machinery, equipment, mines, and land.

**FDI India**

The steadily growing one of the major economies of the world, India has been enjoying huge and regular FDI from diverse investors of all around the world for the last few decades. According to a recent UNCTAD (United Nations Conference on Trade and Development) Survey, India has emerged out as the second most famous and popular destination in the world for FDI, after China. Majority of this foreign direct investment in India is made in the sectors of telecommunication, computer hardware and software, construction, and services, by investor companies from USA, UK, Singapore, Mauritius, etc. The foreign direct investment in India can be made in a variety of ways and in a rather wide range of economic sectors. Worldwide prominent Global Jurix has been helping individuals, associations, private and public companies/organizations, and institutions of diverse sectors for making their cherished FDI in India, through both the Automatic and Government Routes, for a long time.

There are three main categories of FDI:

(i) **Equity Capital**: It may be defined as the value of the Multinational Corporations (MNCs) investment in shares of an enterprise in a foreign country.

(ii) **Reinvested Earnings**: The MNCs share of affiliate earnings not distributed as dividends or remitted to the MNCs.

(iii) **Other Capital**: The short-term or long-term borrowing and lending of funds between the MNCs and the affiliate of the MNCs.

**Types of FDI**: The FDI inflows are of three types:

(i) **Market-seeking**: The size of the local market is the main focus of these FDIs.

(ii) **Efficiency-seeking**: Economic efficiency and commercial logic dictate that capital should flow from the relatively less-profitable developed countries to the relatively more profitable developing world.
23.3 Multinational Corporations

MNCs are involved in foreign direct investment which means they own or control income generation assets in more than one country. Thus, they produce goods or services outside its country of origin. There are more than eleven thousand MNCs with more than eighty-two thousand subsidiaries in operation in today’s world economy.

Characteristics of Multinational Corporations: The important characteristics of MNCs are given below:

(i) Giant Size: Their assets and sales run into billions of dollars.
(ii) International Operations: The control resides in the hands of a single institution but its interests and operations sprawl across countries.
(iii) Oligopolistic Structure: An MNC has awesome power and along with its giant size it becomes oligopolistic.
(iv) Spontaneous Evolution: Generally, MNCs grow in a spontaneous and unconscious manner.
(v) Collective Transfer of Resources: They facilitate multi-lateral transfer of resources.

Importance and Significance of MNCs: In today’s world economy, MNCs have become a powerful force.

The Case for MNCs: MNCs carry the potential benefits that a developing economy can hope to get from MNC operations. Today, foreign investment is the only instrument that can reduce the inequalities between nations of the world.

The Case against MNCs: At present, MNCs acknowledge their responsibility to the concerns and interests of the host country. However, international capital has no loyalty towards any nationality.

Need for Regulation of MNCs: MNCs are needed to regularised due to the following reasons:

(i) After a specific period, restrictions may be imposed on foreign holdings of MNCs, or there may be provision for gradual disinvestments.
(ii) There is threat of nationalisation which is an important tool of regulation.
(iii) In certain areas, the Government may allow or deny permission.
(iv) The Government may demand MNCs to carry out a minimum fixed share of their total research and development activities within the host countries of MNCs.
(v) The MNCs may be taxed at a higher rate.
(vi) The host country may lay down certain export criteria for MNCs.

Foreign Capital in India

Foreign capital has been given an important role to play in the planned economy of India. In the first stage, foreign capital was looked upon as a means to supplement domestic investment but gradually the emphasis shifted to encouraging technological collaboration between Indian entrepreneurs and foreign entrepreneurs. Of late, free flow of foreign capital is invited.

Government Policy towards Foreign Capital: In India, foreign investment is subject to the same industrial policy as all other business ventures. Moreover, there are some additional policies and rules specially governing foreign collaboration. The Industrial Policy Resolution, 1948 (IPR, 1948) is the first articulate expression of free India’s attitude towards foreign capital. It stressed the need for carefully regulating as well as inviting private foreign capital. Special stress, *inter alia*, was put on the...
need to ensure that in all cases of foreign collaboration, the majority interest was always Indian. Later, this was followed by the Fiscal Commission of 1949-50. The Commission recommended that foreign investment may be permitted, first, in the public sector projects needing imported capital good. Moreover, in new capital industries where no indigenous capital or technical know-how was likely to be available. It may be noted that a statement on policy towards foreign capital made by the Government on April 6, 1949 was brought after this. The underlying principles of the policy by and large are valid even now. The policy tried restrict foreign collaboration to those cases which would bring technical know-how into the country such as was not available indigenously for developing new lines of production in the country. These define the broad contours within which the state policy towards foreign capital has been framed all through the different five-year plans. Three distinct phases can be marked during the plan period:

- From 1951 to 1965, the policy was characterised by a liberal attitude towards foreign capital providing many concessions and incentives.
- In the second stage, strict controls were observed and the broad policy was to restrict the area of operation of foreign capital in the economy.
- With the beginning of economic reforms in 1991, the country has adopted a more liberal attitude and has tried to attract a free flow of FDI in India.

**Policy Changes 1991-2005**: Regarding foreign investment and foreign technology Agreements, the new Industrial Policy, 1991, can be described as a minor revolution. There are four types of changes in the policy:

1. **Choice of Product**: The number of products has been significantly increased.
2. **Choice of Market**: Free competition allowed with the domestic producers.
3. **Choice of Ownership Structure**: The foreign investor is broadly free to own a majority share in equity of the business.
4. **Simplification of Procedures**: Two routes for FDI inflows have been opened: The RBI route (or the Mumbai route) and the Foreign Investment Promotion Board (FIPB) route (or the Delhi route). The RBI route is transparent in the sense that the guidelines are clear. Thus, if projects satisfy the guidelines, the approvals are practically automatic and speedy. It consists of 42 industries for FDI proposals and are listed in Annexure III of the industries list. The Foreign Investment Promotion Board (FIPB) route (or the Delhi route) entertains the cases which do not fit into the first case. These proposals by the foreigners are considered case by case. These changes mean that the Government is keen to attract more of foreign investment and apparently believes the following:
   - To go out to borrow is worse than allowing equity.
   - While profit is usually reinvested, the capital is generally never repatriated.
   - FDI brings technology which spreads to other sectors. These firms produce cheaper and better capital goods or intermediate products. There is competitiveness of sectors which spurs development and accelerates the growth process in the economy.

**23.4 Critical Evaluation of the New Policy**

The foreign investment environment in India has been improved by the economic reforms and the success of the new economic policy depends in a large measure on the liberal response of the foreign capital. The response of the foreign capital to the policy Initiatives can be described as follows:

It may be noted that the response of the foreign capital has not been ungrudging and the performance has been far below expectations. At present, there are less than 40 of the top 100 MNCs operating in India.
Notes

Points of Concern to Foreign Investors: Main concerns of foreign investors regarding the new policy are given below.

1. Comparative Advantage among Different Investment Markets: There are three basic advantages in India:
   (i) Cheap manpower.
   (ii) Large domestic market.
   (iii) Inputs with easy availability and lower costs. However, it is argued that low wage levels may be offset by productivity level to a large extent. For taking hard investment decisions, consumption patterns are more relevant than classifications based on incomes and in this regard, India may not score very high in foreigners’ projections. Moreover, the numbers of industries where India can offer such input advantages are few.

2. Permanence of New Policy: India must assure the foreign investors of the liberalisation policy in the future also.

3. Exit Policy: Disinvestment requires approvals which are both cumbersome and time-consuming and are virtually dictated by the RBI. This makes potential foreign investors more cautious in considering investment proposals.

4. Procedural Simplifications: The procedures should be simplified.

5. Removal of Comparative Disadvantages: India must convince that the existing comparative advantages are not offset by the comparative disadvantages they have to cope with in the country.

Self-Assessment

1. Choose the correct options:
   (i) ............... is (are) the sourcing of goods and services from locations world-wide in seeking advantage of national differences and a form of competitive advantage.
   (a) Factors of production (b) Distribution of production
   (c) Globalization of production (d) Dominance of production
   (ii) Which of the following is the oldest institution to maintain order in the international monetary system?
   (a) United Nations (UN)
   (b) International Monetary Fund (IMF)
   (c) World Trade Organization (WTO)
   (d) General Agreement on Tariffs and Trade (GATT)
   (iii) ............... is when a firm invests resources in business activities outside its home country.
   (a) Capital intensive investment (b) Overseas selective borrowing
   (c) Venture capital development (d) Foreign direct investment
   (iv) Which of the following is NOT one of the four major factors that help the U.S. to continue to hold competitive advantages over other national players for global market share?
   (a) the reputation of U.S. graduate schools of business and management
   (b) the U.S. dominance in direct foreign investment
   (c) the dominance of U.S. multinational corporations on the international business scene
   (d) the U.S. dominance in trade and commercial diplomacy which few nations can compete
   (v) Which of the following reflects the trends of the global economy in the 21st Century?
   (a) Globalization is not inevitable.
   (b) The skill, scope and authority of world institutions mean global financial shocks and challenges to global business systems will be mild and short-lived and will eventually disappear.
(c) There will be little change in the current leaders in world trade.
(d) The adoption of liberal economic policies will likely continue everywhere throughout the world because of their undeniable success.

(vi) Which of the following is NOT true about employment and income in the face of continuing globalization:
(a) The wage gap between developed and developing nations is closing.
(b) Recent evidence suggests that technological change had has a bigger impact on globalization on the declining share of national income enjoyed by labor.
(c) Real labor compensation has declined in most developed nations since the 1980s, including for the U.S.
(d) The solution to stagnant incomes among the unskilled is not in limiting free trade but increasing society's investment in education to reduce the supply of unskilled workers.

23.5 Summary

- The foreign capital contributes to gap-filling in an economy. Savings gap, Trade gap and Technology gap are three gaps that can be filled by foreign capital. This would create conditions suitable for fast economic growth. Thus, inflow of capital from abroad is vital for the growth of a developing economy, especially in the initial stages.
- There are two structural constraints in a developing economy: a minimum requirement of inputs to sustain a given rate of growth of GNP; and an actual or potential ceiling on export earnings.
- Foreign aid and private investment are two types of inflows of capital from abroad. Loans and grants from Foreign Governments and Institutions are included in the foreign aid. Since these may have repayment obligations, this source of foreign capital, especially loans, has a limitation.
- There are two types of foreign private equity capital flows: (1) portfolio investment (an investor holds shares in a firms in a developing country but is not involved in its management) and (2) foreign direct investment.
- The Foreign Direct Investment (FDI) in any country abroad is the net inflow of investment (capital or other), in order to acquire management control and profit sharing (10% or more voting stock) or the whole ownership of an accredited company operating in the country receiving investment.
- The foreign direct investment is profitable both to the country receiving investment (foreign capital and funds) and the investor. For the investor company FDI offers an exclusive opportunity to enter into the international or global business, new markets and marketing channels, elusive access to new technology and expertise, expansion of company with new or more products or services, and cheaper production facilities.
- MNCs are involved in foreign direct investment which means they own or control income generation assets in more than one country. Thus, they produce goods or services outside its country of origin. There are more than eleven thousand MNCs with more than eighty-two thousand subsidiaries in operation in today’s world economy.
- Foreign capital has been given an important role to play in the planned economy of India. In the first stage, foreign capital was looked upon as a means to supplement domestic investment but gradually the emphasis shifted to encouraging technological collaboration between Indian entrepreneurs and foreign entrepreneurs.
- In India, foreign investment is subject to the same industrial policy as all other business ventures. Moreover, there are some additional policies and rules specially governing foreign collaboration.
- The foreign investment environment in India has been improved by the economic reforms and the success of the new economic policy depends in a large measure on the liberal response of the foreign capital.
• It may be noted that the response of the foreign capital has not been ungrudging and the performance has been far below expectations. At present, there are less than 40 of the top 100 MNCs operating in India.

23.6 Key-Words

1. FDI: Foreign direct investment (FDI) is direct investment into production or business in a country by a company in another country, either by buying a company in the target country or by expanding operations of an existing business in that country. Foreign direct investment is in contrast to portfolio investment which is a passive investment in the securities of another country such as stocks and bonds.

2. Multinational corporations: A corporation that has its facilities and other assets in at least one country other than its home country. Such companies have offices and/or factories in different countries and usually have a centralized head office where they co-ordinate global management. Very large multinationals have budgets that exceed those of many small countries. Sometimes referred to as a "transnational corporation".

23.7 Review Questions

1. What is the role of FDI? Discuss.
2. Discuss the type of foreign capital.
3. Explain the characteristics of Multinational corporation.

Answers: Self-Assessment

1. (i) (c) (ii) (b) (iii) (a) (iv) (a) (v) (a)
   (vi) (c)

23.8 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited
   New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company
   LTD. Ram Nagar, New Delhi-110055.
Unit 24: Fiscal Federalism in India

CONTENTS

Objective
Introduction
24.1 Fiscal Federalism in India
24.2 Meaning and Scope of Fiscal Policy
24.3 Summary
24.4 Key-Words
24.5 Review Questions
24.6 Further Readings

Objectives

After reading this Unit students will be able to:
• Discuss about the Fiscal Federalism in India.

Introduction

To build a strong united India, India has adopted federalism. It has been done in order to actualise and uphold the values of national unity, cultural diversity, democracy, regional autonomy and rapid socio economic transformation through collective efforts. The Commission on Centre State Relations chaired by Justice R.S. Sarkaria which reported in 1988 has discussed the diverse political, economic and juridical aspects of federal fiscal relations. As a reaction to over-centralisation in the past decades, the States have been asking for greater freedom in the exercise of economic powers. Besides, the current policy of decentralising economic decision-making through liberalisation can aggravate regional disparities and here the Centre has an important role to play. At the same time, the less developed States will have to make corrections in their policies to attract investment, otherwise there are going to be more disparities. The Constitution envisages that fiscal resources would be transferred to the States on the recommendations of the Finance Commission. The capital resources for planned development are now transferred on the recommendations of the Planning Commission. The National Development Council, considers questions of national developmental policy and recommends measures for the implementation of the objectives and targets set out for the national plans. These institutions are expected to play a very effective role as adequate forum of consultation and co-operation between the States and Union, but within a centralised framework.

24.1 Fiscal Federalism in India

The India Constitution has divided the powers in various fields between the Central Government and States. For instance, in the financial field, it has very elaborate provisions. It may be noted that the financial relations between the Centre and States are among the most difficult problems in a federation. It seems to be more logical if we opt for complete separation of taxation powers but according to K. Santhanam, it has given rise to a new set of difficult problems regarding transfer of funds from the Centre to the States. In India, there are three main principles: the Centre as well as the States should be autonomous in their finances; (i) they should be able to obtain enough funds; and (ii) the receipts should grow. However, the reconciliation of these principles is never easy. Today, what is needed is a functional and not a political or ideological approach.
Constitutional Provisions

Allocation of Revenues between the Centre and States: The Constitution has divided tax-sources between the Centre and the States so that there should be no overlapping of tax jurisdiction, otherwise, it will cause confusion and conflict. Thus, the distribution of taxes in India is more logical and thorough than in other federations. There are three lists: the Union List (List I), the State List (List II) and the Concurrent list (List III).

Taxing Powers: In effecting a division of resources, the Constitution provides for a strong centre. The Constitution ensures the supremacy of the action of the Union Government over the fairly comprehensive Union list as also over concurrent jurisdiction. Allocation of the heads of taxation between the Union and the States is based on: he broad principle that taxes which are location-specific and relate to subjects of local consumption have been assigned to the States. Those taxes like for example Income tax which are of inter-state significance and where the place of residence is not a correct guide to the true incidence of tax have been vested in the Union. This clear-cut division of heads of taxation between the Union and States has minimised the scope for conflicts and litigation between them. The taxes over which the Union has legislative jurisdiction can be classified as follows:

(a) Taxes which are to be levied and collected by the Union and the entire proceeds therefrom are to be retained by it. These include corporation tax and Customs duties.
(b) Taxes which are levied and collected by the Union but proceeds are shared with the States. These are income tax, and excise duties.
(c) Taxes which are levied by the Union but collected and retained by the States. These are estate duties and terminal taxes on goods and services.
(d) Taxes which are levied by the Union but collected and retained by the States. These are excise duties on medicinal and toilet preparations (containing alcohol), opium, etc.

Article 286 of the Constitution prohibits taxation by States of

(a) Imports into or exports from the territory of India;
(b) Inter-state trade; and
(c) sale of goods declared by law to be essential for the life of the community.

The property of the Union is exempt from State taxation. The property and income of the States are exempt from the Union taxation. In addition to the provisions for tax-sharing, Article 275 of the Constitution provides for both general purpose and specific grants. However, it has been left to the Parliament to decide which States are in need of grant assistance and to what extent subject to the recommendations of the Finance Commission.

Finance Commission

The Finance Commission of India came into existence in 1951. It was established under Article 280 of the Indian Constitution of India by the President of India. It was formed to define the financial relations between the Centre and state. The Finance Commission Act of 1951 States the terms of qualification, appointment and disqualification, the term, eligibility and powers of the Finance Commission. As per the Constitution, the commission is appointed every five years and consists of a chairman and four other members. Since the institution of the first Finance Commission, stark changes have occurred in the Indian economy causing changes in the macro-economic scenario. This has led to major changes in the Finance Commission’s recommendations over the years. Till date, Thirteen Finance Commissions have submitted their reports.

Planning Commission

In Centre-State financial relations, the Planning Commission is another important body which has an important place. The responsibility for taking decisions and implementing plans rests with the Union and the State Governments. It may be noted that the resolution emphasised the need for “adequate coordination” between the development schemes initiated by the Union and the States. This was also to be done for comprehensive planning based on a careful appraisal of resources and essential conditions of progress of the country.
**Finance Commission Versus Planning Commission**

According to Dr. P.V. Rajamanner, Chairman of the Fourth Finance Commission, the Planning Commission has restricted the scope and functions of the Finance Commission. Plan grants are given under various developmental heads. The discretionary grants made under the recommendations of the Planning Commission have been much greater than the grants given under Article 275 (1). Moreover, these grants are available only for the plan period at the end of which they become committed expenditure for which the States are exclusively responsible. Therefore, the States approach the Finance Commission and try to get a greater share of revenue and larger grants. It was greatly intensified by the loans issued by the Centre. However, a considerable portion of these loans have been spent for purposes which do not yield any income, and their burden of interest and repayment fall on the State revenues. Due to planning, the federal financial relations have become seriously distorted in our country.

**Issues in Fiscal Federalism**

The sprawling powers of the Central Government eroding the foundations of fiscal federalism have been questioned from time to time. Now, under the changed circumstances, need for change in the outlook of the Union towards the States and of the States towards the Union is being felt. The Central Government is finding it difficult to impose its will or decision on the States. The root cause of States’ chorus of more and more demands is too much financial dependence on the Centre. Consequently, it has caused demand for more financial powers. We have to find a satisfactory and enduring solution to the problem of Centre and State relations through a rigorous and concerted drive against tax evasion, tax avoidance and waste and extravagance in public expenditure. At the same time, we must ensure all round efficiency in the deployment of public funds in particular, investments in productive enterprises in the public sector. It may be seen that the appointment of the Sarkaria Commission by the Centre reflected its recognition of the seriousness of the issue.

In the context of the States asking for greater decentralisation of powers to manage their economies, the Centre-State economic relations have assumed special significance. The Finance Commission alone cannot solve the difficult problems faced by it. Therefore, a harmonious, equitable and efficient delegation of financial powers between Centre and States must be an integral part of the overall investment and planning objectives of the economy. While the earlier arrangements have provided a flexible mechanism for the operation of fiscal federalism, there is a widespread feeling that they have proved inadequate. The issues in Union-States financial relations may identified as follows:

(i) The institutions to safeguard the fiscal autonomy of the States have not helped much.

(ii) Looking at the Constitution, we find that the distribution of responsibilities and powers as a chronic imbalance with concentration of fiscal powers in the Centre.

(iii) The fact that the Planning Commission is not a statutory body is a point of discord.

(iv) Centre decides about one-fifth of the total transfers on its own discretion.

(v) Above all, the unitary elements further strength over the years with concentration of fiscal powers in the Centre and growing dependence of the States on financial transfers.

For the improvement in the situation, a few suggestions may be given. The purpose is three-fold (i) Due share of States in responsibilities and rights; (ii) A continuing system of communication and clearing should be available; and (iii) The Centre has to discharge its coordinating, corrective and lead functions in a truly federal system.

**Recommendations of the Twelfth Finance Commission (TFC)**

The Twelfth Finance Commission was incorporated in the year 2005. The commission made recommendations for the distribution of the net proceeds of the taxes between the Union and the States. It also recommended taking of certain measures for augmenting the Consolidated Fund of a State. It also reviewed the financial status of the States and ensured macro-economic stability in the same, evaluated the debt positions of the States and the schemes implemented by the Central
Government to ensure an improved financial system. The TFC has recommended about 74 per cent step up in transfer of resources. There has been a sharp rise in the grant portion of 143% from ₹ 58,587 crore awarded by the EFC. At the same time, taxes portion has gone up by 63% from ₹ 3,76,318 crore. The share of States’ in Centre’s divisible pool of tax and duties has been enhanced to 30.5%. An estimated ₹ 6,13,112 crore is to be devolved to the States as their share in Centre’s tax and duties and ₹ 1,42,639 crore as grants-in-aid, according to the TFC.

Restructuring Public Finances:

(i) The combined tax-GDP ratio to 17.6% to be improved by 2009-10 by Centre and States.
(ii) By 2009-10, 75% reduction in the combined debt-GDP ratio.
(iii) 3% fiscal deficit to GDP.
(iv) Zero revenue deficit by 2009-10.
(v) The interest payments relative to revenue receipts should be 28% for the Centre and 15% for States.
(vi) The total salary bill, relative to revenue expenditure, net of interest payments, should not exceed 35%.
(vii) A fiscal responsibility legislation should be enacted which provides for elimination of revenue deficit by 2008-09 and reducing fiscal deficit to 3% of State Domestic Product.
(viii) On-lending to be stopped.

24.2 Meaning and Scope of Fiscal Policy

The word ‘fisc’ means ‘state treasury’ and ‘fiscal policy’ refers to policy concerning the use of ‘state treasury’ or the government finances to achieve certain macroeconomic goals. Fiscal policy has however been variously defined by the economists. Arthur Smithies defined fiscal policy as “a policy under which government uses its expenditure and revenue programs to produce desirable effects and avoid undesirable effects on the national income, production, and employment.” G. K. Shaw, a well-known expert on the subject, defines fiscal policy as “any decision to change the level, composition or timing of government expenditure or to vary the burden, structure or frequency of the tax payment.” Shaw’s definition presumes that national economic goals are given. Samuelson and Nordhaus offer a more complete definition of fiscal policy. By fiscal policy they “mean the process of shaping taxation and public expenditure to help dampen the swings of the business cycle and contribute to the maintenance of a growing, high-employment economy, free from high or volatile inflation.” In their opinion, the role of fiscal policy is confined largely to stabilization of employment and the price level. Its seems, they have defined fiscal policy keeping in view the problems of the developed countries. Fiscal policy can be defined in more general terms as follows. Fiscal policy is the government programme of making discretionary changes in the pattern and level of its expenditure, taxation and borrowings in order to achieve certain economic goals such as economic growth, employment, income equality, and stabilization of the economy on a growth path.

A narrow concept of fiscal policy is budgetary policy. While budgetary policy refers to current revenue and expenditure of the financial year, fiscal policy refers to budgetary operations including both current and capital receipts and expenditure. The essence of fiscal policy lies, in fact, in the budgetary operations of the government. The two sides of the government budget are receipts and expenditure. The total receipts of the government are constituted of tax and non-tax revenue and borrowings (including deficit financing). These items in the budget represent the budgetary resources of the government. The government expenditure refers to the total expenditure made by the government in the fiscal year. The total government expenditure consists of payments for goods and services, wages and salaries, interest and loan repayments, subsidies, pensions and grants-in-aid, and so on. From economic analysis point of view, receipt items give the measure of the flow of money from the private sector to the government sector. The government expenditure, on the other hand, represents the flow of money from the government to the economy as a whole. The government receipts are inflows and expenditures are outflows.
The government can, by using its statutory powers, change the magnitude and composition of inflows and outflows and thereby the magnitudes of macroeconomic variables—aggregate consumption expenditure and private savings and investment. The magnitude and composition of inflows and outflows can be altered by making changes in taxation and government spending. The policy under which these changes are made is called fiscal policy.

The scope of fiscal policy comprises the fiscal instruments and the target variables. Fiscal instruments are the variables that government can use and maneuver at its own discretion to achieve certain economic goals. Fiscal instruments include taxation (direct and indirect), government expenditure, transfer payments (grants and subsidies) and public investment. The target variables are the macro variables including disposable income, aggregate consumption expenditure, savings and investment, imports and exports, and the level and structure of prices. The fiscal policy instruments and target variables are discussed below in detail.

Compensatory Fiscal Policy

Another variant of stabilizing policy is compensatory fiscal policy. The compensatory fiscal policy is a deliberate budgetary action taken by the government to compensate for the deficiency in, and to reduce the excess of, aggregate demand. The compensatory action is taken by the government in the form of surplus budgeting or deficit budgeting. In this kind of fiscal policy, the government uses a greater degree of discretion than in automatic stabilization policy and compensatory fiscal policy can be revised from time to time as per need of the country. Besides, the policy of surplus budgeting is adopted when the government is required to control inflation and policy of deficit budgeting is adopted when the objective is to control deflation.

The policy of deficit budgeting is adopted to fight depression in the economy. During the period of depression, the government is required to boost up the aggregate demand, especially when the economy is facing depression due to lack of effective demand. The government in this case is required to take compensatory fiscal measures. The compensatory measures may be in the form of tax reduction and enhanced government spending. This kind of fiscal measures increases aggregate demand. Increase in aggregate demand leads first to the rise in price level. It adds to the producers’ profit with a time lag in increase in costs. This increase in profits creates an optimistic environment. Therefore, both opportunity and incentive to invest increase. This is supposed to push up the level of employment and output. This is the kind of fiscal policy that most countries affected by the recent global recession had adopted.

The policy of surplus budgeting is adopted by the governments during the period of high rate of inflation, especially when inflation is caused by excessive demand. Surplus budgeting is a powerful tool to control the aggregate demand. Under this policy, the government keeps its expenditure lower than its revenue. If necessary the government may resort to a higher rate of taxation and cut its expenditure further down. Taxation reduces disposable income. As a result, the aggregate demand decreases at the rate of tax multiplier. On the expenditure side, a cut in the government expenditure reduces the aggregate demand at the rate of expenditure multiplier. The two-prong attack on the aggregate demand helps reducing the demand pressure and, thereby, the inflation.

Discretionary Fiscal Policy

A discretionary fiscal policy is one in which ad hoc changes are made in the government expenditure and taxation system and tax rates at the discretion of the government as and when required. In discretionary fiscal policy, the government makes deliberate changes in (a) the level and pattern of taxation, (b) the size and pattern of its expenditure, and (c) the size and composition of public debt. The discretionary changes in these fiscal instruments are made with a view to achieving certain specific objectives. The discretionary changes in taxation and government expenditure and their effects on the target variables are described here briefly.

(a) Changes in Taxation: The discretionary changes in taxation include such changes in both direct and indirect taxes as (i) increasing or decreasing the tax rates, (ii) imposition of new taxes or abolition of existing taxes, and (iii) imposition of taxes on new tax bases. All these kinds of changes in taxation result in either the flow of household incomes to the government or to reduction in such flows. Tax changes that reduce disposable incomes of the households cause a decline in
the consumer demand and, therefore, a *contractionary effect* on the economy. This proves helpful in reducing the *inflationary pressure* in the economy.

(b) **Discretionary Changes in Government Expenditure**: The discretionary changes in the government spending include change in (i) the size of the government expenditure, (ii) the pattern of government expenditure, (iii) the methods of financing government expenditure, (iv) transfer payments (e.g., subsidies, old age pensions, unemployment relief, etc.), (v) overall budgetary surplus and deficit, and (vi) the methods of deficit financing.

Here again, there are no set rules for making changes in the fiscal policy. Any or many of these changes can be made at any time at the discretion of the government. Changes can be altered or reversed at the discretion of the government. It is this character of fiscal policy which makes a *discretionary policy*.

**Limitations of Discretionary Fiscal Policy**: It is generally alleged that a discretionary fiscal policy works in theory better than in practice. The discretionary fiscal policy does not work effectively in practice because it has certain limitations.

**First**, an *important limitation* of discretionary policy is that it is suitable and effective only when it is used for short-run corrections in the economy. Attempts to solve the macroeconomic maladjustments or disequilibrium of long-term nature through the discretionary fiscal policy creates a greater mess and distortions in the economy rather than resolving them.

**Second**, an important factor that makes effectiveness of discretionary fiscal policy doubtful even in the short run is the problem in making an accurate assessment of the magnitude of the problem and forecasting expected results of policy changes. In the absence of reliable estimates and forecasting, the decisions are likely to go wrong and the consequences may be disastrous. For example, like all other countries affected by the global recession, India had implemented certain short-run stimulus package. Since the economy has started recovering, the government is in dilemma as to whether or not to withdraw the stimulus package because its effects are unpredictable.

**Third**, there are two kinds of *time-lags* in the implementation of fiscal actions: pre-implementation and post-implementation time-lags. Pre-implementation time-lag arises due to time, taken in the process of decision-making, called ‘decision lag’. The policy measures and policy tools are decided upon by the policy-makers and the think-tank of the government. For instance, in India, for all long-term fiscal actions or policy reforms, a committee is appointed to make its recommendation. The committee takes more time than stipulated in its terms of reference. After the committee makes its recommendations, the report is placed for the bureaucratic appraisal. It is then sent for ministerial consideration for its approval. The committee’s recommendations are then placed before the Parliament for discussion. After its approval by the Parliament, proposals find a place in the Finance Bill. The time lost in decision-making is called ‘decision lag’. After the Finance Bill is voted, it takes further time in the implementation of the policy. It is called ‘execution lag’.

Thus, a considerable time is lost in the process of decision-making and its execution. As regards the post-implementation time-lag, it arises due to lagged effect of fiscal actions. The lagged effect arises because fiscal changes work through the related variables and, therefore, take a long time to produce the expected result or unexpected/undesired effects or to show that they cannot produce any satisfactory results.

The time-lag associated with the working of the discretionary fiscal policy makes the efficacy of the policy doubtful. Its working is further complicated when other changes are made in the fiscal policy before the full effect of a previous action is realized. This also complicates the assessment of the performance of the policy. In India, such changes were of regular nature—fiscal changes were made invariably in each annual budget—before the Economic Reforms were made in 1990—91. Changes in taxation and expenditure are also made within a financial year. Now, the frequency of discretionary fiscal changes has considerably reduced.

**Fiscal Policy of India**

India’s fiscal policy was formulated initially in 1950-51 in the background of India’s economic conditions at the time of Independence. The Indian economy was trapped in a *vicious circle of poverty*.
with the lowest per capita income and consumption in the world. Over the entire period of 40 years from 1910 to 1950, the growth rate of the economy had been nearly zero. After Independence, the government assumed the responsibility of creating conditions for the growth of economy. The Government of India adopted a policy of ‘mixed economy’ under democratic framework, in which the public sector had to play a leading role. The government assumed a leading role in the economy because the economy was dominated by the primitive agricultural sector. The private industrial sector of the country was underdeveloped and, therefore, could not be relied upon to play a significant role in the economic development of the country for at least a decade or two. As a strategic measure, the government adopted the Five Year Development Plans. The basic objectives of Development Plans are (i) to achieve a target growth rate, generally 5 percent, (ii) to promote employment opportunities, (iii) to remove poverty, and (iv) to reduce income inequalities. The basic philosophy of the government’s overall economic policy was ‘growth with social justice’.

**India’s Discretionary Fiscal Policy**

The most difficult problem that the Government of India faced was how to mobilize resources for development. It was with this background that the government formulated its fiscal policy. Under the conditions highlighted above, the Government of India adopted discretionary fiscal policy. The government has throughout used its discretion to determine the pattern and level of both taxation and its expenditure. In order to raise financial resources, the government adopted very extensive direct and indirect taxation with highly progressive tax rates. Prior to economic reforms of 1991, the government changed its tax rate and exemption limits almost every third year, sometimes in each annual budget. So was the case with the level and pattern of its expenditure. The dominant aspect of the government’s discretionary fiscal policy was to raise maximum possible revenue through direct and indirect taxation for meeting its revenue requirement, and to allocate expenditure in the manner that could promote growth and employment. Whether the government succeeded in these objectives with its fiscal policy is a different issue.

However, total tax revenue collected through taxation had fallen much short of government’s plan expenditure. Therefore, the government had rely heavily on deficit financing, especially on borrowing from the RBI. In effect, India has adopted a deficit budgeting policy.

The fiscal policy of the Central Government is reflected in its annual budget. Let us have an overview of the annual budgets of the Government of India in recent years. The annual budget has two sides: (i) revenue side, and (ii) expenditure side. The government revenue includes tax revenue and non-tax revenue, and government expenditure includes both development and non-development expenditures. Both government revenue and expenditure are further classified under: (i) revenue account, and (ii) capital account. Let us have a glance at the pattern of government revenue and expenditure in some detail.

**Fiscal Reforms and Fiscal Deficits Since 1991**

Till 1990-91, the Government of India made minor modifications in its fiscal policy (including both taxation policy and expenditure pattern). But drastic changes were made in the fiscal policy and fiscal management of the country in 1991. Here we present a brief analysis of the reforms made by the government in its fiscal policy since 1991.

In 1990, India faced an unprecedented foreign exchange crisis mainly due to rise in crude oil prices following the Gulf War. Due to a sharp rise in oil price, import bill of the country shot up from a monthly average of $287 million in June-August 1991 to $671 million in the following 6 months. As a result, the foreign exchange reserves declined from $3.11 billion in August 1990 to $896 million in 16 January 1991. The Indian economy was almost on the verge of economic collapse. However, financial help provided by the IMF in the form of a loan of $665 million in September 1990 helped the country tide over the crisis. This crisis created conditions and need for evaluating the significance and relevance of country’s economic policies in general and fiscal policy and foreign trade policy in particular. Fiscal reform was one of the main aspects of the economic policy reforms made in 1990-91.

In the opinion of the experts, a reversal of the fiscal expansionism was essential for restoring the macroeconomic balance in the economy. The government adopted a policy to reduce the fiscal deficit.
Indian Economic Policy

Notes

As a result, the ratio of fiscal deficit to GDP declined considerably. It declined from 5.5 percent in the late 1980s to 4.5 percent in the 1990s, and then to 3.2 percent in the 2007-08 Budget (see Appendix). Fiscal deficit was reduced by restraining the growth rate of both the revenue and capital expenditures. In order to regularize the fiscal management of the country, an Act — Fiscal Responsibility and Budget Management Act (FRBMA) — was passed in 2003. The FRBM Act prescribes 3 percent of GDP as the upper limit for fiscal deficit, to be achieved by 2008-09. The 2007-08 budget estimates show that the government is close to achieving this target.

Apart from constraints imposed by the FRBM Act, robust economic growth and improved performance of the manufacturing and services sectors kept the tax revenue buoyant in the last five years. The average revenue growth rate, over this period, was 16.2 percent and growth rate of net tax revenue of the central government was 20.7 percent. The gross tax-GDP ratio increased from 8.9 percent during the preceding decade to 11.5 percent in 2006-07, and is estimated to rise to 12.9 percent in 2008-09 (BE). However, inflation rate has risen from about 5 percent during 2003-07 to 12 percent in July 2008. In order to control inflation, the RBI adopted a stringent monetary policy. It had raised the prime lending rates. However, due to low impact of global recession on the Indian economy and a prudent monetary policy, inflation rate has gone down to a negative rate of — 1.6 percent. But, in 2008-09, (RE) the fiscal deficit was 6.1 of GDP. The fiscal deficit remains a challenge for the government.

Self-Assessment

1. Choose the correct options:

   (i) Federal Reserve Board of Governors members are appointed by the ________ and confirmed by the ________.

   (a) Treasury; Congress (b) President; Senate
   (c) Federal Reserve presidents; Treasury (d) Public; House of Representatives

   (ii) FOMC, the policy making body of the Federal Reserve, stands for ____________.

   (a) Financial Options Management Corporation
   (b) Final Organized Money Company
   (c) Federal Open Market Committee
   (d) Fiscal Operating Money Committee

   (iii) The federal funds rate is set by the FOMC and refers to ____________.

   (a) The rate that affects what fees banks charge consumers
   (b) The rate in which the Treasury measures the deficit
   (c) The interest rate that banks are charged to borrow from the Fed
   (d) The interest rate that banks use to lend to each other overnight

   (iv) The finance commission of India came into existence in

   (a) 1951 (b) 1945
   (c) 1972 (d) 1989

24.3 Summary

• The India Constitution has divided the powers in various fields between the Central Government and States. For instance, in the financial field, it has very elaborate provisions. It may be noted that the financial relations between the Centre and States are among the most difficult problems in a federation.

• The Constitution has divided tax-sources between the Centre and the States so that there should be no overlapping of tax jurisdiction, otherwise, it will cause confusion and conflict. Thus, the distribution of taxes in India is more logical and thorough than in other federations.
• The property of the Union is exempt from State taxation. The property and income of the States are exempt from the Union taxation. In addition to the provisions for tax-sharing, Article 275 of the Constitution provides for both general purpose and specific grants.

• Under the Constitution, the Government of India can borrow internally as well as externally. The Article 292 empowers the Government of India to borrow upon the security of the Consolidated Fund of India. States too are empowered to borrow under Article 293 which States that a State cannot borrow outside India.

• The Finance Commission of India came into existence in 1951. It was established under Article 280 of the Indian Constitution of India by the President of India.

• In Centre-State financial relations, the Planning Commission is another important body which has an important place. The responsibility for taking decisions and implementing plans rests with the Union and the State Governments.

• It is observed that population has been given greater weightage for the basis of distribution of shareable taxes amongst the States. The two salient features of tax-sharing determined by the Finance Commissions are the growing importance of Union excise amongst the shared taxes and the ascendency of population as the principal basis of distribution.

• The sprawling powers of the Central Government eroding the foundations of fiscal federalism have been questioned from time to time. Now, under the changed circumstances, need for change in the outlook of the Union towards the States and of the States towards the Union is being felt.

• The Twelfth Finance Commission was incorporated in the year 2005. The commission made recommendations for the distribution of the net proceeds of the taxes between the Union and the States. It also recommended taking of certain measures for augmenting the Consolidated Fund of a State.

• According to the TFC recommendations, the total transfers should be 73.8% more than what its predecessor allowed with both the share in Central taxes and grants-in-aid being higher. This means the States have scant cause for complaint over the TFC report.

• The word ‘fisc’ means ‘state treasury’ and ‘fiscal policy’ refers to policy concerning the use of ‘state treasury’ or the government finances to achieve certain macroeconomic goals. Fiscal policy has however been variously defined by the economists.

• A narrow concept of fiscal policy is budgetary policy. While budgetary policy refers to current revenue and expenditure of the financial year, fiscal policy refers to budgetary operations including both current and capital receipts and expenditure.

• The scope of fiscal policy comprises the fiscal instruments and the target variables. Fiscal instruments are the variables that government can use and maneuver at its own discretion to achieve certain economic goals.

• Fiscal policy is implemented through fiscal instruments also called ‘fiscal handles’, ‘fiscal tools’ and Fiscal levers’. The changes made in fiscal tools work through their linkage to the target variables.

• Public borrowings include both internal and external borrowings. The governments make borrowings, generally, with a view to financing their budget deficits.

• There is no unique fiscal policy that can provide appropriate solution to all kinds of economic problems and under different condition in different countries and at different points of time.

• The automatic fiscal policy means adopting a fiscal system with built-in-flexibility of tax revenue and government spending. Built-in-flexibility means automatic adjustment in the government expenditure and tax revenue in response to rise and fall in GDP.

• The working of automatic stabilizer is simple. In a fast growing economy, tax collection increases with increase in incomes which constraints aggregate demand. On the other hand, unemployment decreases causing decline in government spending.
Notes

- Another variant of stabilizing policy is *compensatory fiscal policy*. The compensatory fiscal policy is a deliberate budgetary action taken by the government to compensate for the deficiency in, and to reduce the excess of, aggregate demand.

- A discretionary fiscal policy is one in which ad hoc changes are made in the government expenditure and taxation system and tax rates at the *discretion* of the government as and when required.

- Peston has rightly remarked, “The literature on economic policy makes a great deal of fuss about discretionary versus automatic policy making. ”The distinction between *automatic* and *discretionary* fiscal policies is a matter of frequency of government discretion in changing the taxation and expenditure programmes.

- The mechanism of fiscal policy described above appears to be theoretically simple and feasible. In practice, however, policy-makers face a number of problems in the formulation and execution of the fiscal policy.

- India’s fiscal policy was formulated initially in 1950-51 in the background of India’s economic conditions at the time of Independence. The Indian economy was trapped in a *vicious circle of poverty* with the lowest per capita income and consumption in the world.

- The most difficult problem that the Government of India faced was how to mobilize resources for development. It was with this background that the government formulated its *fiscal policy*. Under the conditions highlighted above, the Government of India adopted *discretionary fiscal policy*.

- The fiscal policy of the Central Government is reflected in its annual budget. Let us have an overview of the annual budgets of the Government of India in recent years.

- In order to understand the basic features of India’s fiscal policy, let us study the central government’s budget’s of the last few years.

- Till 1990-91, the Government of India made minor modifications in its fiscal policy (including both taxation policy and expenditure pattern). But drastic changes were made in the fiscal policy and fiscal management of the country in 1991.

- Apart from constraints imposed by the FRBM Act, robust economic growth and improved performance of the manufacturing and services sectors kept the tax revenue buoyant in the last five years.

### 24.4 Key-Words

1. **Fiscal federalism**: As a subfield of public economics, fiscal federalism is concerned with "understanding which functions and instruments are best centralized and which are best placed in the sphere of decentralized levels of government" (Oates, 1999). In other words, it is the study of how competencies (expenditure side) and fiscal instruments (revenue side) are allocated across different (vertical) layers of the administration.

2. **Fiscal policy**: The three main stances of fiscal policy are:
   - (i) Neutral fiscal policy is usually undertaken when an economy is in equilibrium. Government spending is fully funded by tax revenue and overall the budget outcome has a neutral effect on the level of economic activity.
   - (ii) Expansionary fiscal policy involves government spending exceeding tax revenue, and is usually undertaken during recessions.
   - (iii) Contractionary fiscal policy occurs when government spending is lower than tax revenue, and is usually undertaken to pay down government debt.
24.5 Review Questions

1. What is the meaning and scope of Fiscal Policy? Explain.
2. What are the constitutional provisions for the fiscal federalism? Discuss.
3. Write a note on the fiscal federalism in India.

Answers: Self-Assessment

1. (i) (b) (ii) (c) (iii) (d) (iv) (a)

24.6 Further Readings

Books

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Unit 25: Government Finance: Union and States

CONTENTS
Objective
Introduction
25.1 Government Finance: Union and States
25.2 Summary
25.3 Key-Words
25.4 Review Questions
25.5 Further Readings

Objectives

After reading this Unit students will be able to:

• Describe the Government Finance: Union and States.

Introduction

It has been observed that since the mid-1980s, the fiscal position of the both Centre and States Government in India has been under pressure. The stress originates from the inadequacy of receipts in meeting the growing expenditure requirements. We find that the State finances have not been properly managed not only by the States but also by the Planning Commission and the Central Government, which include economists. They do not see States as autonomous, responsible organisations which have to take care of the debt by themselves. Today, one of the major obstacles in the way of reviving growth is the sorry state of State finances since they could not do the minimum that they should do. They have no money to invest. Apart from the persistent problem of unacceptable revenue deficits and high fiscal deficits, many State Governments are now faced with the problem of mounting debt, particularly the burden of contingent liabilities in the form of outstanding guarantees. At present, the estimated total debt of the Central and State Governments are above 80% of GDP. It may be noted that recent years have seen a very sharp upsurge in the indebtedness of both the Centre and the States.

25.1 Government Finance: Union and States

India has a federal structure, in which a clear distinction is made between the Union and State functions and sources revenue, but the residual powers belong to the Centre. Although the States have been assigned certain taxes which are levied and collected by them, they also share in the revenue of certain Union taxes, and there are certain other taxes which are levied and collected by the Union but the proceeds of which wholly go to the States. In addition, the States receive grants-in-aid of their revenue from the Union which further increase the amount of transfers between the two levels of governments. The transfer of resources from the Central Government to the States is an essential feature of the present financial system of India.

Division of Resources

The Constitution of India makes a clear division of fiscal powers between the Union (on the centre) and, the State Governments. The principle adopted for this classification is that taxes which have an interstate base are levied by the Union, while those with a local base are levied by the States. The residuary powers belong to the Union.
The Union taxes as laid down in List I, Seventh Schedule of the Constitution of India, are as under:

1. Taxes on income other than agricultural income,
2. Corporation tax,
3. Customs duties,
4. Excise duties except on alcoholic liquors and narcotics not contained in medical or toilet preparations,
5. Estate and succession duties other than on agricultural land,
6. Taxes on the capital value of assets, except agricultural land, of individuals and companies,
7. Rates of stamp duties on financial documents,
8. Taxes other than stamp duties on transactions in stock exchanges and future markets,
9. Taxes on sale or purchase of newspapers and on advertisements therein,
10. Taxes on railway freight and fares,
11. Terminal taxes on goods or passengers carried by railways, sea, or air,
12. Taxes on the sale or purchase of goods in the course of inter-State trade.

Taxes within the jurisdiction of the States as given in List II of the Seventh Schedule of the Constitution of India are as follows:

1. Land revenue,
2. Taxes on the sale and purchase of goods, except newspapers,
3. Taxes on agricultural income,
4. Taxes on land and buildings,
5. Succession and estate duties on agricultural land,
6. Excise on alcoholic liquors and narcotics,
7. Taxes on the entry of goods into a local area,
8. Taxes on mineral rights, subject to any limitations imposed by Parliament,
9. Taxes on the consumption and sale of electricity,
10. Taxes on vehicles, animals and boats,
11. Stamp duties except those on financial documents,
12. Taxes on goods and passengers carried by board or inland waterways,
13. Taxes on luxuries including entertainments, betting and gambling,
14. Tolls,
15. Taxes on professions, trades, callings and employment,
16. Capitation Taxes,
17. Taxes on advertisements other than those contained in newspapers.

The Union and the State Governments have concurrent powers to fix the principles on which taxes on motor vehicles shall be levied and to impose stamp duties on non-judicial stamps. The property of the Union is exempted from State taxation and the property and income of the State are exempted from Union taxation. The Parliament may, however, pass legislation for taxation by the Union of any trading or business activities of a State which are not part of the ordinary functions of the Government. States may delegate part of their taxation power to the Central Government, as had happened in the case of agricultural land being included in the purview of the Estate Duty Act in many States. Parliament has exclusive power to tax sales or purchases of goods in the course of inter-State trade.

**Distribution and Allocation of Central Revenue**

Apart from the taxes levied and collected by the States, the Constitution had provided for the revenues for certain taxes on the Union list to be allocated, partly or wholly, to the States. These provisions fall into various categories.

There are, in the first place, certain duties which are levied by the Union but are collected and appropriated by the States. These include stamp duties and excise duties on medical preparations containing alcohol or narcotics.

Secondly, there are certain taxes which are levied and collected by the Union, but the entire proceeds of which are assigned to the States, in proportion determined by the Parliament. These taxes include succession and estate duties, terminal taxes on goods and passengers, taxes on railway freight and fares, taxes on transactions in stock exchanges and futures markets, the taxes on the sale and purchase of newspapers and advertisements therein.

Thirdly, Central tax on income and Union excise duties were levied and collected by the Union but were shared by it with the States in a prescribed manner.

Finally, the proceeds of additional excise duties on mill-made textiles, sugar and tobacco, which were levied by the Union in 1957 in replacement of States’ sales taxes on these commodities, are wholly distributed among the States in a manner as to guarantee their former incomes from the displaced sales taxes.

**Resources Transferred to the States**

The importance of Central contributions to State resources becomes clear from Table 1 showing the transfer in broad categories since the inception of economic planning.
The figures indicate the rising contribution of the Centre to State resources. On an average, the States received ₹ 280 crores per year from the Centre during the First Plan, ₹ 3,020 crores per year during the fourth plan, and ₹ 21,000 crores per year during the Seventh Plan.

During the first plan, 36 per cent of the State expenditure was met by resources transferred by the Centre. Currently, transferred resources from the Centre pay for 46 per cent of the total expenditure of the States. The growing transference of resources from the centre to the states is evidence of: (a) increasing integration between the Central and State finances; (b) helpless dependence of States on the Centre; and (c) growing power and interference of the Centre in the affairs of the State.

Table 1: Gross Devolution and Transfer of Resources from the Centre to the States

<table>
<thead>
<tr>
<th>Period</th>
<th>Shared Taxes</th>
<th>Grants (net)</th>
<th>Loans</th>
<th>Total</th>
<th>Transferred Resources as percentage of States’ total expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951-52</td>
<td>50</td>
<td>30</td>
<td>70</td>
<td>150</td>
<td>25</td>
</tr>
<tr>
<td>First Plan (1951-56)</td>
<td>340</td>
<td>290</td>
<td>800</td>
<td>1,430</td>
<td>36</td>
</tr>
<tr>
<td>Second Plan (1956-61)</td>
<td>670</td>
<td>790</td>
<td>1,430</td>
<td>2,870</td>
<td>42</td>
</tr>
<tr>
<td>Third Plan (1961-66)</td>
<td>1,200</td>
<td>1,300</td>
<td>3,100</td>
<td>5,650</td>
<td>43</td>
</tr>
<tr>
<td>Fourth Plan (1969-74)</td>
<td>4,560</td>
<td>3,830</td>
<td>6,710</td>
<td>15,100</td>
<td>37</td>
</tr>
<tr>
<td>Sixth Plan (1980-85)</td>
<td>23,730</td>
<td>15,470</td>
<td>14,120</td>
<td>53,320</td>
<td>46</td>
</tr>
<tr>
<td>Seventh Plan (1985-90)</td>
<td>49,460</td>
<td>42,810</td>
<td>31,260</td>
<td>1,23,530</td>
<td>46</td>
</tr>
<tr>
<td>For the period (1990-95)*</td>
<td>98,890</td>
<td>90,720</td>
<td>54,650</td>
<td>2,44,260</td>
<td>43</td>
</tr>
</tbody>
</table>

Source: Report of the Twelfth Finance Commission (2005-10) and other Finance Commissions

The Finance Commission Awards

Under the provisions of Article 280 of the Constitution, the President is required to appoint a Finance Commission for the specific purpose of devolution of non-plan revenue resources. The functions of the Commission are to make recommendations to the President in respect of:

(i) the distribution of net proceeds of taxes to be shared between the Union and the States and the allocation of share of such proceeds among the States,

(ii) the principles which should govern the payment by the Union of grants-in-aid to the revenues of the States, and

(iii) any others matter concerning financial relations between the Union and the States.

The appointment of the Finance Commission is of great importance, for it enables the financial relation between the Centre and the units to be altered in accordance with changes in need and circumstances. The elasticity in relationship introduced by this provision has great advantage.

(a) Division and Distribution of Income Tax

The personal income tax is imposed and collected by the Union Government but the net proceeds are shared between the Centre and the States under Article 270 of the Indian Constitution. The Finance Commissions have to give their award on two points:

(a) the share of the States in the total collection of income tax (this is known as vertical division) and

(b) the principle/principles which should govern the share of each State in the divisible pool (this is known as horizontal division of resources between states).

Vertical division of Income Tax

The First Finance Commission (presided over by J.P. Neogi) recommended that the States should share 55 per cent of the proceeds of the income tax. But the successive Finance Commissions
had raised the States’ share in income tax to the level of 85 per cent (Seventh, Eighth and Ninth Finance Commissions). However, the Tenth Finance Commission in its report for the period 1995-2000 recommended that 77.5 per cent of the net proceeds of taxes on income should be assigned to states.

**Horizontal division of income tax proceeds**

As regards the basis for the distribution of the States’ pool of income tax proceeds among the States, the first few commissions had used the double criteria of population and tax collection. The First Finance Commission, for instance, recommended the allocation of income tax proceeds on the basis of 80 per cent and 20 per cent for population and collection. This criterion benefited populous states as well as those richer states which contributed more income tax revenue. The Second Finance Commission regarded population of a State as a more important basis for distribution and, accordingly, awarded that 90 per cent of the States’ divisible pool of income tax should be distributed on the basis of population. This criterion naturally favoured populous states like Uttar Pradesh and Bihar which were the poorest states in India. This was reversed by the Third and Fourth Finance Commissions which raised the share of collection to 20 per cent and thus gave greater share to States like Maharashtra and West Bengal which contributed most of the collection of income tax (because of the location of metropolitan cities like Bombay and Calcutta). From the Fifth Commission onwards, population had again become the major criterion for distribution of income tax proceeds among the States.

For the first time, the Eighth Finance Commission presided over by Y.B. Chavan, introduced a new formula for distribution of the income tax proceeds among the States:

(a) 10 per cent would continue to be distributed among the States on the basis of collection of income tax;
(b) 90 per cent of the proceeds of the income tax would be distributed among the States on the following criteria:

25 per cent on the basis of population;
25 per cent on the basis of inverse of the per capita income of the state multiplied by population; and
50 per cent on the basis of the distance of the per capita income of a state from the highest per capita income state (i.e., Punjab) and multiplied by the population of the State.

The basic objective of this three-factor formula was to bring about a high degree of equity among the States. The Ninth Finance Commission (NFC) basically followed the above formula with minor modifications.

The Tenth Finance Commission (TFC) evaluated the formula of both Eighth and Ninth Finance Commissions and introduced the following formula/criteria to determine the shares of the different States in the shareable proceeds of income tax:

(a) 20 per cent on the basis of population of 1971;
(b) 60 per cent on the basis of distance of per capita income of a State from that of the State having the highest income;
(c) 5 per cent on the basis of area adjusted;
(d) 5 percent on the basis of index of infrastructure; and
(e) 10 per cent on the basis of tax effort.

It would be clear from the above table that (a) the successive finance commissions, except the Tenth, had increased the share of the States in the income-tax levied and collected by the Centre, and (b) the proceeds are shared among States mainly on the basis of population, economic backwardness and other criteria.

(b) **Division and Distribution of Excise Duty**

**Vertical division**: The First Finance Commission selected three excise duties—on tobacco, matches and vegetable products—for division with the States, so as to give them larger revenues. These commodities are widely consumed and yield a substantial revenue to the Government.
Notes

The Commission recommended 40 per cent of the net proceeds of these duties to be distributed among the States on the basis of population. The Second Finance Commission added to the list of duties shared between the Union and the states, but reduced the share of the States from 40 per cent to 25 per cent. The Third Finance Commission increased the number of excisable commodities in the divisible pool from 8 to 35 by including all commodities on which duties were collected in 1960-61 but reduced the States’ share from the divisible pool from 25 per cent to 20 per cent. The Fourth Finance Commission enlarged the list to 45 commodities, but the share of the duties was retained at 20 per cent. The Fifth and Sixth Commissions did not make any change.

The Seventh Finance Commission, however, raised the States’ shares to 40 per cent of the net proceeds. The Eighth Commission raised the States’ share to 45 percent and distributed 40 percent on the basis of a new formula—the same as for income tax—and 5 per cent to deficit states. The Ninth Finance Commission proposed to distribute the entire amount of 45 per cent as a consolidated amount without dividing it into two components of 40 per cent and 5 per cent.

Finally, the Tenth Finance Commission has raised the share of the states in the net proceeds of union excise duties to 47.5 percent. This rise in the States’ share in excise duties is to compensate for the reduction in their share in income tax.

It is necessary to emphasise here that all finance commissions kept one basic objective, that is, to increase the share of the States in the proceeds of Central excise duties. The first few finance commissions brought in more and more central excise duties under the divisible pool, but reduced the percentage share of the States. The Seventh, and subsequent Finance Commissions, however, have

(a) brought all the Central excise duties under the divisible pool; and
(b) raised the share of the States from 20 per cent to 40 percent and then finally to 47.5 per cent.

Thus, over the years, Finance Commissions have increasingly relied on Union Excise Duties in meeting the revenue needs of the States.

Horizontal division

As regards the horizontal distribution of the proceeds of Central Excise Duties among States, the Finance Commissions had initially adopted two criteria, viz., the population of the State and the backwardness of the States. This system of distribution clearly favoured populous bin economically backward states like Uttar Pradesh and Madhya Pradesh.

The Seventh Finance Commission was the first to introduce a new formula for distribution of the States’ share of the Central excise duty: 25 per cent weightage equally to (a) population, (b) increase in the per capita income of the state, (c) the percentage of the poor in each state, and (d) a formula for income equalisation between states.

The Ninth Finance Commission (NFC) recommended the following method for distribution of the net proceeds of the Union Excise Duties among the States:

(a) 25 per cent should be distributed among the States on the basis of 1971 population;
(b) 12.5 per cent should be distributed among the States on the basis of Income Adjusted Total Population (IATP);
(c) 12.5 per cent should be distributed on the basis of index of backwardness;
(d) 33.5 per cent should be distributed on the basis of distance of the per capita income of a State from that of the State having the highest per capita income i.e. Punjab; and
(e) the remaining 16.5 per cent should be distributed among the States with deficits, after taking into account their shares from income tax, excise duties and other shareable taxes.

The Tenth Finance Commission used the same formula prepared for the sharing of income tax for sharing the proceeds of 40 percent of excise duties among the states as well. The remaining 7.5 per cent is distributed among deficit states.
(c) **Additional Excise Duties in lieu of Sales Tax**

Apart from the usual excise duties, the Central Government has been levying additional excise duties on sugar, tobacco, cotton fabrics, woollen fabrics and man-made fabrics—these goods were declared to be goods of special importance in inter-state trade and commerce. This scheme of levying additional excise duties on the above goods was the outcome of an agreement reached at the meeting of the National Development Council (NDC) held in December 1956, by which the States agreed to refrain from exercising their power to levy sales tax on these commodities in lieu of a share in additional excise duties to be levied by the Centre. Accordingly, since 1957, the Centre has levied and collected these additional excise duties and the entire proceeds (after deducting the share of Union territories) are distributed among the States in accordance with the principles of distribution laid down by the Finance Commissions from time to time.

The Second, Third, Fourth and Fifth Finance Commissions adopted a procedure under which they first

(a) set apart the guaranteed level of States’ revenue which the States were realising from sales tax on these commodities in 1956-57 and then (b) the balance amount of additional excise duties was distributed among the States according to specific principles. The Finance Commissions adopted such criteria as

(a) Percentage increase in the collection of sales tax in each State since 1956-57; and

(b) size of population of each State.

The Sixth Finance Commission made a departure from the earlier practice of first setting apart a minimum guaranteed amount for each State and then distributing the balance—the Commission was convinced that the share of each State would always exceed the revenue they would have realised in 1956-57 from the respective sales taxes on these commodities.

As regards the basis of distribution, the Sixth Finance Commission took the view that the additional duties of excise were levied in lieu of sales tax, which was itself a tax on consumption, the shares of various states should correspond to their shares in the consumption of these commodities. However, the Commission felt that reliable consumption figures were not available and, accordingly, it took State domestic product (SDP) and population as reliable approximation of consumption levels. Besides, the Commission also felt that the States would have realised sales tax not merely on what was consumed in the State but also on what was produced in the State and sold in the course of inter-state transactions of these commodities. Hence, the Sixth Finance Commission allocated the shares of additional duties on excise on the basis of population, State domestic product (SDP) and production in the ratio of 70 : 20 : 10. The subsequent finance commissions accepted this principle with minor modifications.

(d) **Grant in lieu of Tax on Passenger Fares**

Article 269 of the Constitution empowers the Government of India to levy and collect taxes on railway fares and freights but the net proceeds are to be assigned to the States. This tax was first imposed in 1957 and the proceeds were distributed to the States. The tax was repealed in 1961. Actually, the tax on passenger fare was merged with the basic fare and the system of grant was introduced to compensate States for the consequential loss of revenue. The tax on passenger fare was revived in 1971 but was again repealed in 1973. Now, the Finance Commissions were given the responsibility to suggest the grants to be made to the States in lieu of the tax on passenger fares. There are two points to be decided:

(a) What should be the volume of grant the Centre should transfer to the States in lieu of the tax on passenger fares, i.e., should it be a fixed amount or should it be a fixed percentage of the total passenger earnings; and

(b) What should be the basis of inter-state sharing of the grant?

On the first question, there has always been differences between the Centre and the States. At the time the tax on passenger fare was repealed, it contributed 10.7 per cent of the non-suburban railway passenger earnings. Accordingly the States have insisted that the grant should be pegged at 10.7 per cent of the railway passenger earnings at all times. On the other hand, the Railways
have always insisted that the quantum of grant should be fixed as a given amount. This amount was originally fixed at ₹ 23 crores. The Railways’ case for a fixed amount of grant was based on the following arguments:

(a) The impact of social obligations has been rising continuously and the annual loss to the Railways by way of subsidisation of passenger fares and tariff on low-rated commodities was around ₹ 2,000 crores. In other words, the Railways have been subsidising not only passengers traffic but also freight traffic.

(b) Railway receipts should not be treated on part with Central Government tax revenues, part of which devolves on the States. The Railways -being a major public utility undertaking - have to find adequate resources to provide a modern and efficient transport infrastructure to meet the demands of a growing economy which is acquiring further complexity and sophistication. Accordingly, increasing the amount of grant in lieu of the tax on passenger fare beyond the current size would put their development efforts at jeopardy.

Evaluation of the First Eleven Finance Commission Awards

The appointment of a Finance Commission at intervals of five years or less has great significance for the financial relations between the Union and the States. Periodic examination of the division of resources and suitable modifications in it imparts a degree of flexibility to the finance of both the Centre and the States. This flexibility is of great value in these days of changing needs and resources. The planned development of the country involves growing expenditure and, therefore, larger revenues, and an elastic system of finance is a great necessity. Through the transfer of resources from the Centre to the States, the elasticity of the Union sources of revenue is transmitted to the State finances also. The Finance Commissions help in this process by making suitable suggestions.

The general complaint against the awards of Finance Commissions is that they generally estimate revenue gaps of States (excess of revenue expenditure over their own revenues) and devise measures for ‘gap filling’. In other words, the Finance Commission awards have been characterised as ‘gap-filling’ awards. This type of criticism may not hold good especially for the awards of Seventh and Eighth Finance Commissions. The Seventh Finance Commission was probably the first finance commission to be deeply concerned with the equitable system of federal transfers and accordingly the devolution under the Seventh Finance Commission award was twice that of the Sixth Finance Commission. The Eighth Finance Commission was also deeply concerned with the need to help the most poverty-stricken states, hill states and backward states and its award almost doubled the devolution of the Seventh Finance Commission. There was, therefore, some justification in the claim of the Eighth Finance Commission that its award was not simply ‘gap-filling’, but that it attempted to achieve the twin objectives of a more equal relationship between the Centre and the States and interstate equity.

In this context, a major shift in the awards of the Finance Commission from 7th to 11th Finance Commissions may be mentioned here. In their attempt to fill the resource gap of the states, the first Six Finance Commissions relied heavily on grants-in-aid to cover their revenue deficits. The Seventh Finance Commission raised the states’ share in the divisible pool of taxes by (a) raising the states’ share in income tax from 80 per cent to 85 per cent, (b) bringing all excise duties under the divisible pool and (c) by raising the states’ share in excise duties from 20 per cent to 40 per cent. The Eighth Finance Commission further increased the states’ share in excise duties to 45 percent (the additional 5 per cent to be meant for deficit states). As a result of these recommendations, the devolution of tax revenue to the states was so much that the Seventh and Eighth Finance Commissions did not find it necessary to recommend large grants-in-aid to cover the revenue deficit of States. This trend was reversed by the successive Finance Commissions and we do find sizable grants-in-aid to cover revenue deficit of the states by Ninth to Eleventh Finance Commission.

Centre-State Conflict on Finances

In the last few decades, there has always been growing conflict and tension between the Indian Union and the States in the matter of finance. This conflict has often been aggravated by political and ideological differences between the different parties governing the Centre and the States.
The framers of the Indian Constitution provided for grants and loans so that the Centre might come to the help of those States which were in difficulty and also to bring about balanced development of the different regions. The use of grants and loans in the last 40 years or so, however, has resulted in the complete domination and control of the States by the Centre and to a certain extent, even financial irresponsibility and indiscipline on the part of the States. The enormous increase in transferred resources from the Centre to the States, the phenomenal growth in loan assistance to the states and the political pressure amounting to blackmail by the Centre through the instrument of grants have frightened the States. Hence, there has been an insistent demand for a comprehensive review of Centre-State relations in general and Centre-State financial relations in particular. The J.K. Thavaraj Committee (Report of the taxation Enquiry Committee, Kerala Government), the Rajamannar Committee on Centre-State relations appointed by the DMK Government of Tamil Nadu and the document on Centre-State relations (1978) adopted by the West Bengal cabinet led by the CPI-M United Front—all these have the same theme viz., political and financial autonomy for the States and drastic restriction of the power and financial resources of the Centre.

**Responsibility and Resources of the Centre and of the States**

According to the Constitution, the Centre has to concern itself with the most generalised features of the Indian economy such as the creation and maintenance of the banking system, railways and ports as well as facilities for national economic planning with the regulation and development of large-scale industries, exploitation of mineral resources, regulation of foreign trade, etc., besides, of course, the defence of the nation from foreign aggression. On the other hand, the States are concerned with important aspects of the life of the people, such as the maintenance of law and order, the construction and maintenance of irrigation, power, road transport, etc. the development of educational and health facilities, the promotion of primary sector such as agriculture, fisheries, forests and secondary sector viz., tiny, small and medium industries.

In order to carry out these responsibilities the Constitution provided for different types of financial resources. The Union is entrusted with taxes on personal incomes and profits of companies, excise duties and customs duties. In a rapidly developing economy, these are precisely the most productive taxes in the country. In the case of the States, land constitutes an important base of taxation. In a densely populated country like India, the volume of land coming under tax remains almost stationary. Therefore, land, as a source of revenue has been responsible for the inelastic nature of State revenues to a considerable extent. On the other hand, the various taxes on commodities and services like sales tax, State excise duties, duties in electricity rates, motor vehicles tax etc can be quite productive.

Taxation of industrial and commercial properties has been the preserve of the Centre, and tremendous expansion in the base of industrial and commercial property, income and wealth as a result of economic development 11 as been responsible for raising the financial resources of the Centre. At the same time while rapid industrial development boosted Central excise duty collection, expansion of imports pushed up customs duty collections. This seems to have given a buoyancy to the Central revenues which is not available to any tax head assigned to the States except sales tax.

The period since 1951 has witnessed an enormous expansion of financial powers of the Central Government whose dimensions have progressively increased in relation to the combined resources of all State Governments put together. For instance, the current tax revenues of the Centre have risen from `360 crores in 1950-51 to `65,000 crores in 1994-95 and to `5,48,120 crores in 2007-08 (budget). On the other hand, current tax revenues of the States (excluding transfers from the Centre) have risen from `280 crores in 1951-52 to `53,400 crores in 1994-95 and `2,57,250 crores in 2006-07 (budget). The rate of growth of revenues of the Centre is much faster as compared to that of the States. But then, the Centre has only limited functions to perform while the functions of the States are almost unlimited.

In a way, the Indian Constitution itself is responsible for the existence of a financially strong-Centre and weak-States. Until partition, there was a growing consensus in favour of the corporation tax and export duties to be included in the divisible pool. This was the case made out before the Sircar Committee known as the Expert Committee on Financial Provisions. It was partition which alerted the Constituent Assembly against possible dangers to the unity of India arising from the divisive forces. Its effect is reflected in the strong-Centre theme which runs through the Constitution. The financial provisions of the Constitution clearly reflect this strong-Centre bias.

Finance Minister P. Chidambram presented the Report on Central Government Subsidies in India in December 2004. It is just coincidental that in May 1997, Mr. Chidambram had also presented the discussion paper 'Government Subsidies in India.' The present report has, a narrow focus on account of the following reasons. Firstly, it focuses on only Central Government subsidies and leaves out state Government subsidies. The earlier Discussion Paper was thus more comprehensive. Secondly, while it gives a total estimate of explicit and implicit subsidies, it concentrates on a detailed analysis of only explicit subsidies which account for only 40 percent of total subsidies in 2003-04 and undertakes no analysis about the composition, structure and need for 60 percent implicit subsidies. Even in explicit subsidies, it makes a detailed, though very useful analysis of only three major subsidies on food, fertilizers and petroleum. With these limitations, it appears that the Report was intended to provide some suggestions for reducing only explicit subsidies for the 2005-06 budget, but did not make a penetrating analysis on the need for reducing overall subsidies, at the Central as well as the State level.

The Report classifies subsidies in two broad groups - merit and non-merit subsidies. Merit subsidies are further classified into Merit-I and Merit-II subsidies.

**Merit-I:** Elementary education, primary health care, prevention and control of diseases, social welfare and nutrition, soil and water conservation, ecology and environment.

**Merit-II:** Education (other than elementary), sports and youth services, family welfare, urban development, forestry, agricultural research and education, other agricultural programmes, special programmes for rural development, land reforms, other rural development programmes, special programmes for north-eastern areas, flood control and drainage, non-conventional energy, village and small industries, ports and light houses, roads and bridges, inland water transport, atomic energy research, space research, oceanographic research, other scientific research, census surveys and statistics, and meteorology.

**Non-merit:** All others.

But the classification into Merit I and Merit II loses its significances since the Report states: Subsidy reforms should aim at “limiting these two only merit I and Merit II categories while eliminating non-merit subsidies.” In case, it in intended for prioritization, even then it depends on the subjective judgment of State and Central governments. Both kinds of subsidies Merit I and Merit II are considered sacrosanct. Thus, the sub-classification into the two is of academic value.

Data provided by the Report reveals that total subsidies have grown from ₹ 36,829 crores in 1992-93 to ₹ 1,15,824 crores in 2003-04. Thus, the average annual growth rate (AGR) was 11.0 percent during the 11-year period. Out of them, explicit subsidies have increased from ₹ 11,995 crores in 1992-93 to ₹ 46,869 crores in 2003-04, indicating an annual growth rate of 13.2 percent. As a percentage of total subsidies, explicit subsidies have increased from 32.6 percent to 40.5 percent during this period. Likewise, implicit subsidies have jumped from ₹ 24,834 crores in 1992-93 to ₹ 68,955 crores in 2003-04, indicating an annual average growth rate of 9.7 percent. The share of implicit subsidies in total subsidies has, however, fallen from 67.4 percent to 59.5 percent during the period. The point which deserves attention is that the absolute size of implicit subsidies is nearly one and half times the size of explicit subsidies.

Another, interesting revelation is that in 2003-04 the share of merit subsidies in total subsidies was 42 percent and that of non-merit subsidies was 58 percent. Since subsidies are the difference between the cost of providing goods and services and the receipts obtained from the users, then it may be noted that in merit goods, the recovery rate is only 0.9 percent and in non-merit goods, it is 47.3 percent. As a policy prescription, there is a need to gradually increase the recovery rate in non-merit goods to reduce the huge outgo in the form of subsidies to this sector, but this is again apolitical decision that coalition government which have been in power during the last 15 years in India are unable to take due to various kinds of political pressures from different sectors of the population.

The share of social services which include education, health, family welfare, water supply and sanitation and labour and employment is only 21.2 percent in total subsidies, and the share of economic...
services, viz., agriculture, rural development, energy, industry and minerals, irrigation and flood control, science, technology and environment is 78.8 percent in the total subsidies. Although it is possible to reduce subsidies in social services to some extent by raising recovery rates in university and higher education and to some extent in some unnecessary youth and welfare programmes, but this shall have to be compensated by increasing subsidies in compulsory elementary education and expanding public health services for the poor. In short, the scope for reducing subsidies in social services in practically negligible.

There is, however, enough scope for reducing subsidies in economic services. For instance, in agriculture and rural development activities, subsidies of the order of ₹ 50,579 crores were provided in 2003-04, but recovery rate was barely 1.3 percent. Similarly, in coal and lignite which is a non-merit good, the recovery rate is only 3.3 percent. Another big area for reducing subsidies is industry and minerals which receives a subsidy of ₹ 29,532 crores and the recovery rate is only 6 percent. Besides bringing about an overall increase in recovery rate, there is a need to give pointed attention to reducing subsidies in agriculture and rural development, coal and lignite and industry and minerals. But the farm lobbies on the one hand and industrial lobbies on the other, besides the coal mafia would put up resistance. Again, the decisions have to be taken at the political level.

Let us examine the issues at the level of the Central Government. Of the total Central Government subsidies in 2011-12 of the order of ₹ 1,43,570 crores, food subsidy accounts for ₹ 60,573 crores (42.2%), fertilizer subsidy Rs, 49,981 crores (34.8%) and petroleum subsidy ₹ 23,640 crores (16.5%). Taking food, fertilizer and petroleum, these three subsidies account for 93.5 percent of the total explicit subsidies. Other Central Government subsidies on Railways, interest subsidy etc. account for barely 6.5 percent. Obviously, if explicit subsidies have to be reduced, then steps have to he taken to limit these three subsidies.

**Food subsidy**

Food subsidy in India comprises of three components: (i) subsidies to farmers through support prices, (ii) subsidies to consumers through public distribution system, and (iii) subsidies to the Food Corporation of India (FCI) in its purchase and maintenance of buffer stocks. Data reveal that during 1997-98 and 2003-04, the Central issue price of rice was increased from ₹ 350 per quintal to ₹ 565 per quintal - an increase by 61.4 percent and that of wheat was increased from ₹ 250 per quintal to ₹ 415 per quintal - an increase by 66 percent. However, the consumers price index for agricultural labourers (CPIAL) increased by only 25.8 percent during this period. The purpose of raising the issue price at a relatively higher rate than the rise in CPIAL was to subsidize the farmers to keep foodgrains production at a comfortable level.

Since the FCI continues to purchase foodgrains without any limit, this has resulted in the creation of buffer stocks in FCI godowns far in excess of the prescribed minimum norms. Food stock reached a peak of 63 million tonnes in July 2002, more than 2.5 times the norm of 24 million tonnes. By April 2004, the stocks were brought down to 20 million tonnes, not by increasing PDS offtake of foodgrains, but by exporting foodgrains at near BPL prices. The cost of handling and carrying costs of foodgrains by the FCI over and above the minimum norm is met by the subsidy to FCI. Since FCI operations are concentrated only in five states, viz., Punjab, Haryana, Western UP, Andhra Pradesh and Chhattisgarh, the entire subsidy is available to farmers in these states only. Moreover, since the Minimum Support Price (MSP) is limited to only two crops, rice and wheat, this has distorted the cropping pattern in favour of these two foodgrains.

The Report has suggested the following policy reforms:

(i) Minimum Support Price (MSP) should correspond to CACP-determined C2 cost, which includes all cash costs and the imputed value of family labour.

(ii) Before every sowing season, food procurement targets should be fixed on the basis of norms and a margin of error of about 10 percent. FCI should suspend purchase of operations once the targets are achieved.

(iii) A system of price insurance, similar to Farm Income Insurance Program introduced recently on a pilot basis, may be developed.
Notes
(iv) FCI should include a greater number of states in their price-support operations.
(v) In order to enforce efficiency, the reimbursement to FCI should be on the basis of normative unit costs and actually involved quantity, instead of reimbursement on actual basis.
(vi) To improve PDS penetration and reduce leakages, the Government can introduce the system of food coupons for the poor. A uniform PDS price will be fixed for APL and BPL facilities, but the poor can buy foodgrains partly with coupons and partly with cash. Since the poor cannot afford monthly procurement of foodgrains in one go, the PDS purchases should be allowed only on a weekly basis. Restricting monthly bulk purchases at PDS will discourage the not-so-needy from PDS outlets. This will help self-targeting of PDS.

All these measures appear to be good intentioned. But the major problem relates to their implementation. It is said that habits die hard and hardened habits are still difficult to break. For all these years, the State has been succumbing to farm lobby pressures, thereby responding by raising the minimum support price as also undertaking unlimited procurement. With limiting PDS operations to only five states, a huge buffer stock surplus was created which the state frittered away in exports at nearly BPL prices. Now on the one hand, a proposal is made to extend procurement to more states, and on the other, to limit procurement to the procurement target fixed in the beginning of the agricultural season, appears to be a non-feasible proposition. It would have been better if the present practice of procuring foodgrains by FCI had been continued and the Government should resist further increase in MSP beyond the increase in CPIAL. At the same time, the surplus in FCI godowns should be used to guarantee employment to all unemployed by extending the provisions of the Employment Guarantee Act. Wages can be paid partly in cash and partly in kind - foodgrains. This will be a more practical way of converting food subsidy into employment. The Government will earn the goodwill of farmers as well as unemployed-landless labourers, marginal farmers, and other semi-literates in rural areas.

Fertilizer Subsidy
Fertilizer subsidy which was ₹ 6,735 crores in 1995-96 shot up to Rs. 13,800 crores in 2000-01- more than double the level during the five year period. There after, it slightly declined and was around ₹ 12,000 crores in 2003-04. As a proportion of GDP, fertilizer subsidy which was only 0.23 percent in the early-1980s increased to a peak of 0.93 percent in 1989-90 and thereafter, it started to decline. It was barely 0.53 percent in 1993-94. In the subsequent period, reversal of trend occurred, it reached a level of 0.68 percent in 1999-00, but had declined since then to an estimated level of 0.43 percent in 2003-04. In 2010-11 (BE) fertilizer subsidy has been kept at ₹ 49,981 crores.

Fertilizer subsidy is the difference between the retention price of fertilizers and the price at which fertilizers are made available to consumers. The difference is paid to industry as subsidy. A serious attempt was made by the Government to reform the Retention Price Scheme (RPS) so as to rationalize fertilizer subsidies. Government decontrolled the import of phosphorus and potassium fertilizers and provided a flat-rate concession on their imports. But urea imports continued to be restricted and canalized. In 2000, on the recommendation of Expenditure Reform Commission (ERC) a group-concession rate scheme was introduced on 1st April 2000. ERC recommended phasing out of the unit-wise RPS in stages over a period of six years.

Studies have revealed that overall, for the entire period of 1981-82 to 2002-03, the average share of farmers in fertilizer subsidy was 62 percent and that of industry was 38 percent. Any scheme of rationalization of fertilizer subsidy depends on two factors: (i) efficiency of domestic fertilizer industry and the domestic cost of production, and (ii) the international price of urea. In the event of opening up of fertilizer sector imports, the gas-based plants would survive, whereas others, particularly naphtha-based plants, would not. This is due to the fact that naphtha or fuel oil or low sulphur feedstock is more costly as a raw material than natural gas.

The Report suggests that there is a need to reduce the subsidy to farmers as well as industry. In the short run, the subsidy may be continued. But in the long run, the option of setting up fertilizer plants in such countries where natural gas is available in plenty may be considered. Secondly, there is a need to increase the farm-gate price of urea at regular intervals. The Report is of the opinion that the
application of fertilizers is “more dependent on technological and non-price factors than on price or agro-economic variables. These factor include irrigation facilities, cropping pattern, spread of high yielding varieties (HYVs), effective fertilizer distribution and availability of credit.” The Report, therefore, is of the view that the increase in urea prices may not translate into lower production. It recommends public investment as “an effective instrument to promote the use of fertilizers.” Moreover, rationalization of urea price would have a salutary impact on balanced application of N (Nitrogen), P (Phosphate) and K (Potash).

### Future Policy on Subsidies

It is now really over a decade that a comprehensive paper on subsidies was presented by National Institute of Public Finance and Policy (NIPFP) in 1997. The situation has changed drastically since then and there is a need to re-examine the issue. The main reasons are:

1. Implicit subsidies in various forms are growing both at the Central and State levels. Take for instance, the large number of tax exemptions on Special Economic Zones (SEZs) granted by the Government. They imply a big loss of tax revenues. Another instance is the role of the state governments in acquiring land for SEZs and passing on to industrial houses.

   West Bengal in its drive for industrialisation agreed to the following subsidies on its Singur project to the Tatas. The land at Singur has been provided by the Government to the Tatas on a 90-year lease, with no downpayment. Secondly, for the first five years, Tatas will pay ₹ 1 crore as rent and the yearly payment will increase by 25% for each year interval for five years for the next 25 years. For the next 30 years, payment will increase by 33% at a five year interval and for the final 20 years, the rent would be ₹ 20 crore per year. The West Bengal Government also agreed to provide a loan to the Tatas of ₹ 200 crores at 1 percent rate of interest while the VAT proceeds accruing from the sale of cars will be handed back to the Tatas against 1 % loan for the first 10 year period. But as against this, the total compensation to the farmers will be of the order of ₹ 200 crores.

   The question raised by the critics of industrialisation paradigm of development is: Are we following a policy of inclusive growth by taking away the livelihoods of farmers, sharecroppers and other associated persons dependent on land? On the other hand, are we providing heavy subsidies of several kinds—land acquisition and development by the Government on behalf of industry, subsidised power, generous tax holidays, financial support for purchase of equipment, subsidised credit and exemption of waiver from exports etc. to industrialists.

   Similarly, the state governments have been providing free or highly subsidised electricity for agriculture which benefit mainly the rich farmers.

   It has been estimated that various kinds of tax exemptions have resulted in revenue foregone to the tune of ₹ 2,78,644 crores - a colossal sum indeed. The Government has been praising the corporate sector for better tax compliance resulting in a sharp increase in corporation tax revenues, but facts as they stand, reveal that although notionally, the corporation tax rate is 33%, its effective rate is only 19%. This sharp reduction in effective rate as against the prescribed rate of 33% is the result of the plethora of exemptions granted to the corporate sector.

2. There is a need a consider the legitimacy of other subsidies as well which fall in the category of non-merit subsidies.

3. There is a tremendous change in the situation with respect to petroleum subsidy since international price of crude petroleum has crossed $ 110 per barrel. If the government provides the subsidy fully to oil companies, then the subsidy amount is likely to reach 1.5 lakh crores this years. As a consequence, the fiscal deficit could be pushed up by an additional 3.2% of GDP. The Government could partially salvage the situation by providing 50% subsidy in the form of bonds and thus, only the interest on bonds will be reflected in the budget as a cost. But when the bonds mature at a future date, their redemption will exercise pressure on the fiscal deficit.

   The situation in case of fertilizer subsidies is no better. The international price of fertilizers is 4-5 times the domestic price. The likely impact of fertilizers subsidy is going to be ₹ 80,000 crores as
against the provision of ₹ 31,000 crores in 2008-09 budget. A similar situation prevails in food subsidies. The international price of foodgrains has also risen sharply. On account of shortage at home, India has decided to import one million tonne of foodgrains so that the weaker sections of society are provided foodgrains at subsidized rates. Thus, the foodgrains subsidy bill will be much higher than the provision in the 2008-09 budget of the order of ₹ 32,667 crores. The Finance Minister made a provision of ₹ 66,537 crores in the budget for 2008-09 for food subsidy ₹ 32,666 crores, for fertilizers ₹ 30,986 crores and for petroleum for ₹ 2,885 crores. But both national and international factors are going to jeopardise these predictions. Even by issuing bounds to some public sector companies for petroleum subsidy, the country shall be only postponing a part of the burden for future years. Despite this, experts estimate that the total subsidy on food, fertilizers and petroleum products is likely to go up to 4-5% GDP. The situation is, therefore, very grim.

But what are the policy options? Firstly, the Government has no option but to accept the subsidy on petroleum imports. It can further increase the domestic price of petroleum products. Even if this is done, it will only reduce the burden of the Government partially. The option of reducing petroleum imports is not available to the Government in view of expanding demand for petroleum due to sharp increase in the growing demand and production for automobiles—motor cycles, three wheelers and cars. Secondly, in case of food and fertilizers, the chances of charging the consumers more appear to be very bleak since the coalition government has to face the electorate in the General Election due in early 2009. Thirdly, the Government has to take a decision about the large scale exemptions granted to industry so as to enanche its revenues. But in view of the commitment made on SEZ projects, the Government requires great amount of courage to slash down exemptions.

The only policy option available with the Government is to present a comprehensive paper on all subsidies Central as well as state levels, both implicit and explicit. It is quite possible that a national debate on the question of subsidies may result in throwing up a consensus on some short-term and some long-term options to reduce the mounting burden of subsidies.

## Self-Assessment

1. Choose the correct options:
   (i) In which city is the Board of Governor’s Office located?
      - (a) Philadelphia
      - (b) New York City
      - (c) Washington D.C.
      - (d) Boston
   (ii) Who among the following is the head of the government-appointed panel on the legislative reforms in the financial sectors?
      - (a) Subroto Roy
      - (b) T.N. Srinivasan
      - (c) Vijay Kelkar
      - (d) B.N. Shri Kkrishna

2. Recently which among the following State government has announced special Rs. 300 crore public toilets scheme for the urban poor?
   - (a) Gujarat
   - (b) Maharashtra
   - (c) West Bengal
   - (d) Bihar

3. The first finance commission recommended that the states should share 55 per cent of the proceeds of the income tax. This commission was presided by
   - (a) K.C Pant
   - (b) J.P Neogi
   - (c) Vijay Kelker
   - (d) None of these

## Summary

- India has a federal structure, in which a clear distinction is made between the Union and State functions and sources revenue, but the residual powers belong to the Centre. Although the
States have been assigned certain taxes which are levied and collected by them, they also share in the revenue of certain Union taxes, and there are certain other taxes which are levied and collected by the Union but the proceeds of which wholly go to the States.

• The Constitution of India makes a clear division of fiscal powers between the Union (on the centre) and, the State Governments. The principle adopted for this classification is that taxes which have an interstate base are levied by the Union, while those with a local base are levied by the States.

• Apart from the taxes levied and collected by the States, the Constitution had provided for the revenues for certain taxes on the Union list to be allocated, partly or wholly, to the States. These provisions fall into various categories.

• The importance of Central contributions to State resources becomes clear from Table 1 showing the transfer in broad categories since the inception of economic planning.

• Under the provisions of Article 280 of the Constitution, the President is required to appoint a Finance Commission for the specific purpose of devolution of non-Plan revenue resources.

• The First Finance Commission, for instance, recommended the allocation of income tax proceeds on the basis of 80 per cent and 20 per cent for population and collection. This criterion benefited populous states as well as those richer states which contributed more income tax revenue.

• As regards the horizontal distribution of the proceeds of Central Excise Duties among States, the Finance Commissions had initially adopted two criteria, viz., the population of the State and the backwardness of the States. This system of distribution clearly favoured populous but economically backward states like Uttar Pradesh and Madhya Pradesh.

• Apart from the usual excise duties, the Central Government has been levying additional excise duties on sugar, tobacco, cotton fabrics, woollen fabrics and man-made fabrics-- these goods were declared to be goods of special importance in inter-state trade and commerce.

• The estate duty was levied by the Centre in 1953 but the proceeds were to be assigned to the States. The Second Finance Commission recommended that one per cent of the net proceeds should be assigned to the Union Territories and balance to be divided among the States.

• The finance commissions only recommended writing-off of some loans and rescheduling some portion of them. The Ninth Finance Commission was against such steps and asked states to be careful and exercise restraint in incurring additional debt.

• The appointment of a Finance Commission at intervals of five years or less has great significance for the financial relations between the Union and the States. Periodic examination of the division of resources and suitable modifications in it imparts a degree of flexibility to the finance of both the Centre and the States.

• In the last few decades, there has always been growing conflict and tension between the Indian Union and the States in the matter of finance. This conflict has often been aggravated by political and ideological differences between the different parties governing the Centre and the States.

• Taxation of industrial and commercial properties has been the preserve of the Centre, and tremendous expansion in the base of industrial and commercial property, income and wealth as a result of economic development as been responsible for raising the financial resources of the Centre.

• The period since 1951 has witnessed an enormous expansion of financial powers of the Central Government whose dimensions have progressively increased in relation to the combined resources of all State Governments put together.

• West Bengal, Jammu and Kashmir, Punjab, Maharashtra and Southern states have generally been very agitated over the question of state’s autonomy.

• A serious complaint of some of the States like Kerala is about the regional imbalance in industrial development. The complaint is that the Centre has not used its fiscal dominance over States to correct regional imbalances.

• The Rajamannar Committee on Centre-State relations (it submitted its report in May 1971) and the West Bengal Memorandum came out with a string of suggestions and recommendations aiming at autonomy of the states, consistent with the integrity of the country.
The problem of Centre-State financial relations has thus been a part of the general and more important problem of Centre-State relations. The West Bengal Memorandum would allow The Centre to perform only three or four functions and leave the rest of the functions to the States. The States’ complaint about inadequate financial resources and their demand for large taxation powers would sound more reasonable if the States had fully exploited the resources they command. The Finance Minister’s estimate of subsidies is focused on budget-based subsidies. The estimation of budgetary subsidies are computed as excess of the cost of providing a service over the recoveries from the service.

Food subsidy in India comprises of three components: (i) subsidies to farmers through support prices, (ii) subsidies to consumers through public distribution system, and (iii) subsidies to the Food Corporation of India (FCI) in its purchase and maintenance of buffer stocks. Since the FCI continues to purchase foodgrains without any limit, this has resulted in the creation of buffer stocks in FCI godowns far in excess of the prescribed minimum norms. Food stock reached a peak of 63 million tonnes in July 2002, more than 2.5 times the norm of 24 million tonnes.

It is now really over a decade that a comprehensive paper on subsidies was presented by National Institute of Public Finance and Policy (NIPFP) in 1997. The situation has changed drastically since then and there is a need to re-examine the issue.

The only policy option available with the Government is to present a comprehensive paper on all subsidies Central as well as state levels, both implicit and explicit. It is quite possible that a national debate on the question of subsidies may result in throwing up a consensus on some short-term and some long-term options to reduce the mounting burden of subsidies.

**25.3 Key-Words**

1. **Allocation**: The act of allocating or the state of being allocated
2. **Jurisdiction**: Jurisdiction (from the Latin ius, iuris meaning "law" and dicere meaning "to speak") is the practical authority granted to a formally constituted legal body or to a political leader to deal with and make pronouncements on legal matters and, by implication, to administer justice within a defined area of responsibility. The term is also used to denote the geographical area or subject-matter to which such authority applies. Jurisdiction draws its substance from public international law, conflict of laws, constitutional law and the powers of the executive and legislative branches of government to allocate resources to best serve the needs of its native society.

**Answers: Self-Assessment**

1. (i) (c)  (ii) (d)  (iii) (a)  (iv) (b)

**25.4 Review Questions**

1. Discuss the distribution and allocation of central revenue.
2. Explain the role of finance commission.
3. What are the responsibilities and resources of the centre and of the states?

**25.5 Further Readings**

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Objectives

After reading this Unit students will be able to:

• Explain the 12th Finance Commissions.
• Discuss about the 13th Finance Commissions.

Introduction

The Finance Commission of India came into existence in 1951. It was established under Article 280 of the Indian Constitution by the President of India. It was formed to define the financial relations between the centre and the state. The Finance Commission Act of 1951 states the terms of qualification, appointment and disqualification, the term, eligibility and powers of the Finance Commission. As per the Constitution, the commission is appointed every five years and consists of a chairman and four other members. Since the institution of the first finance commission, stark changes have occurred in the Indian economy causing changes in the macroeconomic scenario. This has led to major changes in the Finance Commission's recommendations over the years. Till date, Thirteen Finance Commissions have submitted their reports.

26.1 12th Finance Commission

The Twelfth Finance Commission was constituted by the President under Article 280 of the Indian Constitution by Dr. C. Rangarajan as chairman. This was the second finance commission after he 80th Amendment Act (2000) of the Constitution. The terms of reference of the 12th FC were the same as those of the 11th FC, except the last one which was actually added later through a special notification. The terms of reference of the 12th FC were:

(i) The distribution between the Centre and the States of the net proceeds of all taxes and the allocation between the States of the respective shares of such proceeds;

(ii) The principles which should govern

(a) The grants-in-aid to the States out of the Consolidated Fund of India; and

(b) The sums to be paid to the States which are in need of assistance by way of grants-in-aid under Article 275 of the Indian Constitution.

(iii) The measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the States;

(iv) Review the Fiscal Reform Facility introduced by the Central Government on the basis of the recommendations of the 11th FC and suggest measures for effective achievement of its objectives;
(v) Assess the debt position of the States at the end of March 2004 and suggest necessary corrective measures consistent with macro-economic stability and debt main-tainability;
(vi) Review the present arrangements as regards financing of Disaster Management; and
(vii) To recommend whether the non-tax income of profit petroleum to the Centre, arising out of contractual provisions, should be shared with the States from where the mineral oils are produced, and if so, to what extent.

The Award of the Twelfth Finance Commission

While giving its award on the various terms of reference, the 12th FC had carefully considered the views of the Central and State Governments on the various items of terms of reference...The Commission’s basic objective was
(a) to sustain the growth momentum,
(b) to bring about fiscal consolidation, and
(c) to recommend a scheme of transfers that could serve the twin objectives of equity and efficiency.

The transfers from the Centre to the States - in the form of tax devolutions and grants - are meant to correct, both the vertical and the horizontal imbalances.

The 12th FC considered the recommendations of previous commissions on this point and also the memoranda submitted by various States regarding :
(a) The continuation of the use of population as a factor;
(b) The use of income distance criteria;
(c) Continuation of area as a factor; and
(d) Retaining the tax effort and index of fiscal discipline criteria.

There is no objective factor in any of the above criteria. Till now, every FC has attempted to work out different criteria and different weightages for each criterion to arrive at a reasonable degree of equalization. In practice, this is impossible to arrive at and every FC award has been criticized by those States who felt that they should have got a bigger share in the shareable. Central revenue pool.

Let us take only one criterion, viz., the population factor, which is a basic indicator of need for public goods and services, and as a criterion, it ensures equal per capita transfers among all States. This was recognized by all FCs, even though, different FCs have given different weights. The 12th FC stated in this connection, “Looking at the recent periods, during the Seventh and Eighth Finance Commissions, the weight attached to population, varied between 22.5 percent to 25 percent. This weight was reduced to 20 percent by the Ninth Commission and further to 10 percent by the Eleventh Commission. We feel that a strong case exists for increasing the weight and have fixed it at 25 percent.” Incidentally, in their memoranda submitted to the 12th FC, different States had demanded the weightage for population to be fixed between 10 percent to 50 percent.

Local Bodies - Panchayats and Municipalities

For the first time, it was the 11th FC which was required to suggest “the measures needed to augment the Consolidated Fund of a State to supplement the financial resources of Panchayats and Municipalities. The 11th FC recommended a number of measures which could be taken by State Governments and local bodies for augmenting the consolidated fund of the States to supplement the resources of local bodies. These measures included assignment of land tax, profession tax, surcharges cesses on State taxes for improving the basic civic services and taking up schemes of social and economic development. At the same time, the 11th FC also noted the additional burden the States had to bear while implementing the recommendations of State Finance Commissions (SFCs). Accordingly, the 11th FC awarded ad hoc annual grant of ₹ 1,000 crores for Panchayats and ₹ 400 crores for municipalities - a total of ₹ 7,000 crores for the period 2000-05.

The 12th FC kept the above points and, ascertained the views of State Governments, of the Ministry of Rural Development, and of the Ministry of Urban Development and Poverty Alleviation, of the
Government of India. The Commission felt that there was a case to augment the consolidated fund of the states through additional grants from the Centre, keeping in view the special circumstances of the states. Besides, there was a clear need to provide an impetus to the decentralization process. Accordingly, the Commission recommended a sum of ₹ 25,000 crores for the award period, (2005-10) as grant-in-aid to supplement the resources of municipalities and the panchayats.

The 12th FC argued that the urban local bodies (Municipalities) had a greater access to tax and non-tax resources of their own, and therefore, it were the panchayats which required substantial support. According to the 2001 Census Report, urban population in India constituted 26.8 percent of the total population. Hence, the 12th FC’s grant-in-aid was based on the ratio of 20:80. That is, ₹ 5,000 crores (20 percent of the grant) would go to municipalities and ₹ 20,000 crores (80 percent) would go to Panchayats. In this connection, the 12th FC had also recommended separately grants for maintenance of roads and buildings which include the roads maintained by the municipalities. The municipalities would thus be major beneficiaries.

The criteria used for inter-State distribution of the above grants were as follows:

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Weight (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Population</td>
<td>40</td>
</tr>
<tr>
<td>2. Geographical area</td>
<td>10</td>
</tr>
<tr>
<td>3. Distance from highest per capita income</td>
<td>20</td>
</tr>
<tr>
<td>4. Index of deprivation</td>
<td>10</td>
</tr>
<tr>
<td>5. Revenue effort</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

The 12th Commission has emphasized that, of the grants allocated to panchayats, priority should be given to expenditure on the operation and maintenance costs (O & M) of water supply and sanitation and at least 50 percent of the grants provided to each State for the urban local bodies should be earmarked for the scheme of solid waste management. Besides, expenditure on the O & M costs of water supply and sanitation in rural areas and on the scheme of solid waste management in panchayats and urban local bodies should, out of the grants allotted should give high priority to expenditure on data base and maintenance of account.

### Financing of Calamity Relief Expenditure

The 12th FC was asked to review the present arrangements as regards financing of disaster management with reference to the National Calamity Relief Fund (CRF) and the National Calamity Contingency Fund (NCCF) and make appropriate recommendations. After a careful study of the present system of disaster management, the 12th FC recommended the continuance of the scheme of CRF in its present form with contributions from the Centre and the States in the ratio of 75 : 25. The Commission fixed the size of the CRF for the award period, 2005-10 at ₹ 21,333 crores, of which the Centre’s share would be ₹ 16,000 crores and the balance would be the share of the States (₹ 5,333 crores).

The 12th FC has also recommended continuance of the scheme of NCCF in its present form with core corpus of ₹ 500 crores. The outgo from the NCCF may continue to be replenished by way of collection of National Calamity Contingent Duty and levy of special surcharges.

### 26.2 13th Finance Commission

The Thirteenth Finance Commission (FC-XIII) was constituted by the President under Article 280 of the Constitution on 13 November 2007 to make its recommendations for the period 2010-15. Dr. Vijay Kelkar was appointed the Chairman of the Commission.
Terms of Reference

The Terms of Reference (ToR) of the Commission included the following:

The Commission shall make recommendations as to the following matters, namely:

(i) The distribution between the Union and the States of the net proceeds of taxes which are to be, or may be, divided between them under Chapter I Part XII of the Constitution and the allocation between the States of the respective shares of such proceeds;

(ii) The principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States which are in need of assistance by way of grants-in-aid of their revenues under article 275 of the Constitution for purposes other than those specified in the provisos to clause (1) of that article; and

(iii) The measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State on the basis of the recommendations made by the Finance Commission of the State.

Subsequently, the commission was given additional terms of reference including the mandate to review the roadmap for fiscal adjustments and suggest a suitably revised one with a view to maintaining the gains of fiscal consolidation through 2010 to 2015 particularly considering the need to bring the liabilities of the Central Government on account of oil, food and fertilizer bonds into the fiscal accounting, and the impact of various other obligations of the Central Government on the deficit targets. The TFC has since submitted its Report.

The Approach of the Thirteenth Finance Commission

Following the mandate under the Presidential Order indicating the terms of reference, the Thirteenth Finance Commission submitted its report on December 30, 2009. The overall approach of the commission was as follows:

(a) To foster “inclusive and green growth promoting fiscal federalism”

(b) Focus on fiscal consolidation process in a medium-term debt reduction framework. The commission observed that as against the level of 75 per cent targeted by the Twelfth Finance Commission, the combined debt-GDP ratio was 82 per cent in the terminal year (2009-10). It purposed reducing the combined debt-GDP ratio to 68 per cent by 2014-15 with the Centre’s debt-GDP ratio declining to 45 per cent.

(c) The commission recommended fiscal consolidation through the elimination of revenue deficit as the long-term target for both the Centre and States. Following a design similar to that adopted by the recent Finance Commissions, the FC-XIII indicated a normative discipline for both Centre and State; with equal treatment which entailed no automatic priority for any level of Government and a focus on equalization (and not equity). The latter signaled the intent of the FC-XIII to ensure that States and local bodies have the fiscal potential to provide comparable levels of public service at reasonably comparable levels of taxation. This principle does not guarantee uniformity in public services across the country; but it addresses the fiscal requirements of each jurisdiction to enable such uniformity.

Vertical Devolution: Issues and Approach

The Thirteenth Finance Commission Justified the existing constitutional arrangement of division of taxes between Central and the States, that many direct taxes like Income Tax are levied and collected by the Centre, but the proceeds are shared with the states. Similar tax treatment, irrespective of geographical or political consideration is the key to efficient function of the market. The vertical and horizontal devolution should be based on the principal of equality of access to public services, irrespective of jurisdiction.

Asymmetric Fiscal Arrangement at Present

TFC elaborated on the asymmetric fiscal arrangement which the constitution specifies the taxing powers of the Centre and states with respect to different sources of tax revenue. It can be argued that
there is a vertical imbalance in the distribution of these taxing powers which has worsened over time, while in the total revenue expenditure there has been long term stability in the relative shares of the Centre and the states after implementation of the transfers recommended by the Finance Commission, the buoyancy of central taxes has been higher than those of the states and such a trend is expected to continue, given the nature of tax assignment to the Centre and states. Thus the commission recommended that to maintain constancy in the share of states in post-devolution total tax revenue, there is a need to increase the share of states by the margin by which the buoyancy of central tax revenue exceed the buoyancy of combined tax revenue. This implies that given the higher buoyancy of central tax revenue, share of states in total central tax revenue to be increased, so that the revenue of centre and state taxes equalises in post devolution stage.

On the expenditure side, the commission notes that the, states have higher ‘fixed costs’ than the Centre, as reflected in their higher share of committed expenditure in total non-plan expenditure relative to the Centre. In addition, states have restrictions placed on their borrowing powers. In addition, over the period 2010-15, there is an added fiscal burden posed by the states’ pay awards, following that of the Sixth Central Pay Commission (CPC). The fiscal burden of the latest round of pay awards is much higher for the states in absolute as well as relative terms.

The commission preferred to discount the projected growth rates as given to it by the Planning Commission. This implies conservative revenue buoyancy for the centre and the states. The commission notes that its fiscal correction targets are not overly ambitious, and are more likely to lead to a situation where performance is better than the promise.

**Poor States Get Less Subsidies**

Commission further notes that there is always a choice between delivery of public goods and services and provision of subsidies for private goods. But there is always a need for well directed subsidies such that they reach the target group. But this always does not happen. For instance poorer states don’t stand to gain from three major subsidies, viz. food, fertiliser and petroleum, as share of poorer states were found to be far lower than the national average. The reasons for this may vary across the subsidies. Food subsidies are determined inter alia by efficiency of administrative arrangements in the respective states, as well as by their fiscal capacity to provide additional subsidies. The use of fertilisers is directly linked to irrigation facilities created and the size of land holdings. Consumption of petroleum products is directly proportional to the purchasing power of citizens. This implies that poorer states tend to receive much lower share in subsidies (food, fertiliser and petroleum given by the centre. In view of the objective of inclusive growth, regressive untargeted subsidies that reduce fiscal space for key growth-promoting public investments and delivery of public goods to enhance inclusiveness are, today, a fiscal obstacle to the acceleration of India’s development transformation. Therefore the commission favored a fiscal path, wherein subsidies are closely targeted.

In view of all the arguments, as given above the Thirteenth Finance Commission recommended that

1. The share of States in net proceeds of shareable Central taxes shall be 32 per cent every year for the period of the award.
2. Revenue accruing to a State is to be protected to the levels that would have accrued to it had service tax been a part of the shareable Central taxes, if the 88th Amendment to Constitution is notified and followed up by a legislations enabling States to levy service tax.
3. Centre is to review the levy of cesses and surcharges with a view to reducing their share in its gross tax revenue.
4. Future fiscal roadmap should be designed in such a manner that subsidies are closely targeted. Public spending on subsidies that detract from inclusive growth should be discouraged.

**Horizontal Devolution : Issues and Approach**

The commission noted that the previous finance commissions have identified for major issues which are needed to the addressed. First, the fiscal needs vary from state to state, as they are at different stages of the development transformation. Some times aggregate state level development indicators do not capture the fiscal needs as there are variations even at district level. Second, fiscal capacity
which is measured by the revenue base available to each state - varies. Third, cost of providing similar levels of public goods and services may also vary from state to state due to historical circumstances, adverse physical geography, sparse terrain, or geopolitical constraints to development. To some extent, the definition of some states as ‘special category states’ addresses this issue. But greater attention is needed to be paid to such factors. Fourth, commission highlighted the endeavor of previous finance commissions in rewarding the efficiency in public management, fiscal effort and outcomes. The commission notes that the adoption of fiscal responsibility legislation after the report of Twelfth Finance Commission has improved the fiscal health of many states. The Thirteenth Finance Commission favored to build upon this effort and incentivising improved efficiency in public expenditure management and revenue effort.

In horizontal devolution of resource transfers the commission clearly stated that it is concerned with equalisation, not equity, (italics added) it says at it is both feasible and possible to address efficiency and fiscal equalisation, using both instruments available to the commission, viz. grants and devolution. The Commission recommended that due weight be given to considerations of efficiency and performance in its overall design. In other words it implies that the states which do not respond to incentives as designed by the commission stand to lose and those who do respond stand to gain in terms of their share in total revenue. Giving effects to its thinking on horizontal devolution, the Thirteenth Finance Commission adopted the following criteria and weights for inter se determination of shares of states.

Local Bodies - Panchayats and Municipalities

Thirteenth Finance Commission provided ₹ 87,519 crores as grants for local bodies. It is significant that out of total transfers from center to states share of local bodies made a jump from 3.3 per cent by Twelfth Finance Commission to 5.1 percent by Thirteenth Finance Commission (Table 3). In absolute terms this increase seems to be much greater as total grants for local bodies have increased from ₹ 25,000 crores to ₹ 87,519 crores. This shows the importance given by the Thirteenth Finance Commission to local bodies. Another major recommendation of the commission was with regard to sharing of income from royalties received by the state government with those local bodies in whose jurisdiction such income arises. Commission also recommended for sharing of revenues of local development authorities with local bodies.

Goods and Service Tax

Thirteenth Finance Commission had to deal with a special issue and that was Goods and Service Tax (GST), which was scheduled to be implemented by October 1, 2010 (earlier it was scheduled for April 2010). The Finance Commission was entrusted with the task of facilitating transition from prevailing system of indirect taxation to a new tax named GST. Thirteenth Finance Commission recommended that both the Centre and the states should conclude a ‘Grand Bargain’ to implement the Model GST. The Grand Bargain comprises six elements:

(i) The design of the Model GST
(ii) The operational modalities.
(iii) The proposed agreement between the Centre and states, with contingencies for changes.
(iv) The disincentives for non-compliance are described.
(v) The implementation schedule is described.
(vi) The procedure for claiming compensation.

To facilitate and incentivise the implementation of this Grand Bargain, the commission recommended a grant of ₹ 50,000 crore. The grant would be used to meet the compensation claims of State Governments for revenue losses on account of implementation of GST between 2010-11 and 2014-15, consistent with the Grand Bargain. Unspent balances in this pool would be distributed amongst all the states, as per the devolution formula, on 1 January 2015. However there is a rider clause in the recommendations of the Commission - “In the unlikely event that a consensus with regard to implementing all the elements of the Grand Bargain cannot be achieved and the GST mechanism finally adopted is different from the Model GST suggested by us, this Commission recommends that this amount of ₹ 50,000 crore shall not be disbursed.”
Revised Roadmap for Fiscal Consolidation

The Thirteenth Finance Commission has recommended fiscal consolidation through the elimination of revenue deficit as the long-term target for both the Centre and States. Following a design similar to that adopted by the recent Finance Commissions, the Thirteenth Finance Commission indicated a normative discipline for both Centre and States; with equal treatment which entailed no automatic priority for any level of Government and a focus on equalization (and not equity). The latter signaled the intent of the Thirteenth Finance Commission to ensure that States and local bodies have the fiscal potential to provide comparable levels of public service at reasonably comparable levels of taxation. This principle does not guarantee uniformity in public services across the country; but it addresses the fiscal requirements of each jurisdiction to enable such uniformity.

The Commission recommended as follows:

• The revenue deficit of the Centre needs to be progressively reduced and eliminated, followed by emergence of a revenue surplus by 2014-15.
• A target of 68 per cent of GDP for the combined debt of the Centre and states should be achieved by 2014-15. The fiscal consolidation path embodies steady reduction in the augmented debt stock of the Centre to 45 per cent of GDP by 2014-15, and of the states to less than 25 per cent of GDP, by 2014-15.
• The Medium Term Fiscal Plan (MTFP) should be reformed and made a statement of commitment rather than a statement of intent. Tighter integration is required between the multi-year framework provided by MTFP and the annual budget exercise.
• Along with the annual Central Budget/MTFT, some disclosures have been recommended. They include
  (i) Detailed breakup of grants to states under the overall category of non-plan and plan grants.
  (ii) Statement on tax expenditure to be systematised and the methodology to be made explicit.
  (iii) Compliance costs of major tax proposals to be reported.
  (iv) Revenue Consequences of Capital Expenditure (RCCE) to be projected in MTFP.
  (v) Fiscal impact of major policy changes to be incorporated in MTFP.
  (vi) Public Private Partnership (PPP) liabilities to be reported along with MTFP.
• Transfer of disinvestment receipts to the public account to be discontinued and all disinvestment receipts be maintained in the consolidated fund.
• Government of India should list all public sector enterprises that yield a lower rate of return on assets than a norm to be decided by an expert committee.
• The FRBM Act needs to specify the nature of shocks that would require a relaxation of FRBM targets.
• In case of macroeconomic shocks, instead of relaxing the states’ borrowing limits and letting them borrow more, the Centre should borrow and devolve the resources using the Finance Commission tax devolution formula for inter se distribution between states.
• Structural shocks such as arrears arising out of Pay Commission awards should be avoided by, in the case of arrears, making the pay award commence from the date on which it is accepted.
• An independent review mechanism should be set-up by the Centre to evaluate its fiscal reform process. The independent review mechanism should evolve into a fiscal council with legislative backing over time.
• Given the exceptional circumstances of 2008-09 and 2009-10, the fiscal consolidation process of the states was disrupted. It is expected that states would be able to get back to their fiscal correction path by 2011-12, allowing for a year of adjustment in 2010-11.
  (i) States that incurred zero revenue deficits or achieved revenue surplus in 2007-08 should eliminate revenue deficit by 2011-12 and maintain revenue balance or attain a surplus thereafter. Other states should eliminate revenue deficit by 2014-15.
(ii) The General Category States that attained a zero revenue deficit or a revenue surplus in 2007-08 should achieve a fiscal deficit of 3 per cent of Gross State Domestic Product (GSDP) by 2011-12 and maintain such thereafter. Other general category states need to achieve 3 per cent fiscal deficit by 2013-14.

(iii) All special category states with base fiscal deficit of less than 3 per cent of GSDP in 2007-08 could incur a fiscal deficit of 3 per cent in 2011-12 and maintain it thereafter. Manipur, Nagaland, Sikkim and Uttarakhand to reduce their fiscal deficit to 3 per cent of GSDP by 2013-14.

(iv) Jammu & Kashmir and Mizoram should limit their fiscal deficit to 3 per cent of GSDP by 2014-15.

- States should amend/enact FRBM Acts to build in the fiscal reform path worked out. State-specific grants recommended for a state should be released upon compliance.
- Independent review/ monitoring mechanism under the FRBM Acts should be set up by states.
- Borrowing limits for states to be worked out by Ministry of Finance using the fiscal reform path, thus acting as an enforcement mechanism for fiscal correction by states.
- Loans from Government of India to states and administered by ministries/department other than Ministry of Finance, outstanding as at the end of 2009-10, to be written off, subject to conditions prescribed.

Assessment of the Thirteenth Finance Commission Report

Vertical Devolution: Increase in the over-all share of the States from Central revenues

Thirteenth Finance Commission recommended that the share of States in net proceeds of shareable Central taxes shall be 32 percent every year for the period of the award. It has also recommended for greater grants-in-aid to states. In all States will get 136 percent higher amount in comparison with Twelfth Finance Commission. This has been due to increase in the expected revenue of the Centre and secondly due to increase in the share of states as recommended by Thirteenth Finance Commission. In comparison to the indicative ceiling of 38 percent by Twelfth Finance Commission, Thirteenth Finance Commission recommended for indicative ceiling at 39.5 percent of gross revenue receipts of the centre as overall transfers to states on revenue account.

Therefore one may conclude that with regard to vertical devolution Thirteenth Finance Commission has done better by granting more revenue transfer to the states.

Table 1: Share of States in Taxes in 11th, 12th and 13th Finance Commission

<table>
<thead>
<tr>
<th>States</th>
<th>11th Finance Commission</th>
<th>12th Finance Commission</th>
<th>13th Finance Commission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>7.701</td>
<td>7.356</td>
<td>6.948</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>0.244</td>
<td>0.288</td>
<td>0.328</td>
</tr>
<tr>
<td>Assam</td>
<td>3.285</td>
<td>3.235</td>
<td>3.634</td>
</tr>
<tr>
<td>Bihar</td>
<td>14.598</td>
<td>11.028</td>
<td>10.934</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>0.000</td>
<td>2.654</td>
<td>2.474</td>
</tr>
<tr>
<td>Goa</td>
<td>0.206</td>
<td>0.259</td>
<td>0.266</td>
</tr>
<tr>
<td>Gujarat</td>
<td>2.821</td>
<td>3.569</td>
<td>3.046</td>
</tr>
<tr>
<td>Haryana</td>
<td>0.944</td>
<td>1.075</td>
<td>1.050</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>0.683</td>
<td>0.522</td>
<td>0.782</td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>1.290</td>
<td>1.297</td>
<td>1.394</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>0.000</td>
<td>3.361</td>
<td>2.806</td>
</tr>
<tr>
<td>Karnataka</td>
<td>4.930</td>
<td>4.459</td>
<td>4.335</td>
</tr>
<tr>
<td>States</td>
<td>Share in Central Taxes &amp; Duties</td>
<td>% of Total</td>
<td>Total Grants-in-aid</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------</td>
<td>------------</td>
<td>--------------------</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>1. Andhra Pradesh</td>
<td>100616.0</td>
<td>6.948</td>
<td>13532.3</td>
</tr>
<tr>
<td>2. Arunachal Pradesh</td>
<td>4755.6</td>
<td>0.328</td>
<td>4348.2</td>
</tr>
<tr>
<td>3. Assam</td>
<td>52620.6</td>
<td>3.634</td>
<td>5215.1</td>
</tr>
<tr>
<td>4. Bihar</td>
<td>158341.2</td>
<td>10.934</td>
<td>14602.8</td>
</tr>
<tr>
<td>5. Chhattisgarh</td>
<td>35825.2</td>
<td>2.474</td>
<td>6175.5</td>
</tr>
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<td>6. Goa</td>
<td>3857.8</td>
<td>0.266</td>
<td>516.2</td>
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<td>7. Gujarat</td>
<td>44107.1</td>
<td>3.046</td>
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<td>8. Haryana</td>
<td>15199.5</td>
<td>1.050</td>
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<td>9. Himachal Pradesh</td>
<td>11327.3</td>
<td>0.782</td>
<td>10364.4</td>
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<td>10. Jammu &amp; Kashmir</td>
<td>20182.7</td>
<td>1.394</td>
<td>20255.9</td>
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<td>11. Jharkhand</td>
<td>40640.3</td>
<td>2.806</td>
<td>7238.4</td>
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<td>12. Karnataka</td>
<td>62774.9</td>
<td>4.335</td>
<td>11601.4</td>
</tr>
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<td>13. Kerala</td>
<td>33954.3</td>
<td>2.345</td>
<td>6371.5</td>
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<td>14. Madhya Pradesh</td>
<td>103268.9</td>
<td>7.131</td>
<td>13324.5</td>
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<td>15. Maharashtra</td>
<td>75406.9</td>
<td>5.207</td>
<td>16302.8</td>
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<td>16. Manipur</td>
<td>6541.2</td>
<td>0.452</td>
<td>7026.3</td>
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<tr>
<td>17. Meghalaya</td>
<td>5918.5</td>
<td>0.409</td>
<td>3923.9</td>
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Notes

<table>
<thead>
<tr>
<th></th>
<th>Mizoram</th>
<th>Nagaland</th>
<th>Orissa</th>
<th>Punjab</th>
<th>Rajasthan</th>
<th>Sikkim</th>
<th>Tamil Nadu</th>
<th>Tripura</th>
<th>Uttar Pradesh</th>
<th>Uttarakhand</th>
<th>West Bengal</th>
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<tr>
<td>18.</td>
<td>3901.3</td>
<td>0.269</td>
<td>4904.0</td>
<td>1.897</td>
<td>8805.3</td>
<td>0.516</td>
<td>4552.9</td>
<td>0.314</td>
<td>9191.3</td>
<td>3.555</td>
<td>13744.2</td>
</tr>
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<td>19.</td>
<td>4552.9</td>
<td>0.314</td>
<td>9191.3</td>
<td>3.555</td>
<td>78974.9</td>
<td>4.627</td>
<td>69316.1</td>
<td>4.787</td>
<td>9658.8</td>
<td>3.735</td>
<td>5.733</td>
</tr>
<tr>
<td>20.</td>
<td>Orissa</td>
<td>69316.1</td>
<td>4.787</td>
<td>9658.8</td>
<td>3.735</td>
<td>78974.9</td>
<td>5.733</td>
<td>4.889</td>
<td>5.733</td>
<td>4.889</td>
<td>5.733</td>
</tr>
<tr>
<td>21.</td>
<td>Punjab</td>
<td>20146.4</td>
<td>1.391</td>
<td>5540.3</td>
<td>2.143</td>
<td>25686.6</td>
<td>1.505</td>
<td>1.505</td>
<td>1.505</td>
<td>1.505</td>
<td>1.505</td>
</tr>
<tr>
<td>22.</td>
<td>Rajasthan</td>
<td>84892.2</td>
<td>5.862</td>
<td>12949.8</td>
<td>5.008</td>
<td>97842.0</td>
<td>5.733</td>
<td>5.733</td>
<td>5.733</td>
<td>5.733</td>
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</tr>
<tr>
<td>23.</td>
<td>Sikkim</td>
<td>3466.8</td>
<td>0.239</td>
<td>1058.8</td>
<td>0.409</td>
<td>4525.7</td>
<td>0.265</td>
<td>0.265</td>
<td>0.265</td>
<td>0.265</td>
<td>0.265</td>
</tr>
<tr>
<td>25.</td>
<td>Tripura</td>
<td>7411.5</td>
<td>0.512</td>
<td>5716.1</td>
<td>2.211</td>
<td>13127.6</td>
<td>0.769</td>
<td>0.769</td>
<td>0.769</td>
<td>0.769</td>
<td>0.769</td>
</tr>
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<td>27.</td>
<td>Uttarakhand</td>
<td>16245.1</td>
<td>1.122</td>
<td>4063.0</td>
<td>1.571</td>
<td>20308.1</td>
<td>1.190</td>
<td>1.190</td>
<td>1.190</td>
<td>1.190</td>
<td>1.190</td>
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<tr>
<td>28.</td>
<td>West Bengal</td>
<td>105358.6</td>
<td>7.276</td>
<td>12638.7</td>
<td>4.888</td>
<td>11997.2</td>
<td>0.703</td>
<td>0.703</td>
<td>0.703</td>
<td>0.703</td>
<td>0.703</td>
</tr>
<tr>
<td>Total</td>
<td>1448096.0</td>
<td>100.000</td>
<td>258581.0</td>
<td>100.000</td>
<td>1706676.0</td>
<td>100.000</td>
<td>100.000</td>
<td>100.000</td>
<td>100.000</td>
<td>100.000</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Source: Report of Thirteenth Finance Commission

Table 3: Criteria and Weights for determining the Relatives Share of States in Taxes and Duties

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Population</td>
<td>20%</td>
<td>10.00%</td>
<td>25.00</td>
<td>25.00</td>
</tr>
<tr>
<td>2. Distance of per capita income of the state from that of the State having highest per capita income</td>
<td>60%</td>
<td>62.50%</td>
<td>50.00</td>
<td>47.50</td>
</tr>
<tr>
<td>3. Fiscal Capacity Distance</td>
<td>5%</td>
<td>7.50%</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>4. Area</td>
<td>5%</td>
<td>7.50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Index of Infrastructure</td>
<td>5%</td>
<td>7.50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Tax effort</td>
<td>10%</td>
<td>5.00%</td>
<td>7.50%</td>
<td></td>
</tr>
<tr>
<td>7. Fiscal Discipline</td>
<td>-</td>
<td>7.50%</td>
<td>7.50%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>


Self-Assessment

1. Choose the correct option

(i) "Shareholder wealth" in a firm is represented by:

   (a) the number of people employed in the firm.

   (b) the book value of the firm's assets less the book value of its liabilities.

   (c) the amount of salary paid to its employees.

   (d) the market price per share of the firm's common stock.
(ii) The long-run objective of financial management is to:
   (a) maximize earnings per share.
   (b) maximize the value of the firm’s common stock.
   (c) maximize return on investment.
   (d) maximize market share.

(iii) A (n) ------ would be an example of a principal, while a(n) ------ would be an example of an agent.
   (a) shareholder; manager  (b) manager; owner
   (c) accountant; bondholder  (d) shareholder; bondholder

(iv) The market price of a share of common stock is determined by:
   (a) the board of directors of the firm.
   (b) the stock exchange on which the stock is listed.
   (c) the president of the company.
   (d) individuals buying and selling the stock.

(v) The focal point of financial management in a firm is:
   (a) the number and types of products or services provided by the firm.
   (b) the minimization of the amount of taxes paid by the firm.
   (c) the creation of value for shareholders.
   (d) the dollars profits earned by the firm.

(vi) The decision function of financial management can be broken down into the decisions.
   (a) financing and investment
   (b) investment, financing, and asset management
   (c) financing and dividend
   (d) capital budgeting, cash management, and credit management

(vii) The controller’s responsibilities are primarily in nature, while the treasurer’s responsibilities are primarily related to .
   (a) operational; financial management  (b) financial management; accounting
   (c) accounting; financial management  (d) financial management; operations

26.3 Summary

• The Twelfth Finance Commission was constituted by the President under Article 280 of the Indian Constitution, with Dr. C. Rangarajan as chairman. This was the second finance commission after the 80th Amendment Act (2000) of the Constitution. The terms of reference of the 12th FC were the same as those of the 11th FC, except the last one which was actually added later through a special notification.

• The transfers from the Centre to the States - in the form of tax devolutions and grants - are meant to correct, both the vertical and the horizontal imbalances.

• As in the case of the 11th FC, the 12th FC considered all the relevant factors as regards receipts and expenditures of the Centre and of the States, the level of over-all transfers relative to Centre’s gross revenue receipts, the relative balance between tax devolution and grants, etc.

• The horizontal aspect of transfers relates to the sharing of the total shareable pool between the States. If all the States in the Indian Union have the same or almost the same per capita income, and if all the States have similar fiscal capacities, the problem of transfer between the States would be simple - namely, equal per capita transfers to every State...In practice, there are considerable horizontal imbalances - States differ in area, size of population, income, tax base, forest and mineral wealth, etc.
There is no objective factor in any of the above criteria. Till now, every FC has attempted to work out different criteria and different weightages for each criterion to arrive at a reasonable degree of equalization. In practice, this is impossible to arrive at and every FC award has been criticized by those States who felt that they should have got a bigger share in the shareable Central revenue pool.

For the first time, it was the 11th FC which was required to suggest “the measures needed to augment the Consolidated Fund of a State to supplement the financial resources of Panchayats and Municipalities.

The 12th Commission has emphasized that, of the grants allocated to panchayats, priority should be given to expenditure on the operation and maintenance costs (O & M) of water supply and sanitation and at least 50 percent of the grants provided to each State for the urban local bodies should be earmarked for the scheme of solid waste management.

The twin objectives of the 12th FC, were to give debt relief to the States and urge them to reduce and completely eliminate revenue deficit.

The award of the Twelfth Finance Commission has been accepted by the Government, though in some cases, the Finance Ministry has added some conditionalties - as, for example, the total share of the States in the Central Government’s gross revenue should not exceed 38 percent.

The Thirteenth Finance Commission (FC-XIII) was constituted by the President under Article 280 of the Constitution on 13 November 2007 to make its recommendations for the period 2010-15. Dr. Vijay Kelkar was appointed the Chairman of the Commission.

On the expenditure side, the commission notes that the, states have higher ‘fixed costs’ than the Centre, as reflected in their higher share of committed expenditure in total non-plan expenditure relative to the Centre.

In view of the objective of inclusive growth, regressive untargeted subsidies that reduce fiscal space for key growth-promoting public investments and delivery of public goods to enhance inclusiveness are, today, a fiscal obstacle to the acceleration of India’s development transformation. Therefore the commission favored a fiscal path, wherein subsidies are closely targeted.

In horizontal devolution of resource transfers the commission clearly stated that it is concerned with equalisation, not equity, (italics added) it says at it is both feasible and possible to address efficiency and fiscal equalisation, using both instruments available to the commission, viz. grants and devolution.

Thirteenth Finance Commission provided ₹87,519 crores as grants for local bodies. It is significant that out of total transfers from center to states share of local bodies made a jump from 3.3 percent by Twelfth Finance Commission to 5.1 percent by Thirteenth Finance Commission.

Thirteenth Finance Commission had to deal with a special issue and that was Goods and Service Tax (GST), which was scheduled to be implemented by October 1, 2010 (earlier it was scheduled for April 2010). The Finance Commission was entrusted with the task of facilitating transition from prevailing system of indirect taxation to a new tax named GST.

The Thirteenth Finance Commission has recommended fiscal consolidation through the elimination of revenue deficit as the long-term target for both the Centre and States.

Thirteenth Finance Commission recommended that the share of States in net proceeds of shareable Central taxes shall be 32 percent every year for the period of the award. It has also recommended for greater grants-in-aid to states. In all States will get 136 percent higher amount in comparison with Twelfth Finance Commission.

According to the basic spirit of the Constitution, Finance Commission is supposed to make recommendations in such a manner that devolution of taxes and grants in aid tend to reduce the prevailing disparities among different states by allocating more resources for the development of less privileged and underdeveloped states.
Basic cause of all these upheavals is the formula adopted by the 13th Finance Commission to decide the share of different states in devolution of Union Taxes. The 13th Finance Commission made radical changes in the formula for devolution such that more deprived states are put at loss and better off are given more resources.

12th Finance commission had given 7.5 per cent importance to fiscal discipline and in 13th Finance Commission its importance has been enhanced to 17.5 percent. It is worth noting that this factor was absent in 10th Finance Commission.

Now that poorer states would receive less money from the central taxes, the aspirations of the residents of those poorer states would remain unfulfilled.

26.4 Key-Words

1. Panchayats: The word "panchayat" literally means "assembly" (ayat) of five (panch) wise and respected elders chosen and accepted by the local community. However, there are different forms of assemblies. Traditionally, these assemblies settled disputes between individuals and villages. Modern Indian government has decentralized several administrative functions to the local level, empowering elected gram panchayats. Gram panchayats are not to be confused with the unelected khap panchayats (or caste panchayats) found in some parts of India.

2. Municipalities: A municipality is usually an urban administrative division having corporate status and usually powers of self-government. The term municipality is also used to mean the governing body of a municipality.

26.5 Review Questions

1. Discuss the term 12th finance commission.
2. Write a short note on the local bodies.
3. Why the 13th finance commission was instituted? Discuss the recommendations made in the thirteenth finance commission.

Answers: Self-Assessment

1. (i) (d) (ii) (b) (iii) (a) (iv) (d) (v) (c) (vi) (b) (vii) (c)

26.6 Further Readings

1. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
2. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
Unit 27: Governance of the Economy – Implementation of Economic Policies

CONTENTS
Objectives
Introduction
27.1 Governance of the Economic Policies: Implementation of Economic Policies
27.2 The Parallel Economy: Concept, Nature and Effects on Policy Processes
27.3 Summary
27.4 Key-Words
27.5 Review Questions
27.6 Further Readings

Objectives

After reading this Unit students will be able to:

• Understand the Governance of Economy.
• Discuss the Implementation of Economic Policies.

Introduction

Although there have been many far-reaching and notable achievements in India but the country is still very far from achieving the objectives of our freedom struggle, Constitution and the plans. Combining continuity with change, the private enterprise-market economy was allowed to continue and expand. This was done by enabling and active assistance of the State for overcoming our age-old problems of poverty and stagnation. For the purpose, India went in for a non-laissez faire, active role of the State beyond the conventional, universal functions of the State. Gradually, the State and the political sphere became important, large and decisive, facilitated and legitimised by the adoption of plural democracy. This model, based on very sound insights, could not deliver the desired positive results and we call policy or State failure in Indian context. There are many studies available to document these failures of policy and planning. However, there are vast differences of opinion concerning whether or what kind of policy or State failure it is. Against this backdrop, we throw light on how the policy implementation has been poor in India. Further, its consequences and implications have also been discussed. For instance, one of the severe consequences is the emergence and flourishing of the parallel economy. Thus, the concept, nature and effects of parallel economy have been discussed.

27.1 Governance of the Economic Policies: Implementation of Economic Policies

The situations regarding policy failure have been given below:

(i) Only partial or inadequate attainment of the objectives of public policy or in a distorted manner;
(ii) Counter-productive results;
(iii) Costs are disproportionate to positive;
(iv) Policy outcomes are related to or generate heavy present and future negative externalities; and
(v) The State’s capacity to initiate course-correction measures gets weakened and failure of policy gives rise to domestic or external forces posing problems before the policy objective.
In the ultimate analysis, this kind of State failure is essentially related to State character, State capacity and State-society relationship in a historical perspective is pretty obvious but is often lost right of.

The Implications of Failures of Policy Implementation

There is an implicit assumption in most policy studies that once a policy has been formulated the policy will be implemented. This assumption is invalid for policies formulated in many Third World nations and for types of policies in Western societies. Third World Governments tend to formulate broad, sweeping policies, and Governmental bureaucracies often lack the capacity for implementation. Interest groups, opposition parties, and affected individuals and groups often attempt to influence the implementation of policy rather than the formulation of policy. Policymakers can attempt to minimize disruptive tensions faced during implementation which can result in the failure of policy outcomes to match policy expectations. It may be noted that the policy implementation failures make the State stray from the chosen declared path of policy.

An Illustration: Tax Policy Implementation: For our purpose of discussion on implementation, we can take the case of tax policy. This policy tried to raise resources by a combination of direct and indirect taxes to finance a large part of increasing public expenditure. In India, the tax administration could not prove itself equal to the task to prevent widespread and regular leakages of revenue. There appears to be inadequate recognition of the limitations and built-in defects in the design and law of the taxes. Moreover, their frequent changes made its success problematic. Apart from this, avenue of tax avoidance was sought to be plugged by imposing gift tax. Gradually, poor and indifferent implementation of tax laws forced the Government to place greater reliance on indirect taxes and Non-tax revenue like internal and external public borrowing and deficit financing (i.e., printing money) to finance public expenditure. It may be observed that a tax policy is not just a matter of tax base and tax rates or even the tax law. Thus, non-realisation of its wide ramifications and deep roots in the social reality, particularly the power of the sections called upon to pay a better part of the taxes, became a major element of many-sided policy failures in India. The fiscal crunch arising from inept and weak implementation of tax laws made the Indian State reduce its normal responsibilities, leaving large gaps in the provision of minimum essential services in areas like socio-economic infrastructure, education, health services and move in the direction of either abdicating many pressing social tasks or hope to achieve them by privatisation.

Factors Responsible for Policy Failures

There are several factors ranging from population pressure, political, bureaucratic and business elite values and modes of behaviour, legacy of colonialism and the domineering policies of the rich countries, national character, etc. we may also include transparency, accountability, widespread corruption, lack of popular peoples’ organisation for active participation in democratic State processes and the adverse, improper policy advice, kibitsing and interference by the rich countries by means of peripatetic advisers, to lack of technical expertise and proper appreciation of the narrow, vested interests hidden as international ‘development’ expertise, as responsible for the policy failures in our country. Moreover, there are general factors, for every specific policy, a set of particular factors have often been identified. It may be noted that even a major policy shift like the one towards globalisation liberalisation and privatisation in the early 1990s appears to have become stuck in the deep-seated morass of cozy, crony relationships and partial, unrealistic analysis of the underlying reality. Apart from the neglect of popular concerns, at least some of the factors are still crying for attention. Such as tax reforms, public debt management, public expenditure and fiscal stabilisation etc.

Lack of Integration in Policy Formulation and Policy Implementation: The main problems for lack of integration are related to the implementation procedures, the agencies, the bureaucracy, politicians, business ethics, archaic methods of financial controls, legal and administrative framework wanting in transparency, accountability, etc. which impede effective implementation of policies. In short, while the theoretical framework and the mechanism of the interaction between the policy variables and the economy are usually declared appropriate and/or easily correctible, a rather sticky and difficult terrain is encountered in the sphere of implementation.
Although there is substantial expansion of the role of the State and economic policies, the lingering, influence of the outdated theories of economic policies is seen in the form of neglect of implementation issues. However, the possibility of something like Government failure was hardly taken note of. The empirical and realistic theoretical studies recognise that the policy processes carry the impact of both market and non-market incentives, information, social power and influence conflicts and contradictions between divergent economic interests, partisan character of the State and its personnel as compulsions of a State chosen by competitive, democratic electoral processes in highly non-equalitarian societies. Another potent source is growing global linkages that make the policy arena a virtual battleground. It is observed that tax evasion, black marketing and violation of economic regulation are manifestations of the ‘revolt’ by the market against high tax rates, ‘unjust’ price, distribution, investment and movement controls and the curtailment of private and corporate freedom to take independent economic decisions for the legitimate pursuit of their goal of maximising profits etc. The State has the responsibility to moderate and modify economic policies and make them market-friendly if the parallel economy is to be reduced to represent the marginal, deviant behaviour of some economic entities with little macro-societal significance except as pinpricks. It may be noted that this parallel economy imposes high, unnecessary or avoidable costs on business, or increases the transactions cost of business by imposing rent of authority on private business i.e., illegal gratification extorted or collected from or paid to the people enjoying and exercising State authority to permit the market players to operate according to their own lights.

27.2 The Parallel Economy : Concept, Nature and Effects on Policy Processes

Black money or unaccounted money circulating in the parallel economy is a big menace to the economy. It is also a cause of big loss in the tax-revenues for the Government. As such it needs to be curbed. Its elimination will benefit the economy in more than one way. It will also generate more revenues for the Government.

Black money may be defined as the money that is generated by activities that are kept secret in the sense that these are not reported to the authorities. As such this money is also not accounted to the fiscal authorities i.e., taxes are not paid on this money. Contrasted to this is the white money that is shown in relevant accounts and tax paid, if due.

Parallel economy connotes the functioning of an unsanctioned sector in the economy whose objectives run parallel, rather in contradiction with the aroused social objectives.

The money involved in black/secret transactions or used in parallel economy (i.e., parallel to the legitimate economy) is very large indeed. Very recently the National Institute of Public Finance Policy has estimated that the sum involved is as much as about Rs. 40,000 crores. This constitutes around 20 per cent of the gross domestic product of the economy. A recent estimate puts the size of black money at over 50 per cent of GDP (at factor cost). It is also Stated that the annual rate of growth of black money is higher than the annual growth-rate of GDP. The present size of black money is thus very large indeed.

Future Directions

The country must evolve a new concept, theory, strategy and policy framework of development. It may be noted that these are long-term and uncertain tasks, depending on mega socio-economic factors of both the national and global politics. For effective intervention, people must have at least a minimum of livelihood adequacy and security. The existing order and its beneficiaries are the fountain head of the black economy and perversion of policy processes. As a positive sign for strengthening the anti-black economy forces in the economy, there should be a political framework which guarantees the livelihood adequacy and security, as seems to be on the horizon with the enactment of the Employment Guarantee law by the Government at the center. Moreover, democratisation of political parties and electoral reforms in order to break the unholy nexus between politicians, corrupt business persons, bureau-crats and the criminal mafia gangs can go a long way in moving towards a clean democratic society in India. It may be observed that democracy and peoples’ own efforts are the means which may be slow, difficult, at times frustrating. However, they do produce desirable outcomes over the
time. Over the time India would move towards a genuine, honest pro-people State, economy and society and in the process the black economy and policy perversions would become marginal instances of deviant behaviour.

Self-Assessment

1. Choose the correct options:
   (i) For the first half of the 1800s, which level of government was most active in promoting and regulating private economic activity?
      (a) just local and national governments were active in the early 1800s.
      (b) neither the national nor state levels were active
      (c) state
      (d) the national and state levels were equally active
      (e) national
   (ii) The doctrine of laissez-faire as it applies to government regulation of the economy
      (a) holds that consumers and workers would fare better if the economy were regulated by government.
      (b) was applied completely through the 1800s.
      (c) holds that government regulation of the economy is wrong.
      (d) had no impact on U.S. economic policy in the 1800s.
      (e) has been regularly applied to communist systems.
   (iii) National government intervention in the economy during the 1800s was exhibited by the
      (a) Homestead Act.  (b) Sherman Antitrust Act.
      (c) Interstate Commerce Act.  (d) all of the above
      (e) none are correct
   (iv) Which of the following acts of Congress created a system to regulate the national banking system in 1913?
      (a) Sixteenth Amendment  (b) Federal Trade Commission
      (c) Clayton Act  (d) Missouri Compromise
      (e) Federal Reserve Act
   (v) The New Deal of President Franklin D. Roosevelt in the 1930s represented a significant step
      (a) away from the laissez-faire state.
      (b) toward turning over much of the national regulation of the economy to the states.
      (c) toward turning over much of the national regulation of the economy to the local governments.
      (d) toward the laissez-faire state.
      (e) away from the interventionist state.
   (vi) Economic regulation grew significantly in which of the following industries during the early 1900s?
      (a) banking and the stock market
      (b) none—economic regulation did not grow during the early 1900s.
      (c) trucking and aviation  (d) all of the above
      (e) agriculture
   (vii) Social regulation is concerned with such areas as the
      (a) control of entry into a business.
      (b) prices or rates of charges to society for goods and services.
      (c) activities of interest groups as they apply grassroots lobbying efforts on the people.
27.3 Summary

The situations regarding policy failure have been given below:

(i) Only partial or inadequate attainment of the objectives of public policy or in a distorted manner;
(ii) Counter-productive results;
(iii) Costs are disproportionate to positive;

In the ultimate analysis, this kind of State failure is essentially related to State character, State capacity and State-society relationship in a historical perspective is pretty obvious but is often lost right of.

There is an implicit assumption in most policy studies that once a policy has been formulated the policy will be implemented. This assumption is invalid for policies formulated in many Third World nations and for types of policies in Western societies.

For our purpose of discussion on implementation, we can take the case of tax policy. This policy tried to raise, resources by a combination of direct and indirect taxes to finance a large part of increasing public expenditure.

The fiscal crunch arising from inept and weak implementation of tax laws made the Indian State reduce its normal responsibilities, leaving large gaps in the provision of minimum essential services in areas like socio-economic infrastructure, education, health services and move in the direction of either abdicating many pressing social tasks or hope to achieve them by privatisation.

There are several factors ranging from population pressure, political, bureaucratic and business elite values and modes of behaviour, legacy of colonialism and the domineering policies of the rich countries, national character, etc.

It may be noted that even a major policy shift like the one towards globalisation liberalisation and privatisation in the early 1990s appears to have become stuck in the deep-seated morass of cozy, crony relationships and partial, unrealistic analysis of the underlying reality.

Although there is substantial expansion of the role of the State and economic policies, the lingering, influence of the outdated theories of economic policies is seen in the form of neglect of implementation issues.

It may be noted that this parallel economy imposes high, unnecessary or avoidable costs on business, or increases the transactions cost of business by imposing rent of authority on private business i.e., illegal gratification extorted or collected from or paid to the people enjoying and exercising State authority to permit the market players to operate according to their own lights.

Black money or unaccounted money circulating in the parallel economy is a big menace to the economy. It is also a cause of big loss in the tax-revenues for the Government.

Black money may be defined as the money that is generated by activities that are kept secret in the sense that these are not reported to the authorities. As such this money is also not accounted to the fiscal authorities i.e., taxes are not paid on this money. Contrasted to this is the white money that is shown in relevant accounts and tax paid, if due.

It is the High Networth Individuals (HNWIs) and private companies that were the primary drivers of illicit flows from the private sector in India rather than the common man.

The country must evolve a new concept, theory, strategy and policy framework of development. It may be noted that these are long-term and uncertain tasks, depending on mega socio-economic factors of both the national and global politics.

Over the time India would move towards a genuine, honest pro-people State, economy and society and in the process the black economy and policy perversions would become marginal instances of deviant behaviour.
27.4 Key-Words

1. Policy implementation: Represents the stage where government executes an adopted policy as specified by the legislation or policy action. At this stage, various government agencies and departments, responsible for the respective area of policy, are formally made responsible for implementation. Policy implementation is what happens after a bill becomes law.

2. Parallel economy: Parallel economy connotes the functioning of an unsanctioned sector in the economy whose objectives run parallel, rather in contradiction with the aroused social objectives. This is variously termed as 'black economy', 'unaccounted economy', 'illegaleconomy', 'subterranean economy', 'unsanctioned economy' or 'hidden economy'. The National Institute of Public Finance and Policy (NIPFP) defines black money as the aggregate of incomes which are taxable but not reported to the tax authorities. A hidden economy in its broadest sense may consist of - a) illegal economy, such as money laundering, smuggling, etc; b) unreported economy including tax evasion; c) unregulated economy, ie economic activities outside regulations.

27.5 Review Questions

1. What is the concept of Parallel economy? Discuss.
2. Discuss the factors responsible for policy failures.
3. What do you mean by the governance of policy economic policy?

Answers: Self-Assessment

1. (i) (c)  (ii) (c)  (iii) (d)  (iv) (e)  (v) (a)
   (vi) (d)  (vii) (e)

27.6 Further Readings

Books
1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.
Note: The page contains a unit on Indian Economic Policy titled "Parallel Economy." The text discusses the historical context and the emergence of the parallel economy in India, its definition, and objectives. It explains how the parallel economy emerged in the 1940s due to rationing and control mechanisms post-1947. The text also elaborates on the objectives of planning and how they were met with opposition from vested interests. The parallel economy, defined as an unsanctioned sector, is discussed in the unit, providing a comprehensive overview of its significance in the Indian economy.
geared that the progressive forces dominate and are able to subjugate those who attempt to frustrate
the efforts of the state to establish a social order based on equality and justice for all, more especially
for the downtrodden.

With the attainment of independence and the advent of planning, more avenues of investment in a
large number of industries were opened. The concept of the mixed economy envisaged the co-existence
of a public sector and a private sector. Both were expected to promote investment and output. The
criterion in the public sector was social gain and thus it concentrated on the creation of economic
infrastructure in the form of roads, railways, irrigation and hydro-electric works, etc., the development
of heavy, basic and defence industries and the provision of better education and health facilities. The
rest of the economy was left to be developed by the private sector.

With the expansion of economic activity in the post-independence period, the magnitude of the black
sector has grown and proliferated to such an extent that it has begun to play a dominant role in
moulding state policies, in changing the structure and composition of output, in promoting a class
which derives its maximum source of power from black money. Obviously, the magnitude of
operations of the black money operators has resulted in the establishment of a parallel economy.
D.K. Rangnekar rightly mentions: “If the “Parallel economy” poses a serious threat to stability and
growth of the official economy, surely it stems from the fact that the magnitude of “black money” is
large and rigged deals are growing in volume and complexity at an alarming rate. Apart from the
wide ramifications of the “parallel economy”, one might also be alive to the fact that “black incomes”
are accentuating the inequalities in income and wealth and breeding a new class of “black” rich in a
society which is already harshly stratified. The inequalities are no longer below the surface. The
conspicuous consumption of the new “black” rich, their vulgar display of pomp and opulence, their
unlimited accessibility to finance, their nest-eggs in various places and countries, their influence in
important places, all these are now common knowledge”. To understand the impact of black economy,
it is essential to have an estimate of ‘black income’ over a period of time.

28.1.1 Estimates of Black Income in India

Several attempts have been made to quantify black incomes in India. Broadly speaking, the various
estimates of black incomes made so far follow two approaches: (i) Kaldor’s approach of quantifying
non-salary incomes above the exemption limit of income tax and (ii) Edgar L. Feige’s method of
working out transaction-income on the basis of currency deposit ratio and from it deriving the black
income of the economy. Kaldor’s method has been used in the report on Indian Tax Reform, and later
by the Direct Taxes Enquiry Committee with some modifications. D.K. Rangnekar, former Editor,
Economic Times, used the same technique with some more modifications and later Mr. O.P. Chopra
developed a series of black income by further modifying the Wanchoo Committee’s assumptions.
Feige’s method has been used by Poonam Gupta and Sanjeev Gupta. It would be of interest to study
these methods in some detail.

Estimates of black income based on Kaldor’s approach

(i) Kaldor’s estimate: N. Kaldor in his report on Indian Tax Reform estimated the non-salary
income on the basis of the break-up of national income into (a) wages and salaries, (b) income
of the self-employed, and (c) profit, interest, rent etc. Excluding wages and salaries from the
contributions to net domestic product, he derived total non-salary income. For various sectors
of the economy, on the basis of assumed proportions of non-salary incomes above the exemption
limit. Kaldor estimated non-salary income above the exemption limit. An estimate of the actual
non-salary income assessed to tax was made for each sector in order to arrive at the total non-
salary income assessed to tax. The difference between the estimated non-salary income above
the exemption limit and the actual non-salary income assessed to tax measures the size of the
black income. (Refer table 1).

(ii) Wanchoo Committee’s Estimate: Direct Taxes Enquiry Committee (Wanchoo Committee)
followed the method adopted by Kaldor with suitable modifications. According to Wanchoo
Committee, “the estimated income on which tax has been evaded (black income) would probably
be ₹ 700 crores and ₹ 1,000 crores for the years 1961-62 and 1965-66 respectively. Projecting this
estimate further to 1968-69 on the basis of percentage increase in national income from 1961-62 to 1968-69. the income on which tax was evaded for 1968-69 can be estimated at a figure of ₹ 1800 crores.”

(iii) Rangnekar’s Estimate: Dr. D.K. Rangnekar as member of the Wanchoo Committee, in his minute of dissent considers the estimates made by the Wanchoo Committee as under-estimates. According to him, tax evaded income for 1961-62 was the order of ₹ 1,150 crores, as compared to the DTEC estimate of ₹ 850 crores. For 1965-66, it was ₹ 2,350 crores, as against ₹ 1,216 crores estimated by DTEC. The projections of black income for 1968-69 and 1969-70 were ₹ 2,833 crores and ₹ 3,080 crores respectively. Rangnekar concluded: “The compound rate of growth of “black income” was of the order of 13 per cent per annum at current prices whereas the compound rate of growth of national income for the same period was 11 per cent per annum.” Rangnekar further clarifies that if one took into account the leakage of foreign currency incomes and surreptitious foreign income transfers, the estimates of black income may have to be marked up by ₹ 200 crores.

(iv) Chopra’s Estimate: Mr. O.P. Chopra prepared a series of unaccounted income (black income) for a period of 17 years, i.e., 1960-61 to 1976-77. Chopra uses a slightly modified methodology recommended by the Direct Taxes Enquiry Committee. Since it is difficult to obtain information on non-salary income actually assessed, the DTEC assumed the ratio of evaded income to non-salary assesseable income to remain constant to the one observed in 1960-61. Chopra gives up this assumption in favour of a less demanding assumption. Chopra’s methodology marks a significant departure from the DTEC approach and as a consequence, he finds a larger divergence in the two series from 1973 onwards when the income above the exemption limit registered a significant increase. The underlying assumptions of the methodology are:

(i) Only non-salary income is evaded. While this may be true for government employees, this does not capture additional benefits given by the private sector to its salary earners, more especially, business executives.

(ii) Taxes other than income tax are evaded and the study is restricted to only that part of income which is subject to income tax. Thus tax evasion which may be due to (a) non-payment or under-payment of excise duty, (b) sales-tax, (c) customs duties, or (d) substituting non-agricultural income for agricultural income is not captured.

(iii) The efficiency of the tax administration remains unchanged.

(iv) The ratio of non-salary income above the exemption limit to total non-salary income has remained the same.

(v) The ratio of non-salary income to total income accruing from various sectors of the economy remains the same.

(vi) Unaccounted income generation in the agricultural sector has not been taken into account. The study shows that a buoyant economy offers more opportunities for unaccounted income. During periods of recession, it may be difficult for producers to extract unaccounted money. The crucial finding of Chopra’s study is that after 1973-74, the ratio of unaccounted income to assessable non-salary income has gone up, whereas the Wanchoo Committee assumed this ratio to have remained constant. As a consequence, after 1973-74, there is wide divergence between the estimates of Wanchoo Committee and those of Chopra. Chopra also corroborates the hypothesis that tax evasion is more likely the higher the rate of tax.

(v) Gupta’s Study of Black Income using Feige’s method of transaction-income ratio

Poonam Gupta and Sanjeev Gupta have raised some fundamental objections regarding Kaldor’s methodology used in estimating black income in India. Since the income generated in the illegal economy is not reported for the calculation of official GNP, the estimates of GNP which are used as the basis for estimation of black economy are serious under-estimates. Consequently, the exclusion of black market activity biases all the important indicators of economic activity in any society. Official statistics on income, therefore, grossly under-estimate the true size of the economy. That being so, the size of the black economy is also seriously under-estimated.
Guptas made use of Feige’s method of estimating the magnitude and growth of the black market. Feige assumed that the ratio of total transactions to total income was relatively stable. Therefore, it would be more logical to calculate the total volume of transactions, both legal and illegal. The Official GNP measures only the legal economic activity. Thus, if a proportional relationship exists between transactions and income, then significant increases in this ratio would be due to the expansion of illegal (or black) economic activity.

Feige’s methodology requires preparation of estimates of chequing transactions and currency transactions. Chequing transactions are equal to the average stock to demand deposits multiplied with their turnover rate (i.e., the average number of times the demand deposits turnover). Transactions supported by currency (or cash) can be estimated by calculating the turnover of a unit of currency and then multiplying it by the total currency with the public. A benchmark year is chosen where it is assumed that there was no illegal activity or black income generation was zero. For this base year, the ratio of transactions of GNP is first obtained. Estimates of the magnitude of legal and illegal activities in the succeeding years can be obtained by dividing the total volume of transactions in each year by the base year’s ratio. Subtracting measured GNP gives us the estimate of black income generated in these years.

According to this study, the absolute size of the black income in India increased from ₹ 3,034 crores in 1967-68 to ₹ 46,867 crores in 1978-79, i.e., by more than 15 times. The relative share of the black economy was 9.5 per cent of GNP in 1967-68, but it has jumped to nearly 49 per cent by 1978-79. According to Guptas: “Thus, currently almost half of the official income is being produced outside the “legal” sector. Not only is the black economy a substantial proportion of the regular economy but it has also grown at a rate faster than that of the official economy.”

The study further indicates that 1 per cent increase in overall taxes leads to more than 3 per cent increase in the black income relative to the official economy.

(vi) NIPFP Study on Black Economy in India

National Institute of Public Finance and Policy conducted a study under the direction of Dr. S. Acharya, formerly of the World Bank. Dr. Raja Chelliah was the overall supervisor of the Study. The study defines black income as “aggregate of incomes which are taxable but are not reported to tax authorities”. The study, however, gives a broader definition of black income and calls it as “unaccounted income” for purposes of clarity. It is “the extent to which estimates of national income and output are biased downwards because of deliberate, false reporting of incomes, output and transactions for reasons of tax evasion, flouting of other economic controls and related motives.”

28.1.2 A Review of the Various Estimates of Black Income

IMF staff survey on the unaccounted sector of the economy has estimated black money in India at 50 per cent of Gross National Product (GNP), which was ₹ 1,45,141 crores in 1982-83 at current prices. On this computation, India’s unaccounted sector is of the order of ₹ 72,000 crores.

The estimate of black income prepared by Guptas indicates the highest proportion, i.e., 49 per cent of GNP. As against it, other estimates indicate that black income was near about 10 per cent of GNP. The question arises : which one of these estimates can be considered reliable ? Some economists have expressed serious doubts about the validity of the estimate of Guptas. J.C. Sandesara writes: “The estimation of black money, at any rate, for India is far too serious a business to be handled exclusively by the tool of currency-deposit ratio, and/or to be left to monetary statisticians/economists.” The main point of criticism is that the value of total transactions is affected by several factors, viz., the degree of monetisation, the extent of vertical integration of the economy, the rate of introduction of technical change, etc. It would be advisable to disaggregate the effect of these factors. To that extent, there would be over-estimation. But there is a serious element of under-estimation which has not been noted by the critics. A good number of transactions which are effected through ‘hundis’ or other near money instruments which go unrecorded in chequing or currency transactions are not covered in the estimate of total transactions. An upward adjustment on this account has to be made and it may be noted that the number and size of such transactions is quite large.
A review of the various estimates clearly reveals that the Kaldor’s method of concentrating attention on official GNP seriously under-estimates the size of black income generated in the economy. There is a serious under-reporting of production and there is enough evidence about it. By corrupting excise department officials, the capitalist classes are able to evade the reporting of a significant proportion of total production.

It would not also be fair to discard the monetary approach altogether because this also serves as a cross-check on the other estimate. It is probable that truth lies somewhere between the two extremes. In that sense, more research has to be directed in this regard. If only 9-10 per cent of GNP is generated as black income, it cannot pose the threat as suggested in the phrase “Parallel economy”, but if the magnitude is much larger as many economists believe, then the threat of “parallel economy” is real. Moreover, it would be more relevant if the size of black income is compared not to total GNP but to GNP minus income from the agricultural sector (Y–Ya), as Chopra has done. Such an approach is more useful for an underdeveloped country like India where agricultural income constitutes about 40 per cent of GNP.

The main findings of the various studies on black income are:

(i) The amount of black money has not only been growing in absolute terms, but also in relative terms as a percentage of GNP.

(ii) Black income which was less than 10 per cent of GNP up to 1975-76 began to grow at a much faster rate thereafter. According to NIPFP estimate for 1983-84, it was in the range of 18 to 21 per cent of GNP, though as per the estimate of Dr. Suraj B. Gupta, it was about 46 per cent of GNP in 1983-84 and rose further to about 51 per cent in 1987-88.

(iii) The rate of growth of black income generation is faster than the rate of growth of Gross National Product.

(iv) Higher rates of taxation motivated businessmen and industrialists to go for massive tax evasion.

(v) The political system winked at the growth of black income but did not take effective measures to curb the growth of unaccounted income.

28.1.3 Impact of Black Incomes on the Economic and Social System

The creation of a parallel economy as a consequence of the growing proliferation of black money in every sector of the economy has very serious and in a number of ways pernicious influences on the working of the Indian economy. It would be of interest to study their impact on the Indian economic and social system.

First of all, the direct effect of black income is the loss of revenue to the state exchequer as a consequence of tax evasion, both from direct and indirect taxes. Moreover, tax evasion does not include loss of revenue resulting from unreported production or illegal economic activity. Since the Government is not able to plug the leakage of tax evasion, it has to resort to other avenues of raising funds. So it imposes more taxes on commodities or raises the existing rates of taxation on commodities. As a consequence, India developed a regressive tax structure. Direct Taxes Enquiry Committee in this connection mentioned: “Black money and tax evasion, which go hand in hand, have also the effect of seriously undermining the equity concept of taxation and warping its progressiveness. Together, they throw a greater burden on the honest taxpayer and lead to economic inequality and concentration of wealth in the hands of the unscrupulous few in the country.” It is the salaried person (who cannot escape taxation) who suffers and the dishonest tax-payer is able to get away and then use the evaded income in luxurious and ostentatious consumption. Emphasizing this fact, D.K. Rangnekar mentions: “So while the tax paying public finds its own income falling, the non-tax paying public is having a free run of swelling concealed incomes thereby adding a new dimension to the problem of inequality of incomes and wealth.”

Secondly, the availability of black incomes with businessmen and capitalists and the consequent inequalities of income place a large amount of funds at their disposal. Easy money as it obtains, finds ready outlets in non-essential articles of conspicuous consumption. This has a demonstration effect on all classes of people. As a consequence, the consumption pattern is tilted in favour of the rich and elite classes, at the cost of encouraging the production of articles of mass consumption. A rise in the
overall consumption leaves less resources for investment in priority areas. These distortions in the product-mix in favour of non-essential consumption have adverse effects on production and thus they distort the objectives of planning.

Thirdly, black money encourages investment in precious stones, jewellery, bullion, etc. This has an adverse effect on growth via its demonstration effect.

Fourthly, black money has encouraged diversion of resources in the purchase of real estate and investment in luxury housing. There is large scale under-valuation of property and in this way, lot of black money is made white. This has also pushed up the prices of land to astronomical heights because of speculative purchases of land by black money operators. As a consequence, the middle classes are priced out in the purchase of land for houses. Not only that, a lot of nation’s resources are used in only making inputs available for luxury housing. Since most of these buildings are registered at under-valued prices, the Government loses by way of tax revenues when these buildings are transferred as gifts or are bequeathed.

Fifthly, a part of the black incomes is held in cash and as a consequence there is an abundance of liquidity which becomes available through the accumulation of savings held in the form of cash, bullion, gold, silver, etc. This is popularly termed as ‘black liquidity’. Thus, whenever the Government attempts to control excess demand with the help of measures of credit control or rationing, such attempts are frustrated by the huge liquidity provided by black money. Since this liquidity results in heavy inventory build-up, it becomes a threat to price stability.

Sixthly, black money results in transfer of funds from India to foreign countries through clandestine channels. Such transfers are made possible by violations of foreign exchange regulations through the device of under-invoicing of exports and over-invoicing of imports. The country thus finds itself in a paradoxical situation, “where capital and more particularly foreign exchange resources are scarce, (the country) becomes a de facto lender of aid and capital to economically advanced and wealthier nations, with the concealed outflow of funds.” The situation has worsened further over the years.

28.1.4 Factors Responsible for Generation of Black Money

There are several factors responsible for the generation of black money. It would be relevant to discuss those factors so that a correct understanding about the genesis, growth and expansion of black money can be made. The principal factors are :

(i) **Divergence between the acceptable net rate of return and legally permissible rate of return**:

There is a school of thought which believes that the chief factor responsible for generation of black incomes is that individuals expect a higher net rate of return than the legally permissible rate of return. In this connection, the higher marginal rates of taxes assume special importance. The Chambers of Commerce and Industry hold a unanimous view that very high rates of taxation on incomes above a certain limit are in fact expropriatory in nature. For instance, at one time, the marginal rate of income tax was as high as 97.5 per cent and this was tantamount to near nationalisation of all incomes beyond a certain level. The high marginal rates led many experts on public finance to describe that we are “the most highly taxed nation.” These high rates were gradually brought down to 40% by former Finance Minister Dr. Manmohan Singh by 1996. Mr. P. Chidambram has further reduced them in 1997-98 budget to 30 % for individual and 35% for corporations.

However, there is another school of thought led by economists of the left who believe that the argument of high marginal tax rates is over-played. They assert that actually paid rates on declared incomes are not as high as determined by the officially prescribed marginal rates of taxation. Consequently, a reduction in rates of taxation, would not result in reduction in tax evasion but it only grants more relief to the tax evaders.

Dr. K.N. Kabra in his empirical study of high rates of income tax and tax evasion has worked out the actual income taxes paid at various levels of income during the period 1971-72 and 1978-79. His study reveals the following :

(a) Tax evasion was of the order of ₹ 1,890 crores in 1971-72 and it jumped to three times this figure (at nearly ₹ 5,400 crores) in 1978-79. Evaded tax as a percentage of potential tax
revenue was nearly 78 per cent in 1971-72, it declined to 72 per cent in 1975-76 but started rising there after and was of the order of 82 per cent in 1978-79. It follows that reduction in tax rates could not control the propensity towards tax evasion.

(b) There was a dramatic increase in actual tax collection from ₹ 874 crores in 1974-75 to ₹ 1,214 crores in 1975-76—an increase of almost 40 per cent. But this spurt in actual tax revenue was the result of tightening up of tax administration during emergency, coupled with a vigorous drive for unearthing black incomes. However, buoyancy in tax revenue was short-lived and with the wearing down of the effects produced by measures taken during emergency, actual tax collections registered a decline.

The upshot of Kabra’s analysis is that whereas it may be conceded that higher marginal rates of taxation motivate tax evasion because of its expropriatory nature, a reduction in the marginal rates of taxation, even though substantial, is no guarantee that tax evasion would not be resorted to, if the costs and risks involved in tax evasion are considerably less than the amount of money converted into black income. In other words, elasticity of increase in tax revenue as a consequence of the reduction in the marginal rate of taxation is less than unity. Kabra writes: “In a regime which induces reduction in tax evasion by a method “soft” on tax evaders (like cut in tax rates) rather than by “harder” method which enhances the costs and risks of tax evasion, it would be difficult to expect a better tax compliance through “soft-methods.”

(ii) Black money generation as a consequence of controls, licensing system: There is a school of thought which firmly believes that the system of controls, permits, quotas and licences which are associated with maldistribution of the commodities in short supply results in the generation of black money. The Wanchoo Committee explaining this factor as a source of black money observed, “In spite of the vigilance exercised by the Government, controls and regulations came to be used by the unscrupulous for amassing money for themselves. Since considerable discretionary powers lay in the hands of those who administered controls, this provided them with a scope for corruption – ‘speed money’ for turning a blind eye to the violation of controls. All this gave rise to trading in permits, quotas and licences, malpractices in distribution and in the process, it generated sizeable sums of black money.”

Dagli Committee on Controls and Subsidies concurring with DTEC observed: “Price and distribution controls have in the past led to the generation of black money on a significant scale. Any price control without any adequate machinery of distribution and speedy arrangement for increasing supplies is potentially a source of black money generation.”

Dagli Committee pointed out rent control leads to “pugree system” and is, therefore, another source of black money. Similarly, the system of licences requires large number of inspectors for completing various formalities and thus good amount of hush money has to be paid.

(iii) Donation to political parties: Ever since the Government decided to ban donations to political parties in 1968, it prompted businessmen to fund political parties, especially the ruling party, with the help of black money. Ostensibly, this decision was taken to reduce the influence of big business on the electoral process, but in practice what happened was precisely the opposite. Businessmen everywhere have by now learnt that they should pay a certain charge out of the black money to the coffers of political parties and then be sure that the political leaders will only bark but not bite. Big business, in the process, has been able to tame the political leadership and thus, the latter has started speaking the language of big business etc.

(iv) Ineffective enforcement of tax laws: Whereas the Government has an armoury of tax laws pertaining to income tax, sales tax, stamp duties, excise duty etc., their enforcement is very weak due to widespread corruption in these departments. The high rates of these taxes induce businessmen to avoid recording of these transactions. This evasion largely goes unchecked and thus sets in a chain reaction for the generation of black money at the wholesale, retail as well as production levels.

(v) Generation of black money in the public sector: Every successive five-year plan planned for a larger size of investment in the public sector. The projects undertaken by the public sector have to be monitored by the bureaucrats in Government departments and public sector...
undertakings. Tenders are invited for the various works and these tenders are awarded by the bureaucracy in consultation with the political bosses. Thus, a symbiotic relationship develops between the contractors, bureaucracy and the politicians and by a large number of devices, costs are artificially escalated and black money is generated by underhand deals. Instability of the political system has given a further momentum to this process. The rapidity with which ministers are changed or dropped or cabinets reshuffled, has added another dimension to the problem. Since the ministers are not sure of their tenure and in a majority of cases, the tenure is very short, the principle ‘Make hey while the sun shines’ is adopted by most of them. The large number of scandals that are unearthed by the Opposition only support the contention that huge investment in the public sector is a big potential source for black money generation.

28.1.5 A Survey of Measures Undertaken to Unearth Black Money

It would be desirable at this stage to make a survey of the measures undertaken to unearth black incomes since independence and to assess their success so that further course of action can be decided. The principal measures undertaken were:

(i) **Measures to check tax evasion**: One of the basic causes of black income generation and then its conversion into either white money by various measures or into black wealth is tax evasion. Therefore, plugging loopholes in tax evasion by a large number of legal and administrative measures was undertaken. Most of these measures were based on the recommendations of various committees and commissions, *viz.* the Taxation Enquiry Commission (1953), Nicholas Kaldor’s proposals for Indian Tax Reform (1956), the Direct Taxes Administrative Enquiry Committee (1958). Recommendations by the Administrative Reforms Commission (1969), the Direct Tax Enquiry Committee (1971). Most of these recommendations pertained to improvement in tax laws. But more important than that, the various committees felt that tax administration was too weak and ineffective. The penalties imposed under the tax laws were not deterrent enough and the tax administration machinery was not able to bring to book the tax evaders. During 1965-69, all the measures taken against tax evasion yielded only ` 105 crores by way of taxes and penalties.

While it is customary to make the income tax officials as scapegoats in the matter, the fact of the matter is that the political support needed by the Tax Administration did not come forth and thus even the income tax officials who pursued their task honestly and vigorously were demoralised. This is evidenced by the fact that when state support was given in 1975, then in one year income tax revenues jumped from ` 874 crores in 1974-75 to ` 1,214 crores in 1975-76, an increase by 39 per cent, but as state support declined, tax revenues also started declining. The rot at the political level only demoralises the tax administration and makes it dysfunctional.

(ii) **Demonetization**: In 1946, demonetization was resorted to but the Direct Taxes Enquiry Committee in its interim report admitted: “Demonetization was not successful then, because only a very small proportion of total notes in circulation was demonetized. Notes demonetized in 1946 were of the value of ` 143.97 crores as against the total notes issued of the value of ` 1,235.93 crores.”

Another demonetization was attempted with effect from January 16, 1978 of high denomination notes, i.e., ` 1,000, ` 5,000 and ` 10,000. The high denomination notes as on that date aggregated to ` 146 crores. Notes tendered to the Reserve Bank of India amounted to ` 125 crores as per data available till August 1981. Obviously, demonetization failed to make a serious dent on unearthing black money.

Demonetization assumes that all black incomes are held in the form of cash balances, but the fact of the matter is that it is only a small part of the total black incomes which is held in liquid form. The rest are in circulation. Secondly, businessmen invent a number of clandestine ways to circumvent demonetization. So the net effect of this limited and partial measure to destroy black incomes is too insignificant.

(iii) **Voluntary Disclosure Schemes**: From time to time, various voluntary disclosure schemes were floated by the Government. These schemes were nothing but a camouflaged version of reduction
in tax rates at higher income levels. Mr. H.R. Machiraju estimated the results of all the various schemes and methods used to unearth black incomes. Up to 1968 a total concealed income of the order of ` 519 crores was declared on which ` 131 crores were paid as tax, this further highlights the failure of the Government to unearth black incomes. The Direct Taxes Inquiry Committee, therefore, categorically opposed the introduction of any further voluntary disclosure schemes since they “placed a premium on fraud and are unfair to the honest tax payers.” The DTEC mentioned: “They were more or less schemes for converting black money into white on payment of what turned out to be in most cases, a small amount of conscience money” (emphasis added). Disclosure made in the name of minors, ladies and benamidars has, on the other hand, contributed to perpetuating evasion, and rendering investigation in many a case of suspected tax evasion difficult or even futile. The fact that in the last of the three schemes, namely block scheme, as many as 77 thousand and odd out of a total of 1,64,226 disclosures were from persons not previously assessed to tax would bear ample testimony to this misuse of the scheme. We were informed by the Central Board of Direct Taxes that there were several instances of the same set of persons taking advantage of all the three schemes which would belie the theory that such schemes help to rehabilitate the repentant tax evader who is desirous of mending his ways.”

Ignoring the recommendations of the Direct Taxes Enquiry Committee, the Government again introduced a Voluntary Disclosure Scheme of Income and Wealth in 1975. The fear psychosis generated by the emergency had a profound effect. As a consequence, a sum of ` 746 crores was realised as tax. This certainly terrified the black money operators and most of them were on the run. But this atmosphere was shortlived. Neither the Janata Government after 1977 nor the Congress Government after resuming power in 1980 took up the task of unearthing black incomes seriously.

(iv) Special Bearer Bond Scheme: Special Bearer Bonds Scheme (1981) was intended for canalising unaccounted money for productive purposes. The Special Bearer Bonds, 1981 of the face value of ` 10,000 each were issued at par with a maturity period of 10 years. The holders of these bonds were to be entitled to receive ` 12,000 on maturity. In other words, they carry an interest of 2 per cent per annum. Complete immunity was granted to the original subscriber or possessor of the bonds from being questioned about the possession of bonds or about the sources of money from which the same were acquired. As per data provided in the budget (1982-83), Special Bearer Bonds were subscribed to the tune of ` 964 crores. V.L. Mehta, in a very sharp comment condemned the SBB Scheme in the following words. “Such efforts, as the Bearer Bonds Scheme to tackle the problem, are only half-hearted measures. By controlling inflation for the time being, the Bearer Bonds Scheme, might to a certain extent, alleviate the situation, but it has, at the same time provided an opportunity for parallel economy to function more brazenly and also more effectively. (Emphasis added). There is thus a great danger of black incomes being generated on a larger scale than hitherto, adding considerably to the volume of large black incomes that is already there.” It is strange, he further laments, “possession of currency has to be accounted for but not the possession of the Bearer Bonds.”

(v) Voluntary Disclosure Scheme (1997)

Finance Minister Mr. P. Chidambaram while presenting 1997-98 budget announced a Voluntary Disclosure Scheme (VDS). The Finance Minister in this connection observed. The scheme is very simple. Irrespective of the year or nature of the source of funds, the amount disclosed either as cash, securities or assets, whether held in India or abroad would be charged to tax at 30 per cent for individuals and 35 per cent for corporations. Total immunity would be granted for any action under the scheme under the Income Tax, Wealth Tax Acts and FERA.

28.1.6 Evolution of a Policy Package to Control Parallel Economy

Broadly speaking, there are two schools of thought on the question of arresting and eliminating the generation, growth and expansion of black money. There are economists who believe that within the framework of the mixed economy as obtaining in India, black money can be eliminated and its size
can be brought within manageable limits so that it does not pose a threat to the very objectives of national economic policies. On the other hand, there is another group of economists who believe that mixed economy is only a euphemism for capitalist system and there is no hope of controlling black economy in the framework of the mixed economy that prevails in India.

Fundamentalist View

Since tax evasion is basic to the phenomenon of black money generation, the question arises: What motivates tax evasion? Meena Gupta and Thavaraj provide an answer: “It is obvious that tax evasion is a disease associated with an economic system based on private property. The disease assumes epidemic proportions when environmental pollution affecting the social, political, administrative and ethical systems exceeds the limits of tolerance.” A similar view has been expressed by Dr. V.M. Dandekar in the following words: “If one had any notions on this point, one would have suggested that if large incomes do not pay taxes they should, the remedy is not to lower the tax rates but abolish altogether incomes above a certain limit.”

Sunanda Sen goes a step further and calls for a change in the character of the state since mixed economy does not provide the requisite framework for the purpose. She writes: “The failure of the government’s recent drive to curb smuggling is illustrative of the self-defeating nature of controls in a partially planned economy... attempts to control such evasion through a manipulation of instruments open to the state in a mixed economy are not likely to meet with much success unless the reforms are extensive enough to change the character of the state itself.”

The fundamentalist view, therefore, does not see any merit in making certain marginal adjustments in tax rates because this will not serve any useful purpose in controlling black money, nor does it see any merit in removing all controls, but it feels that if tangible results have to be achieved, the abolition to private property or at least fixing a ceiling on property is essential so that the motivation for acquiring more wealth itself is blunted.

The Moderate View

There are two variants of the moderate view. One is typified by Kabra who considers the fundamentalist view as “naive, one-dimensional view of the state in as much as it fails to recognise a need for partial, effective controls, without necessarily changing the character of the state in its essentials.” It would, therefore, be inadvisable not to initiate measures within the framework of the mixed economy. In support of their contention, they advance the argument that there are mixed capitalist economies in which the extent of black money is much smaller, which are much better managed and in which ethical standards in politics are much better. They, therefore, plead for internally consistent but extensive controls, so that they are relatively strong in comparison with the forces operating the parallel economy. As a consequence, the control mechanisms should make the economy perform much better, not only in the narrow sense of acquiring more revenue or making certain essential goods available, but in the broader sense of creating a social order based on equality and justice.

Prem Shankar Jha who represents the other variant, believes that “by far the worst effect of the regime of controls is that it has perverted the operation of the profit motive in the economy. Instead of being harnessed to increasing production, it is now harnessed to the exploitation of shortage.”

Four sets of reforms that can have a dramatic effect on the parallel economy, according to Prem Shankar Jha are: (i) lifting of price controls on all products except a few basic consumer goods (where dual pricing is in any case preferable to controls); (ii) the exemption of savings from taxation; (iii) the indexation of direct tax rates to the cost of living; and (iv) the liberalisation of the tax laws governing the depreciation allowance, to permit firms to write off capital at a rate of their own choosing. Jha, broadly speaking, represents the view of the private sector lobby which believes that controls are at the root of prevailing shortages and the operations of the free market mechanism will be able to usher in an era of plenty, remove shortages and thus reduce the size of black market economy.

In the light of these two broad view-points, we discuss in the following section the concrete measures suggested for controlling the parallel economy in India.

(i) Rationalisation of tax structure: Various suggestions have been made by different groups of economists in this regard. Most of them are aimed at reduction of tax rates. For instance, it has
been argued that marginal tax rates on higher incomes should be reduced, there should be liberalisation of tax laws regarding depreciation and writing off of capital; there should be complete exemption of savings from taxation, direct taxes should be indexed to cost of living, etc. If one closely analyses all these suggestions made by Federations of Chambers of Commerce and Industry and some economists who are votaries of more freedom for the private sector, then one reaches the conclusion that all these suggestions are aimed at reducing rates of direct taxes or providing more and more legal avenues of tax avoidance so that the overall burden on the business classes is considerably reduced. The argument of indexation to cost of living is fallacious because inflation by its very nature distributes incomes in favour of business classes and cost of living index is mainly associated with the working class.

The real problem is that even at these modest rates of taxation as obtain today, those in high income brackets do not want to pay taxes and rather like to evade on a massive scale. It is this aspect which needs to be attended to. For this purpose, the ‘Soft State’ attitude has to be basically altered in favour of ‘strong state’ which should be keen to realise tax revenue from persons who fall in high income ranges. Obviously, this would require gearing up of tax administration to ensure better tax compliance.

(ii) Removal of controls that are considered unnecessary: A school of thought believes that controls and licensing procedures are all unnecessary, they hinder productivity, obstruct the free play of market forces and should, therefore, be withdrawn.

The Government, in pursuance of this reasoning, lifted control on cement and introduced a dual system of pricing. Even the price of levy cement was raised from $28 per bag of 50 Kgs. to about $37. The cement manufacturers fixed the price of open market cement at $65 per bag.

But what have the later developments shown? The price currently is $240 per bag and the Government is considering measures to halt the further rise of the price of cement. The abolition of controls has helped to remove shortage of cement, but the other result that the forces of competition in the course of time will lower the price of cement per bag, has not been achieved. In other words, the benefits of liberalisation have been passed on the manufacturers rather than the consumers.

In fact, the ineffective use of controls is responsible for the present state of affairs. The absence of controls creates much worse situations in which businessmen by creating artificial scarcities carry on unbridled exploitation and thus generate black money. Dagli Committee rightly diagnosed the problem: “Leakages in the distribution system even where price control, is accompanied by distribution controls, is another potential source of black money generation. If follows, therefore, that distribution control should be attempted after making sure of the machinery of distribution, and price control should not be attempted without control over distribution.” The logic of the Dagli Committee is not to abolish price controls, but to rationalise them and support them with an effective system of distribution. To recommend abolition of all controls in order to speed-up the growth rate of the economy is like the suggestion of removal of breaks from a car so that it can travel faster. The distortions in investment pattern in favour of hoteliers, cosmetic manufacturers and other luxury item producers is the direct result of the manipulations of black money operators, it is not the consequence of statism, but the absence of effective management by the State over affairs of the economy.

(iii) Appropriation of the gains of investment of black income in real estate: A very significant outlet for black income is investment in real estate. Speculation in real estate business is rampant in urban areas. These investments result in very high “capital gains”. A very large proportion of black income gets congealed in such residential buildings. Dr. Amit Bhaduri suggests that the most effective way to attack black money system is to appropriate the gains from property speculation. He, therefore, recommends the setting up of “a Corporation in each state and the Union territory to deal in transactions in real estate property, where all private buyers and sellers will have to transact through the corporation for legalisation of urban property transactions. The basic idea can, therefore, be put in a nutshell: neither nationalisation nor “ceiling” on urban private property; but nationalisation of all private transactions in urban real estate.” These Corporations, Bhaduri suggests, can be based on the STC pattern wherein the
seller of say an imported car has to register with the STC and a buyer can only purchase it through the STC. Since the Corporation will be able to know the capital gains accruing from these transactions, it will provide an opportunity to the state to tax these capital gains appropriately. This will act as a double-edged weapon against black money. On the one hand, it will slow down the transactions in urban property thus breaking the back of the speculative boom and on the other, it will bring more revenue to the state.

Dr. K.N. Kabra examining Bhaduri’s proposal mentions: “The political pre-conditions for making such a move are not vastly different from those involved in nationalisation of such properties. The feasibility of the proposed remedy on political grounds does not seem to be meaningfully different from that associated with ceilings etc. Kabra, therefore, presents a modified proposal. Since most of the urban property created with the help of black incomes is registered at understated values, Kabra recommends that the state should acquire the right to compulsorily purchase properties at their understated purchase price or construction costs. To enhance the effectivity of the measure, Kabra considers it essential that the right to transfer use of property by means of granting power of attorney be restricted. This will limit benami sales or real estate.

The basic idea underlying both the proposals is to limit the use of black money in real estate and enable the State to appropriate the gains arising there from.

The ultimate aim of both the proposals is to seriously limit investment of black incomes in real estate. Kabra goes to the extent of saying that an all-India ceiling on total value of urban estates should also be enforced to improve the effectivity of the remedy. If that were so, it only implies that whereas the fundamentalist proposition is rejected by Kabra, he imperceptibly and implicitly moves nearer to fundamentalist position. The proposals of appropriating the gains of investment of black income in real estate should be given a fair and honest trial. One more comment which seems pertinent must be made in this context. It would not be advisable to reject Bhaduri’s proposal on the basis of administrative feasibility as Kabra does. If this position is taken, the same criticism becomes equally applicable to Kabra’s proposal. To consider the economic system a slave of the present administrative set-up will prevent us from taking up any task of gigantic dimensions. To tame parallel economy is a gigantic task and if a meaningful dent has to be made in it, then the administrative set-up must be geared to meet the challenge.

(iv) Establishment of the institution of Ombudsman: The institution of Ombudsman, on the pattern of Sweden, has been discussed for a long time in India. On the basis of the recommendations of the Administrative Reforms Commission (1966), a Lok Pal Bill was introduced for the first time in 1968-69. The Bill was passed by the Lok Sabha, but could not be passed in Rajya Sabha as the Lok Sabha was dissolved. The Lok Pal Bill was introduced in the Lok Sabha for the eighth time on the 14th August 2001. However, it has not been passed so far to become a law. A bone of contention was whether the office of the Prime Minister should be brought within the ambit of the Lok Pal. The NDA government agreed that the office of the Prime Minister shall also be within the jurisdiction of Lok Pal. The Bill, however, excludes from its purview, the President and Vice-President of India, the Speaker of the Lok Sabha, the Chief Justice of India or any other judges of the Supreme Court, the Comptroller and Auditor General of India, the Chief Election Commissioner and Election Commissioners, and the Chairman and other members of the Union Public Services Commission. It may be noted that eight unsuccessful attempts have been made so far to pass legislation in the Parliament to make it mandatory for ministers and legislators to ensure annual declaration of their assets and liabilities. This only underlines the hard reality that while political leaders talk of maintaining integrity and honesty, but when it comes to brass tacks, they create hurdles on one pretext or another to pass legislation binding them to social norms.

Lok Ayukta, the ombudsman at the State level has been set up in Andhra Pradesh, Bihar, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Rajasthan and Uttar Pradesh. However, a review of
the state legislation reveals that in some states, it is designed to be toothless. In several states, on the
completion of the first term, for several years, the Lok Ayukta was not appointed. A study made by
Shukla and Singh (1988) observed: “While the institution has potentiality and scope for operation, it
may or may not be allowed to operate freely by other structures/systems of the society.”

Another study made by Vinod Pavrala (1996) revealed that though a large number of
complaints were received about corruption cases in Andhra Pradesh which clearly
indicated that the people in general were eager to avail of the opportunity to combat
corruption, but since the recommendations of the Lok Ayukta were routinely ignored by
the government, people became disillusioned with the effectivity of the Lok Ayukta to
deal with cases of corruption.

The package of measures discussed above are all steps in the right direction within the socio-economic
framework of the mixed capitalist economy. Their success depends on the sincerity and vigour with
which they are implemented. However, if the State apparatus means business, black money can be
brought within manageable limits. But if a symbiotic relationship develops between the capitalist classes,
the bureaucracy and political structure in the country, as it obtains today, the chances of controlling the
menace of parallel economy appear to be bleak. The crucial issue, therefore, is the nature of state structure,
its attitude towards black money, the degree of tolerance and connivance with black money operators.

Self-Assessment
1. Choose the correct options:
   (i) An outward shift of the production possibilities frontier
       (a) is always a parallel shift (b) does not relate to the state of the economy
       (c) reflects economic growth (d) reflects economic decline
       (e) reflects economic stability
   (ii) Society’s production possibilities frontier
       (a) demonstrates that, although resources are scarce for individuals, there is no problem of
           scarcity for society as a whole
       (b) is based on unrealistic assumptions and therefore has no value as an economic tool
       (c) helps explain the immense complexity of the real economy
       (d) is based on simplifying assumptions, but is still useful for illustrating scarcity, opportunity
           cost, and economic growth
       (e) is based on the assumption that technology is constantly changing
   (iii) Which economic question does the decision to give all of the butter the economy produces to
        the homeless answer?
        (a) How to produce?
        (b) Who has an absolute advantage in butter production?
        (c) For whom to produce?
        (d) Who has a comparative advantage in butter production?
        (e) What to produce?
   (iv) The U.S. economy is best characterized as
        (a) a command economy (b) a mixed capitalist economy
        (c) socialism (d) pure capitalism
        (e) market socialism
   (v) Which economic concept does the expression "time is money" reflect?
(a) opportunity cost  (b) comparative advantage
(c) market exchange  (d) efficiency
(e) specialization

(iii) A mixed capitalist economy is one in which

(a) all resources are publicly owned and prices are used to coordinate economic activity
(b) all resources are publicly owned and economic planning is centralized
(c) all resources are privately owned and prices are used to coordinate economic activity
(d) decisions are based primarily on religion or custom
(e) resources are both publicly and privately owned and some markets are regulated

28.2 Summary

• Parallel economy connotes the functioning of an unsanctioned sector in the economy whose objectives run parallel, rather in contradiction with the avowed social objectives. This is variously referred to as ‘black economy’, ‘unaccounted economy’, ‘illegal economy’, ‘subterranean economy’, or ‘unsanctioned economy’.

• With the attainment of independence and the advent of planning, more avenues of investment in a large number of industries were opened. The concept of the mixed economy envisaged the co-existence of a public sector and a private sector.

• Several attempts have been made to quantify black incomes in India. Broadly speaking, the various estimates of black incomes made so far follow two approaches: (i) Kaldor’s approach of quantifying non-salary incomes above the exemption limit of income tax and (ii) Edgar L. Feige’s method of working out transaction-income on the basis of currency deposit ratio and from it deriving the black income of the economy. Kaldor’s method has been used in the report on Indian Tax Reform, and later by the Direct Taxes Enquiry Committee with some modifications.

• There is no doubt that the estimate of black income prepared by S. Acharya of the NIPFP has meticulously searched for available information and data and has tried to collate and present a global estimate of black income. In this sense, it makes an advance over the earlier studies in the sense that it is much more comprehensive.

• If similar ranges of black income generation had been developed by the study in immovable property or personal incomes by including illegal acquisitions, its estimate of black income would touch 30 per cent, which it treats as extravagant. To incorporate built-in-depressors in the estimates and then to claim that black income is only 18 per cent appears to be illogical.

• Black income from customs (Import) Duty Evasion has been taken as not less than 30 per cent of the customs duty due if there was no evasion. Similarly, Suraj Gupta speaks of smuggling as a “growth industry” in India and its guesstimate has been reckoned at as ₹ 12,000 crores in 1987-88.

• Three major states’ taxes, viz., sales tax, state excise duty and entertainment tax are the principal sources of tax evasion. On the basis of some empirical findings, Suraj Gupta assumes evasion of 47 per cent of the potential tax revenue in these three taxes and 30 per cent of tax evasion in the other state taxes.

• IMF staff survey on the unaccounted sector of the economy has estimated black money in India at 50 per cent of Gross National Product (GNP), which was ₹ 1,45,141 crores in 1982-83 at current prices. On this computation, India’s unaccounted sector is of the order of ₹ 72,000 crores.

• It would not also be fair to discard the monetary approach altogether because this also serves as a cross-check on the other estimate. It is probable that truth lies somewhere between the two extremes. In that sense, more research has to be directed in this regard.

• The creation of a parallel economy as a consequence of the growing proliferation of black money
in every sector of the economy has very serious and in a number of ways pernicious influences on the working of the Indian economy.

- As a consequence, India developed a regressive tax structure. Direct Taxes Enquiry Committee in this connection mentioned: “Black money and tax evasion, which go hand in hand, have also the effect of seriously undermining the equity concept of taxation and warping its progressiveness.

- There are several factors responsible for the generation of black money. It would be relevant to discuss those factors so that a correct understanding about the genesis, growth and expansion of black money can be made.

- The high marginal rates led many experts on public finance to describe that we are “the most highly taxed nation.” These high rates were gradually brought down to 40% by former Finance Minister Dr. Manmohan Singh by 1996. Mr. P. Chidambram has further reduced them in 1997-98 budget to 30% for individual and 35% for corporations.

- Kabra writes: “In a regime which induces reduction in tax evasion by a method “soft” on tax evaders (like cut in tax rates) rather than by “harder” method which enhances the costs and risks of tax evasion, it would be difficult to expect a better tax compliance through “soft-methods.”

- Transparency International (TI) has been preparing Corruption Perception Index (CPI). It was noted that India’s rank in CPI slipped to 71 among 102 countries surveyed in 2002 whereas it was 88 among 158 countries surveyed in 2005.

- The dismantling of the system of controls initiated in 1991 Industrial Policy has resulted in a slight improvement in level of corruption. The demand for transparency at a result of Right to Information Act is also acting positively in reducing the level of corruption but we have miles to go before we reach the levels of least corrupt societies like New Zealand.

- In short, corruption raises the cost of development, it breeds inefficiency in departments to produce inferior quality of goods—roads, water works, substandard houses built by the PWD, etc.

- It would be desirable at this stage to make a survey of the measures undertaken to unearth black incomes since independence and to assess their success so that further course of action can be decided.

- In 1946, demonetization was resorted to but the Direct Taxes Enquiry Committee in its interim report admitted: “Demonetization was not successful then, because only a very small proportion of total notes in circulation was demonetized. Notes demonetized in 1946 were of the value of ₹ 143.97 crores as against the total notes issued of the value of ₹ 1,235.93 crores.”

- Special Bearer Bonds Scheme (1981) was intended for canalising unaccounted money for productive purposes. The Special, Bearer Bonds, 1981 of the face value of ₹ 10,000 each were issued at par with a maturity period of 10 years. The holders of these bonds were to be entitled to receive ₹ 12,000 on maturity.

- There is no doubt that keeping the maximum tax rate as 30 per cent, the government was able to garner ₹ 10,000 crores from tax evaders, but given the widespread growth of black money, this is really the tip of the iceberg.

- In the connection, some suggestions have been made. First, the imposition of a uniform rate of 35 percent corporation tax on all companies needs to be reviewed. It would be prudent to introduce a slab system and charge only 15 per cent on smaller companies up to a profit of ₹ 50,000.

- As a consequence of the efforts of international division of the Income Tax Department, multinational companies paid a record ₹ 10,000 crores during 2006-07 which was 40 per cent higher than the previous year’s collection from this set of companies. The singe in tax figure in unprecedented as the normal increase is 15-20 percent.
• A survey of the measures taken so far reveals that the Government has miserably failed to tackle the problems created by black money. Its approach in combating parallel economy has been half-hearted, misconceived and in some cases, it has collaborated with the black money operators in legitimizing black money.

• Broadly speaking, there are two schools of thought on the question of arresting and eliminating the generation, growth and expansion of black money. There are economists who believe that within the framework of the mixed economy as obtaining in India, black money can be eliminated and its size can be brought within manageable limits so that it does not pose a threat to the very objectives of national economic policies.

• The fundamentalist view, therefore, does not see any merit in making certain marginal adjustments in tax rates because this will not serve any useful purpose in controlling black money, nor does it see any merit in removing all controls, but it feels that if tangible results have to be achieved, the abolition to private property or at least fixing a ceiling on property is essential so that the motivation for acquiring more wealth itself is blunted.

• There are two variants of the moderate view. One is typified by Kabra who considers the fundamentalist view as “naive, one-dimensional view of the state in as much as it fails to recognise a need for partial, effective controls, without necessarily changing the character of the state in its essentials.”

• In the light of these two broad view-points, we discuss in the following section the concrete measures suggested for controlling the parallel economy in India.

• The real problem is that even at these modest rates of taxation as obtain today, those in high income brackets do not want to pay taxes and rather like to evade on a massive scale. It is this aspect which needs to be attended to.

• Finance Minister Mr. P. Chidambaram stated in his budget speech (2008-09) : “The UPA Government inherited a tax to GDP ratio of 9.2 per cent in 2003-04. At the end of 2007-08, the ratio has risen to 12.5 per cent... Many people are surprised by the buoyancy in tax revenues, especially in direct taxes. I am not. I have always maintained that moderate and stable tax rates coupled with a tax administration that shows no fear or favour will bring high revenues to the exchequer,“

• There is no doubt that even today tax evasion takes place in indirect taxes and this generates black income, but evidence of growth of Gross Tax Revenue only re-inforces the conclusion that the magnitude of black money generation has come down.

### 28.3 Key-words

1. **Black Economy** : A black market or underground economy is the market in which illegal goods are traded. Due to the nature of the goods traded, the market itself is forced to operate outside the formal economy, supported by the established state power. Typically the totality of such activity is referred to with the definite article as a complement to the official economies, by market for such goods and services, e.g. “the black market in bush meat” or the state jurisdiction “the black market in China”.

2. **Illegal Economy** : The "illegal economy" consists of the income produced by those economic activities pursued in violation of legal statutes defining the scope of legitimate forms of commerce. Illegal economy participants engage in the production and distribution of prohibited goods and services, such as drug trafficking, arms trafficking, and prostitution.
3. Informal Economy: The "informal economy" comprises those economic activities that circumvent the costs and are excluded from the benefits and rights incorporated in the laws and administrative rules covering property relationships, commercial licensing, labor contracts, torts, financial credit and social security systems.

28.4 Review Questions

1. What do you mean by Parallel economy? Discuss.
2. How will you estimate the black money in India? Explain.
3. Discuss the factors responsible for generation of Black money.

Answers: Self-Assessment

1. (i) (c) (ii) (d) (iii) (c) (iv) (b) (v) (a) (vi) (e)

28.5 Further Readings

1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 11001.
Unit 29: Role of Bureaucracy and Delivery Mechanism in Implementation of Economic Policies

CONTENTS

Objectives
Introduction
29.1 Role of Bureaucracy
29.2 Delivery Mechanism in Implementation of Economic Policies
29.3 Summary
29.4 Key-Words
29.5 Review Questions
29.6 Further Readings

Objectives

After reading this Unit students will be able to:

• Describe the Role of Bureaucracy and Delivery Mechanism in Implementation of Economic Policies.

Introduction

An economic policy can not be successful only with the formulation of good policy. The success depends more on efficient and effective implementation but it is a tragedy in our country that implementation process has been very poor. It may be noted that bureaucracy is very important tool for implementation of economic policies. Thus, their role becomes very crucial in this process. Here, bureaucratic hurdles in the effective implementation of economic policies have been discussed. Moreover, good governance, needed changes in its role, required administrative reforms and strategies and policies for improvement in bureaucracy have also been included in the discussion of this issue.

29.1 Role of Bureaucracy

The term Bureaucracy was coined by M de Gournay, an economist of France, in the 18th century. He referred to it as “a fourth or fifth form of Government”. According to him, in these system officers, clerks, secretaries, inspectors and attendants are not appointed to benefit the public interest. The public interest appears to have been established so that offices might exist. According to Harold J. Laski, bureaucracy may be defined as a system of Government, the control of which is so completely in the hands of officials that their power jeopardises the liberties of ordinary citizens. The characteristics of bureaucracy were first formulated in a systematic manner by the German Sociologist Max Weber (1864-1920). According to Weber, there are three types of authority, viz., traditional, charismatic and legal-rational (bureaucratic). He classifies traditional authority as the authority resting on an established belief in the sanctity of immemorial traditions and the legitimacy of the status of those exercising authority under them. Charismatic authority rests on the devotion to the specific and exceptional sanctity, heroism or exemplary character of an individual person, and of the normative patterns or order revealed or ordained by him. While the legal authority rests on the premises of legality of patterns of normative rules and the right of those elevated to authority under such rules to issues commands.

The characteristic features of bureaucracy are given below:

1. Impersonal Order: In bureaucracy, the authority is inherent in the post and not the individual who performs the official role.
Notes

2. **Rules and Regulations**: In this authority, rules must be followed meticulously. Functions are clearly spelled out in rules.

3. **Hierarchy**: Here, the lower offices are under the control of the higher ones.

4. **Contract**: Bureaucracy has officials appointed through contract on the basis of professional qualifications.

5. **Control**: Checks, unified control and disciplinary system is the hallmark.

6. **Division of Work Leading to Specialisation**: The work of the organisation is fixed which leads to specialisation.

7. **Efficiency**: According to Weber, the decisive reason for the advance of bureaucratic organisation has always been its purely technical superiority and efficiency over any other form of organisation.

8. **Neutrality**: It is a political and neutral.

Now, we can discuss as to how this bureaucracy runs the administration to put the economic policies into action to deliver the benefits of economic policy.

### 29.2 Delivery Mechanism in Implementation of Economic Policies

The understanding of Public Administration would help in knowing how this bureaucracy runs the administration to put the economic policies into action to deliver the benefits of economic policy.

**Public Administration**: Administration may be defined as an activity which demands correct analysis and accurate orientation to achieve the objectives of the organisations and meet the needs of the people in an economic and efficient manner. Woodrow Wilson defined Public administration as a detailed and systematic application of law. According to him, every application of law is an act of administration. Similarly, L.D. White views Public administration as consisting of all those operations having for their purpose the fulfillment or enforcement of public policy. Pfiffner defines Public administration as a system that consists of doing the work of the Government, whether it be running an X-ray machine in a health laboratory or coining money in the mint. This means public administration is concerned with the implementation of public policy, as laid down by the competent authority economically and efficiently for the benefit of the people and the country.

**Development Administration**: Development administration was introduced to manage new activities such as economic policies. This was necessary because the Government has been entrusted to manage economic and business activities and hence it was found difficult to manage the economic policy with the traditional administration as it has the experience of mostly dealing with law and order and justice. It may be noted that development is a process of growth in the direction of modernity, particularly towards nation-building and socio-economic progress. In the words of K.S. Dadzie, the final aim of development must be the constant increase of the well-being of the entire population on the basis of its full participation in the process of development and a fair distribution of the benefits there from. Therefore, the main aim of development should be to enrich the quality of life. In this way, development Administration was introduced to ensure implementation of economic policies sincerely.

**Essentials of Development Administration**: To be effective and efficient Development administration should have the following:

1. **Administrative Innovation**: It is said that administrative innovation is the *sine quo non* for development administration. According to Susanne MacGregor, there is need for ‘Life Cycle’ of innovation to improve services which involves the following: conception, adoption, early trial and error, mature implementation and routinisation, dominance, and replacement by newer forms of things.

2. **People’s Participation**: The potential energy of the people should be utilised through their involvement.

3. **Definite Policies Programmes and Projects**: These should reflect the needs of the people.

4. **Monitoring**: Monitoring and evaluation are needed to locate problems and inject improvements.
5. **Use of Modern Management Technique**: It should be used for optimising personnel, financial and material resources.

6. **Achievement Orientation**: Administration should be achievement oriented.

7. **Commitment and Dedication**: These provide extra power to development.

   It is known that development administration could not achieve much in developing countries because of the fact that the same personnel with the old administrative apparatus are implementing development programmes in their respective countries.

**Lack of Implementation: Bureaucratic Problems**

In the implementation of economic policies many bureaucratic problems are faced. For instance, mounting corrupt practices by public officials caused by the poor remuneration of public officials and their concomitant low self-motivation; culture of secrecy in public service; weak enforcement of laws and regulations; high degree of centralised decision-making; weak instruments of control and accountability; low level of compensation; politicisation of service delivery systems; the supremacy of the executive; inefficient public employment system; inter-cadre rivalry; lack of favourable conditions for women; lack of linkage between rewards and performance; wastages in public offices caused by unscientific management of human resources and wasteful management of public properties; low levels of efficiency, effectiveness, accountability, transparency and dynamism; and over-sized organisations and over-staffing in bureaucracy of our country.

**Need of Reforms**

A lot of paper work generated in today’s Government offices could have been avoided in cases where requisite information could be easily gathered by phone, personal interaction, etc. Personnel administration should not only attend to personnel matters but also improve the general management. Management improvement is a continuous process. The principal responsibility for effecting improvements in administration lies with the administrators themselves. Administrative reforms may be politically necessary or socially desirable, but unless they are administratively feasible and bureaucratically acceptable, they will prove sterile. It may be noted that all reforms require a clear vision, committed leadership and sustained effort. The innate creative and innovative abilities of seniors, colleagues and subordinates should be harnessed. In the new Millennium, the Government would need to relevant itself to become ‘citizen-centric’ and ‘citizen-friendly’. Greater delegation and decentralisation of authority and responsibilities would need to be introduced at all levels. Greater accountability in the administrative system would be ensured by a combination of Citizens’ Charters and the Right to Information. Gradually, the process of consultation with the participation of citizens in decision-making would become more pronounced in order to ensure accountability. The civil servants and politicians need to adopt clearly defined ethical standards. This all can be achieved through an innovative use of information technology.

**Good Governance to Ensure Implementation of Economic Policy**

Today, good governance is an important agenda of Government which has taken measures to make administration accountable, responsive and transparent. It has been done through citizen charters; formulation of a Freedom of Information Bill; review of administrative laws and regulations for dismantling procedures and red tape by repeal or amendment of outdated and obsolete laws, regulations and procedures that mystify, and confuse the people, creating the environment to reap the benefits of IT by harnessing IT, establishing Information and Facilitation Counters. Today, systemic thinking is necessary as well as to involve the people and the employees in the effort through a shared vision. Today’s culture of competition between individuals has to be replaced by competition between teams and organisations.

Now, the Government must possess the certain qualities to ensure implementation of economic policy efficiently in the society. For instance, the bureaucracy should have wide contact with the people administered. A sense of justice, sensitivity and responsiveness to the urges, feelings and aspirations of common people is another reform need in the bureaucracy. Humility and simplicity in the persons
manning the administrative machinery and their easy accessibility to bureaucracy is also needed. Moreover, honesty and integrity in thought and action is required as well as creating and sustaining an atmosphere conducive to development, growth and social change should be there. It may be noted that the widespread poverty and the depressed standards of living among such a large number of people pose a very serious threat to peace as well as socio-economic development. The personnel administration must recognise that the final aim of development must be the constant increase in the well-being of the whole population.

**Linkages of Bureaucracy with the Knowledge Centres**

For implementing economic policies, officials must make use of knowledge generated in higher seats of learning as has been stressed by the Planning Commission in its report “India as Knowledge Superpower: Strategy for Transportation” (2001). In the 21st century, only those nations will survive and succeed, which will build them by understanding the dynamics of knowledge and create true knowledge societies. A knowledge society has the following characteristics:

(i) A knowledge society uses knowledge as a powerful tool to drive societal change.
(ii) There is capacity to generate, absorb, disseminate and protect knowledge and also use it to create economic wealth and social good.
(iii) Knowledge used through all its constituents and endeavours to empower and enrich its people.
(iv) An integrated view of life a fusion of mind, body and spirit is advocated.
(v) It is committed to learning and innovation.

In this century, there will be three key drivers of knowledge society: societal transformation for just and equitable society; wealth generation; and protection of knowledge, not only the one generated in its research laboratories but also its traditional knowledge, generated by our communities over centuries in laboratories of life and the society.

**Administrative Reforms for Implementation of Economic Policy**

Phenomenal changes have occurred at a fast rate in the field of science and technology as well as in external environment during the last few decades. They influence public administration also which, today, has to shoulder multifarious tasks designed to fulfil the rising aspirations of the people. However, it is too often not prepared for are the overwhelming managerial problems involved in the implementation of these technologies. Therefore, there is an urgent need to re-orient (improve) the systems of public administration. According to Leif H. Share, good Public Administration could serve as a major instrument for promoting economic and social development and for introducing needed advances in science and technology. According to a United Nations Report, management improvement comprised the planning, implementation and evaluation of various measures conducive to the increase of effectiveness and efficiency in the organisation.

**Strategies and Policies for Administrative Reforms**

According to the United Nation’s Publication, following strategies and policies are needed for administrative improvement in a country:

(a) Classification of objectives and goals;
(b) A responsibility of management;
(c) Administration must be a systematically planned and organised activity, with specific work programmes;
(d) A continuous activity;
(e) Long-term planning and development;
(f) Special resources must be allocated to the projects;
(g) Selection of personnel engaged in the improvement work must be of high quality;
(h) Training and development of the members of the organisation;
(i) In large projects, pilot studies or the implementation of the new organisational structures are often needed; and
(j) Participation and involvement of management in the organisations affected by possible changes are of great importance;
(k) Improvement work must be based on the concept of the organisation as a socio-technical system;
(l) Planning of improvement projects in terms of activities, time and resources.
(m) Orientation improvement towards implementation and change;
(n) Both centralised and decentralised though coordinated programmes needed;
(o) Work programme for improvement should be formalised as an obligation;
(p) The project organisation should be flexible.

The following aspects must be kept in mind to promote administrative reforms in our country:

1. Explore alternatives to direct public provision, which might provide more cost-effective policy results;
2. In terms of efficiency and effectiveness, and service quality, a closer focus on results;
3. Highly centralised hierarchical organisational structures to be replaced with decentralised management environments;
4. To provide greater flexibility in the deployment of staff;
5. Strategic capacities at the centre to be strengthened to steer Government to respond to external changes and diverse interests;
6. Accountability and transparency through results;
7. Mechanisms to improve performance;
8. Incentives to improve performance.

Self-Assessment

1. Choose the correct options:

(i) The first president to actually win passage of the first deregulation act was
   (a) Bill Clinton
   (b) Ronald Reagan.
   (c) Gerald R. Ford.
   (d) Richard M. Nixon.
   (e) John F. Kennedy.

(ii) Which of the following industries faced near collapse after deregulation?
   (a) railroads
   (b) trucking
   (c) commercial airlines
   (d) savings and loan
   (e) all of the above

(iii) The chief responsibility for the development and implementation of monetary policy lies with the
   (a) Congress.
   (b) president.
   (c) Commerce Department.
   (d) Federal Reserve Board.
   (e) Treasury Department.
Notes

(iv) The impact by the U.S. president is felt most on the Federal Reserve Board by the fact that the
(a) president is a member of the Board.
(b) Board is a cabinet department in the executive, giving the president complete control
over Federal Reserve operations.
(c) president nominates Board members to a fourteen year terms.
(d) president becomes a member of the Board after he leaves office.
(e) Board actions may be vetoed by the president, just like congressional legislation.

(v) Which of the following tools is used by the Federal Reserve to regulate the nation's money
supply and control interest rates?
(a) discount rate  (b) selling U.S. government securities
(c) buying U.S. government securities  (d) reserve requirements
(e) all are correct

(vi) If the Federal Reserve Board wanted to increase the money supply, it would probably be in
response to
(a) their concern for inflation.  (b) the need to stimulate the economy.
(c) the need to 'slow down' the economy.  (d) an order by the U.S. Supreme Court.
(e) a demand from Congress or the president of the U.S.

(vii) An example of an application of "commercial Keynesianism" would be the
(a) Congress and the president increasing military and social welfare spending.
(b) Federal Reserve Board selling U.S. government securities.
(c) Congress and the president passing a tax cut.
(d) Federal Reserve Board lowering the discount rate.
(e) all of the above

(viii) Which staff agency was created to assist the president and handle the details of budget
preparation?
(a) Congressional Budget Office (CBO)  (b) Department of Treasury (DOT)
(c) General Accounting Office (GAO)  (d) Department of Commerce (DOC)
(e) Office of Management and Budget (OMB)

29.3 Summary

• The term Bureaucracy was coined by M de Gournay, an economist of France, in the 18th century. He referred to it as "a fourth or fifth form of Government".

• The characteristics of bureaucracy were first formulated in a systematic manner by the German Sociologist Max Weber (1864-1920). According to Weber, there are three types of authority, viz., traditional, charismatic and legal-rational (bureaucratic).

• The understanding of Public Administration would help in knowing how this bureaucracy runs the administration to put the economic policies into action to deliver the benefits of economic policy.

• Development administration was introduced to manage new activities such as economic policies. This was necessary because the Government has been entrusted to manage economic and business activities and hence it was found difficult to manage the economic policy with the traditional administration as it has the experience of mostly dealing with law and order and justice.
• It is known that development administration could not achieve much in developing countries because of the fact that the same personnel with the old administrative apparatus are implementing development programmes in their respective countries.

• In the implementation of economic policies many bureaucratic problems are faced. For instance, mounting corrupt practices by public officials caused by the poor remuneration of public officials and their concomitant low self-motivation; culture of secrecy in public service; weak enforcement of laws and regulations; high degree of centralised decision-making; weak instruments of control and accountability; low level of compensation; politicisation of service delivery systems; the supremacy of the executive; inefficient public employment system; inter-cadre rivalry; lack of favourable conditions for women;

• Gradually, the process of consultation with the participation of citizens in decision-making would become more pronounced in order to ensure accountability. The civil servants and politicians need to adopt clearly defined ethical standards. This all can be achieved through an innovative use of information technology.

• Today, good governance is an important agenda of Government which has taken measures to make administration accountable, responsive and transparent.

• Now, the Government must possess the certain qualities to ensure implementation of economic policy efficiently in the society.

• For implementing economic policies, officials must make use of knowledge generated in higher seats of learning as has been stressed by the Planning Commission in its report “India as Knowledge Superpower:

• Phenomenal changes have occurred at a fast rate in the field of science and technology as well as in external environment during the last few decades.

• However, it is too often not prepared for are the overwhelming managerial problems involved in the implementation of these technologies.

• According to a United Nations Report, management improvement comprised the planning, implementation and evaluation of various measures conducive to the increase of effectiveness and efficiency in the organisation.

• Selection of personnel engaged in the improvement work must be of high quality;

Explore alternatives to direct public provision, which might provide more cost-effective policy results;

29.4 Key-Words

1. Bureaucracy : A bureaucracy is a group of specifically non-elected officials within a government or other institution that implements the rules, laws, ideas, and functions of their institution; in other words, a government administrative unit that carries out the decisions of the legislature or democratically-elected representation of a state.

The term "bureaucracy" was created from the French word bureau, meaning desk or office, and the meaning rule or political power.

2. Good Governance : Good governance is an indeterminate term used in international development literature to describe how public institutions conduct public affairs and manage public resources in order to guarantee the realization of human rights. Governance describes "the process of decision-making and the process by which decisions are implemented (or not implemented)".

The term governance can apply to corporate, international, national, local governance or to the interactions between other sectors of society.
29.5 Review Questions

1. Discuss the concept and features of Bureaucracy. Also examine the role and significance of Bureaucracy in the development.

2. Examine the available delivery mechanism in implementation of economic policies.

3. Examine the need for reforms in the delivery mechanism for implementation of Economic Policies. Suggest measures for bringing about necessary reforms.

4. Discuss the good governance to ensure implementation of economic policy.

5. Explain the role of bureaucracy and delivery mechanism.

6. What are the strategies and policies for administrative reforms? Discuss.

**Answers: Self-Assessment**

1. (i) (c) (ii) (d) (iii) (d) (iv) (c) (v) (e) (vi) (b) (vii) (c) (viii) (e)

29.6 Further Readings

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1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.

2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi -110001.
Unit 30: Implementation of Economic Policies: Role of Panchayats and Pressure Groups

CONTENTS
Objectives
Introduction
30.1 Role of Panchayats
30.2 Pressure Groups
30.3 Summary
30.4 Key-Words
30.5 Review Questions
30.6 Further Readings

Objectives

After reading this Unit students will be able to:

• Explain the Role of Panchayats.
• Discuss the Pressure Groups.

Introduction

The role of bureaucracy in the implementation of economic policies and has seen that it is not up to the mark. Thus, we can make use of Local Level initiatives, that is, Panchayats, NGOs and Pressure Groups which are closer to the people. Effective implementation of economic policy can be ensured through people’s participation. To understand the importance of this we can discuss the potentialities and problems of local institutions and suggest solutions to make them more effective in the process. It may be noted that decentralisation at local level is needed to encourage local initiatives and run the socio-economic programmes efficiently partly due to the pressure of work at the union and state levels and partly due to corruption at the high places. For the purpose, decentralisation is needed to involve local people for whom the programme is prepared. Such objectives could be achieved through Democratic Decentralisation.

30.1 Role of Panchayats

Decentralisation is the transfer of authority, responsibility, and accountability from Central to Local Governments. Decentralisation can take various forms, commonly described in public administration terms as deconcentration, devolution, and delegation. Decentralisation also has several dimensions that reflect, in general terms, increasing and often sequential stages of progress in achieving the governance objectives of decentralisation. These stages are: Administrative decentralisation (functional responsibility), financial decentralisation (access to resources) and Political decentralisation (accountability). The Political dimension is especially critical for democratic decentralisation because it reconstitutes the state in a democratic way. It provides a process at the local level through which diverse interests can be heard and negotiated and resource allocation decisions can be made based on public discussions. Genuine political power sharing is a key element often missing in the political dimension of decentralisation.

Democratic local governance is autonomous levels of local Government, vested with authority and resources that function in a democratic manner. That is, they are accountable and transparent, and involve citizens and the institutions of civil society in the decision-making process. Democratic local governance It emphasises the presence of mechanisms for fair political competition, transparency,
and accountability, Government processes that are open to the public, responsible to the public, and
governed by the rule of law.

Democratic decentralisation is the development of reciprocal relationships between central and local
Governments and between local Governments and citizens. It addresses the power to develop and
implement policy, the extension of democratic processes to lower levels of Government, and measures
to ensure that democracy is sustainable. Democratic decentralisation incorporates both decentralisation
and democratic local governance.

Panchayati Raj

Genesis and Legal Framework: In India, panchayats have been very important in the structure of
the Indian villages since the beginning of the history. The three-tier Panchayati Raj made Gandhiji’s
dream of every village being a republic a reality. The Constitution (73rd Amendment) Act, 1992 came
into force on 24th April, 1993 Which became a landmark in the history of Panchayati Raj in India since
on this day the Panchayati Raj Institutions were provided the Constitutional Status. The characteristic
features of the Act are as follows:

(i) It provides three-tier system of Panchayati Raj in the country;
(ii) Panchayat elections would be held regularly every five years;
(iii) Reservation of seats for Scheduled Castes, Scheduled Tribes and women (not less than one-third of total seats);
(iv) State Finance Commissions to be set up for making recommendations regarding financial powers
   of the Panchayats;
(v) District Planning Committee to be constituted to prepare draft development plan for the districts.

Now, Panchayats will have powers and authority to function as institutions of self-Government.
Panchayats will do it in the following manner:

(a) They would prepare a plan for economic development and social justice;
(b) Schemes for economic development and social justice in relation to 29 subjects given in the
   Eleventh Schedule of the Constitution would be implemented by them; and
(c) They would levy, collect and appropriate taxes, duties, tolls and fees in their respective areas.

Constitutional Status: The experts thought that it is needed to enshrine certain basic and essential
features of PRI in the Constitution to impart certainty, continuity and strength to them. The Constitution
(73rd Amendment) Act, 1992 conferred constitutional status to Panchayats and Government from
the village upwards with effect from 24th April, 1993.

There are 30 subjects that are to be assigned to the PRIs under the Eleventh Schedule. Some of the
important ones are agriculture and allied areas, minor forest produce, small-scale industries, roads,
rural housing, drinking water, non-conventional energy, rural electrification, poverty alleviation
programmes, education including primary and secondary schools, health, family, women and children.
The problems like lack of uniform structure, dominance of upper castes and vested interests, irregular
elections and frequent super-sessions have been solved by the mandatory provisions.

Problems: There are certain problems in the implementation of the Act such as non-empowerment
of Gram Sabhas and top-down approach to planning, monitoring and evaluation. Moreover, there
may be manipulation of the pattern of reservation for the posts of Adhyakshas. Apart from this delay
in constitution of District Planning Committees (DPCs) would bring the process of rural-urban
synchronisation to a stand still.

Such problems might hamper the representative character of the PRIs and weaken the instrument of
check and balances in the system.

Certain suggestions were made by a Round Table Conference on ‘Financing for District Level
Development’, in 2001 as given below:

1. The Centre can give money directly to the district.
2. The categories like the plan/non-plan distinction should be simplified.
3. When a fund transfer takes place to the Panchayat, there should be a mechanism to maintain accountability and transparency. This is not very difficult in today’s electronically-linked world of giving publicity to the people of that area.

4. To solve over-engineering of the structure, one has to move, between what items have to be subject to conditionalities and what kind of conditionalities are actually needed. Moreover, what extent of freedom of decision-making should be allowed to which level should also be considered.

5. There is also the issue of a whole set of parallel paraphernalia and agencies which really are not required to be set-up.

Effective decentralisation for development needs the following steps:

- We should train people participating in Panchayats in prioritising issues.
- Members of Panchayats should be trained to put choices before an elected body so that they are in a position to really explain to the chairperson or the Panchayat.

Administrative Powers

1. After preparing the framework for devolution, the State Government, should simultaneously reorganise the existing District Administration.

2. Different line departments should be encouraged by the State Governments to take up appropriate measures to integrate their activities with Panchayati Raj System.

3. The three tiers of Panchayati Raj should be supported with adequate autonomy in the framework for devolution.

4. The District Rural Development Agency (DRDA) should be integrated with the District Panchayat to ensure harmonious integration of different agencies to the service of common objectives of rural development.

5. State Governments should assign administrative powers between three tiers as per the framework given.

6. Convergence of schemes should be further pursued for local benefit.

7. The State Governments may devolve powers and functions to the three tiers of Panchayati Raj vis-a-vis. The 30 items under the Eleventh Schedule.

8. Functionaries and funds may be transferred to the PRIs for implementation of various Schemes.

9. The Panchayati Raj Institutions should be allowed to constitute adequate number of Subject Committees covering important items.

10. Institutions/organisations along with the activities to the appropriate tier of Panchayats should be transferred to facilitate smooth functioning of the Panchayati Institutions.


12. Qualified and trained personnel at all levels to assist PRIs in their day-to-day Operations should be made the part of devolution package.

13. It may noted that all Class-I posts of Panchayati Raj should be filled on deputation basis from the State Cadre. Similarly, Class-II officers may be recruited through the State Public Service Commissions or on deputation basis from the State Cadres. For class-III and lower staff, the recruitment may be at the Regional/District level through an independent Recruitment Board.

14. The Chief Executive Officer (CEO) of the District Panchayat should be an Officer equivalent to the District Collector.
People’s Participation In Panchayati Raj Activities

For our purpose, people’s participation in the development process means active cooperation and involvement of the general masses in the process of development administration. People’s active interest, enthusiasm and cooperation in planning, implementation and evaluation of development programmes at all levels, particularly at the grass-root level is required. India’s participatory local self-governance has a feasible and institutional status that can be harnessed to implement people’s programmes at the grass root. Eventually, local self governance will be the final route of decentralisation of fund, function and functionaries specially the 29 subject/departments under 73rd CAA. However, this dream of local self governance needs informed and responsible decisions at village level by the electorate in Gram Sabhas. We must not only be aware of the possibility & potential of PRI’s but should also be very conscious that we have a long way to go to strengthen the PRI’s in Rural India. It is possible if all of us who are involved in rural development take the building of PRI’s as a very important tool for developing rural India which constitutes 71% of India’s populations. It requires active and responsible participation by the Gram Sabha. This is a big challenge in a country with 34.97% illiterate people and where the literate are either indifferent or driven by vested interests.

In his article, “Good Governance through Transparency” (1999), M. Ariz Ahmed has strongly advocated the following:

It may be noted that transparency and people’s participation in regulatory and development administration is very important not only in bridging the gap between the administration and the public but also in nation-building, by way of reducing the corruption and complaints against the system. Rural body should not function as machinery but in a humane and purposeful way. Moreover, the strengthening of democracy in its social and economic aspect has to be attained through the participation on the part of the people. At the international level, the UNDP framework for Copenhagen Implementation (1996) outlines the basic goal as sustainable human development, eradication of poverty, job creation and sustainable livelihood, and environment protection and regeneration and advancement of women.

Delivery Mechanism at Local Level by Panchayats

To address different aspects of rural poverty, the Government has brought poverty alleviation programmes. Micro-credit-linked programmes provide a package of services including credit and subsidy to set up micro-enterprises. Apart from this, the scheme of infrastructure development and provision of basic services contribute to the well-being of the rural people. For a successful implementation of these programmes, an appropriate policy framework, adequate funds, and an effective delivery mechanism is needed. Further, an effective delivery system has to ensure people’s participation at various stages of the formulation and implementation of the programmes, transparency in the operation of the schemes and adequate monitoring. The following suggestions are made to improve the qualitative impact of these programmes:

1. Organising the Poor for Greater Participation: Farmers “co-operatives, Manila Mandals and other institutions should perform intermediary functions like awareness generation, credit extension, and so on.

2. Unity of Plan and Policy: All over the country, a national plan of action supported by national, regional and block level policies should be evolved and adhered to uniformly.

3. Emphasis on Coordination Rather than Control: The PRIs should report their progress and Central/State level co-ordinators should use this feedback to analyse the problems/shortcomings to suggest necessary policy-changes which means the flow of information should be two-ways.

4. Schemes to Originate from PRIs and not State/Centre: The PRIs should be sufficiently equipped to collect their own database, analyse their problems and priorities and formulate their own schemes and programmes to develop their areas.

5. Simplification of Procedures/Norms: We should make project planning more scientific and simplified, properly understood and implemented at GP level. Excessive paper work in the name of monitoring should be avoided because it alienates the elected representatives and...
gives way to bureaucratisation of programme implementation. Field inspections and result-oriented feedback in terms of number and percentage of village population crossing poverty line should be encouraged.

6. **Adoption of Package Approach**: The help should be provided as a package to ensure achievement of tangible results as seen in Sri Kshetra Dharmasthala Model.

7. **PRIs as Corporate Bodies**: The PRIs should spend Government money yielding returns in the form of revenue generation. We should work out the cost-benefit ratio and internal rate of return and monitor them for all schemes per say.

8. **Focus on HRD**: It may be noted that human development through better education, health nutrition and family planning at local level promotes economic growth as effectively as capital investment in factories. The benefits arising out of mass education outweigh its negative aspects, such as educated unemployed or social tensions.

9. **Creation of Satisfactory Monitoring System to Measure and Regulate Performance during Implementation**: Programme control helps the heads of the departments at the district level to keep the programme functioning as scheduled.

It may be noted that a participatory and result-oriented bureaucracy interacting with an aware and educated population would interact fruitfully to produce a self-reliant village entity in the right spirit of democratic decentralisation for rural development. Our experience has confirmed that the goals of economic growth and poverty reduction can be and often are complementary. Hence, the 73rd Amendment to the Constitution has outlined the country’s commitment to rural development through democratic decentralisation system.

1. **PRIs as an End and not the Means**: Under the Act, the Panchayats are being treated as an agency for implementation of rural development programmes and not as units of self-Government. PRIs should reflect the spirit of the Constitutional amendment, which says that Panchayats will function as institutions of self-Government (Article 243G).

2. **Autonomy of PRIs**: A number of powers have been given to the Government officials for inspection and supervision of the Panchayats at different levels in the states. Thus, these bodies will not enjoy institutional autonomy and freedom.

3. **Developing able Leadership**: The leadership available at grass-root level may be developed to influence people to co-operate towards a common goal and to create a situation for collective response. PR Organisation constitutes three important leaders as given below:
   (i) First, elected leaders would derive their authority from the institution of PRI.
   (ii) Second, the bureaucratic leaders derive their authority from the administrative system.
   (iii) Gradually, self-appointed leaders spring up with a reformist approach by persuading people to join them in checking the prevailing malpractice of the above two sets of leaders given.

### 30.2 Pressure Groups

Pressure groups are voluntary agencies which have a long history of active involvement in the promotion of human welfare and well-being. Lord Beveridge called voluntary agencies “a private enterprise for social progress”. A pressure group can be described as an organised group that does not put up candidates for election, but seeks to influence Government policy or legislation. They can also be described as ‘interest groups’, ‘lobby groups’ or ‘protest groups’. Some people avoid using the term ‘pressure group’ as it can inadvertently be interpreted as meaning the groups use actual pressure to achieve their aims, which does not necessarily happen.

The term pressure group is a very wide definition that does not clearly distinguish between the groups that fall under the term. The aim of all pressure groups is to influence the people who actually have the power to make decisions. Pressure groups do not look for the power of political office for themselves, but do seek to influence the decisions made by those who do hold this political power. Pressure groups provide a means of popular participation in national politics between elections. They are sometimes able to gather sufficient support to force Government to amend or even scrap...
legislation. Pressure groups also provide a means of participation in local politics between elections. A pressure groups can use a variety of different methods to influence law.

Help in Efficient Programme Implementation: It may be noted that voluntary agencies help in the programme implementation, collaboration and co-ordination with other activities. Moreover, they can be helpful in development through programme implementation in the following ways:

1. They can conduct reviews and assessment of existing development programmes.
2. They can develop innovative programmes.
3. They can provide assistance to develop and/or strengthen local NGO capabilities and activities.
4. Voluntary agencies can ensure that their existing programmes and new initiatives promote full participation by individuals and communities in the planning, implementation and control of the programmes of the area.
5. They can expand their training efforts to respond to the need of primary health care programmes.
6. They can extend their efforts to develop locally sustainable and appropriate health technologies.
7. Voluntary agencies can help in recognising the essential roles of women in health promotion.
8. They can extend their capacity to work with poor, disadvantaged and remote populations.
9. Voluntary agencies can help in the creation of new and effective methods of health education.

These agencies are increasingly playing the catalysistic role in getting the public policies implemented. In the above discussion, the term ‘pressure groups’ and various forms of organisations have been used interchangeably. It may be noted there are two types of pressure groups or organisations: Membership Based Organisations (MBOs) and the Non-Government Organisations (NGOs) as discussed below:

Membership Based Organisations (MBOs): Membership-Based Organisations (MBO) are associations and societies that focus on the common interests of their members. Organisations provide tools and solutions to members to increase their productivity and ensure better service. With the use of the latest internet technology, Milestone Consultants provides advanced web communication channels to professional associations, societies, trade unions and clubs to collaborate and share information. Associations can inform and update their members about news and events through emails, newsletters, blogs, discussion forums, wiki’s, and various community sites.

Non-Government Organisations (NGOs): A non-Governmental Organisation (NGO) is a legally constituted organisation created by natural or legal persons that operates independently from any Government. The term is usually used by Governments to refer to entities that have no Government status. In the cases in which NGOs are funded totally or partially by Governments, the NGO maintains its non-Governmental status by excluding Government representatives from membership in the organisation. The term is usually applied only to organisations that pursue some wider social aim that has political aspects, but that are not overtly political organisations such as political parties. Unlike the term “inter-governmental organisation”, the term “non-governmental organisation” has no generally agreed legal definition. In many jurisdictions, these types of organisation are called “civil society organisations” or referred to by other names.

Here, it may be noted that NGOs cannot be substitutes for people’s organisations because:

1. They are not uniformly distributed all over the country’s area.
2. The success of an NGOs depends on the availability of service-minded people.
3. It is important to note that empowerment of people can come about only when they actually run their own organisations.

Despite the above reasons, NGOs can contribute considerably in building the Membership Based Organisations which in turn need a great deal of financial and moral support for capacity building. It is observed that Membership Based Organisations in India are confined to a few legal forms. Of these, the most prominent are the trade unions registered under the Trade Union Act (1926) and the co-operatives registered under various State Cooperative Acts. MBOs Networks are formed through alliances between MBOs or federations of trade unions, co-operatives and savings and credit groups and organisations.
Case Studies: MBOs - Here is a case study of Self-Employed Women’s Association (SEWA) which a union of self-employed women. Established in 1972, this MBO pressurises the bureaucracy at all levels to get the programmes and schemes (launched by the Central and State Governments) implemented as well as it builds pressure for making policies for the welfare of the weaker sections of self-employed women. To combat injustice at different levels, the strategies adopted are different and range from direct action to dealing with the Government departments through complaints and courts as well as to organising campaigns, workshops, studies and advocacy to influence policy changes. Moreover, SEWA is also actively involved in enhancing the capacities of its members by provision of credit through the SEWA Bank. It provides assistance in housing, sanitation, education and marketing facilities for manufactured products, etc.

NGOs - Society for Technology and Development (STD) takes up economic activity through collective organisation of marginalised sections. In the beginning, it acted as a field station of a Delhi based NGO. In 1990, it was registered as a separate society in 1990. It has set up a production unit for tanning of leather and has a network of traditional leather artisans (mainly flayers) of the area, buying the raw hides from them and processing them at its unit.

Many improvements are needed in voluntary organisations to make them effective for implementation of socio-economic programmes of the country. For example, they need to develop a reasonable personnel policy to attract qualified and stable personnel to implement their programmes. Apart from this, they must work in the area of social action and thereby facilitate social change. There is an urgent need to expand their work in rural areas.

Thus, the role of voluntary organisations vis-a-vis the support of Government for social welfare and development must be defined clearly. Their performance can be enhance through the following:

(i) The policy towards voluntary organisations indicating the relative role of the Government and the voluntary sector, entitlement to funds, etc. should be clear.
(ii) In terms of assets, financial soundness, service conditions to staff, quality of service etc., there is an urgent need to make a serious review of the working of voluntary organisations.
(iii) It may be noted that the Directorates of Social Welfare should equip themselves with facts and figures regarding voluntary organisations, their specialised areas of work, problems faced by them in their day-to-day functioning etc. during any action.
(iv) Certain rules and procedures of recruitment, salary scales and working/service conditions should be followed so that voluntary organisations would get properly qualified persons to man their programmes and schemes.
(v) Moreover, grants must not be released as a matter of routine.

Self-Assessment

1. Choose the correct options:
   (i) What is the system of governance in the Panchayat Raj set up
      (a) Single tier system of local self government at the village level
      (b) Two tier system of local self government at the village and block level
      (c) Three tier structure of local self government at village, block and district level
   (ii) Which of the following states has no Panchayat Raj institution
        Choose one:
        (a) Assam
        (b) Nagaland
        (c) Tripura
        (d) Kerala
   (iii) Which of the following regarding the Panchayat Raj are correct
        (a) The elections to the panchayats will be held by the election commission
        (b) There are mandatory reservations for women and weaker sections
Notes

(c) The panchayats have a fixed term of 5 years
Choose one:
(a) A and b  (b)  B and c  
(c) All of the above  (d) none

(iv) The recommendations of the Ashok Mehta committee on Panchayati Raj are
1. Creation of two tier system
2. Compulsory powers of taxation to Panchayat
3. Reservation for SC/ST
Choose one:
(a) 1, 2  (b)  2, 3
(c) All of the above  (d) None

(v) The Balwant Rai Mehta committee was on
Choose one:
(a) Democratic decentralization  (b)  Panchayati Raj institution
(c) Community development programme

(vi) Panchayati raj was first adopted by (in order)
Choose one:
(a) Rajasthan, Madhya Pradesh  (b)  Andhra Pradesh, West Bengal
(c) Rajasthan, Andhra Pradesh

(vii) Which of the following is a committee on Panchayati Raj institution
Choose one:
(a) Balwant Rai Mehta Committee  (b)  G.V.K Rao
(c) LM Singhvi  (d) Ashok Mehta
(e) None of these

30.3 Summary

• Decentralisation is the transfer of authority, responsibility, and accountability from Central to Local Governments. Decentralisation can take various forms, commonly described in public administration terms as deconcentration, devolution, and delegation.
• Democratic local governance is autonomous levels of local Government, vested with authority and resources that function in a democratic manner.
• Democratic decentralisation is the development of reciprocal relationships between central and local Governments and between local Governments and citizens.
• In India, panchayats have been very important in the structure of the Indian villages since the beginning of the history.
• There are 30 subjects that are to be assigned to the PRIs under the Eleventh Schedule. Some of the important ones are agriculture and allied areas, minor forest produce, small-scale industries, roads, rural housing, drinking water, non-conventional energy, rural electrification, poverty alleviation programmes, education including primary and secondary schools, health, family, women and children.
• There are certain problems in the implementation of the Act such as non-empowerment of Gram Sabhas and top-down approach to planning, monitoring and evaluation.
• For our purpose, people’s participation in the development process means active cooperation and involvement of the general masses in the process of development administration. People’s active interest, enthusiasm and cooperation in planning, implementation and evaluation of development programmes at all levels, particularly at the grass-root level is required. India’s participatory local self-governance has a feasible and institutional status that can be harnessed to implement people’s programmes at the grass root.

• It may be noted that transparency and people’s participation in regulatory and development administration is very important not only in bridging the gap between the administration and the public but also in nation-building, by way of reducing the corruption and complaints against the system.

• To address different aspects of rural poverty, the Government has brought poverty alleviation programmes. Micro-credit-linked programmes provide a package of services including credit and subsidy to set up micro-enterprises.

• The PRIs should report their progress and Central/State level co-ordinators should use this feedback to analyse the problems/short comings to suggest necessary policy-changes which means the flow of information should be two-ways.

• We should make project planning more scientific and simplified, properly understood and implemented at GP level.

• It may be noted that a participatory and result-oriented bureaucracy interacting with an aware and educated population would interact fruitfully to produce a self-reliant village entity in the right spirit of democratic decentralisation for rural development.

• Pressure groups are voluntary agencies which have a long history of active involvement in the promotion of human welfare and well-being. Lord Beveridge called voluntary agencies “a private enterprise for social progress”.

• The term pressure group is a very wide definition that does not clearly distinguish between the groups that fall under the term. The aim of all pressure groups is to influence the people who actually have the power to make decisions.

• It may be noted that voluntary agencies help in the programme implementation, collaboration and co-ordination with other activities.

• With the use of the latest internet technology, Milestone Consultants provides advanced web communication channels to professional associations, societies, trade unions and clubs to collaborate and share information. Associations can inform and update their members about news and events through emails, newsletters, blogs, discussion forums, wiki’s, and various community sites.

• The term is usually used by Governments to refer to entities that have no Government status. In the cases in which NGOs are funded totally or partially by Governments, the NGO maintains its non-Governmental status by excluding Government representatives from membership in the organisation.

• Despite the above reasons, NGOs can contribute considerably in building the Membership Based Organisations which in turn need a great deal of financial and moral support for capacity building.

• MBOs Networks are formed through alliances between MBOs or federations of trade unions, co-operatives and savings and credit groups and organisations.

• NGOs - Society for Technology and Development (STD) takes up economic activity through collective organisation of marginalised sections.

• Many improvements are needed in voluntary organisations to make them effective for implementation of socio-economic programmes of the country.

• Thus, the role of voluntary organisations vis-a-vis the support of Government for social welfare and development must be defined clearly.
Notes

30.4 Key-Words

1. Participation : Engagement: the act of sharing in the activities of a group; "the teacher tried to increase his students' engagement in class"

2. Panchayati Raj : The Panchayat is a South Asian political system. 'Panchayat' literally means assembly (yat) of five (panch) wise and respected elders chosen and accepted by the village community. Traditionally, these assemblies settled disputes between individuals and villages. Modern Indian government has decentralised several administrative functions to the village level, empowering elected gram panchayats. Gram panchayats are not to be confused with the unelected khap panchayats (or caste panchayats) found in some parts of India.

30.5 Review Questions

1. Do you think that decentralisation is better alternative to bureaucracy in effective implementation of economic policy?
2. "An effective delivery system has to ensure People’s participation” Comment.

Answers: Self-Assessment

1. (i) (c) (ii) (b) (iii) (c) (iv) (c) (v) (c) (vi) (c) (vii) (d)

30.6 Further Readings

Books

1. Indian Economy; Gaurav Datt and Aswani Mahajan; S. Chand and Company LTD. Ram Nagar, New Delhi-110055.
2. The Indian Economy; S.K. Ray; Prentic, Hall of India Private Limited New Delhi - 110001.