UNIT 1 ALTERNATIVE PARADIGMS OF DEVELOPMENT

Structure

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1.0 OBJECTIVES

After reading the unit you will be in a position to:

- distinguish between growth and development;
- discuss the various institutional approaches to development;
- explain the implications of different trade strategies in the context of domestic structural changes and the process of globalisation; and

- discuss the major concerns and challenges of development with a perspective on current developmental paradigms.

1.1 INTRODUCTION

Approaches to development is a subject that interests not only students of Economics but also of other social science disciplines. It is also of concern to politicians and policymakers. While it can be an exciting subject for these reasons, it can also be frustrating for the reason that there is often no consensus on what exactly should be its boundaries. In view of this, the present unit discusses some of those aspects of development on which there is a reasonable consensus. Beginning with providing a distinction between growth and development, the unit dwells on the debate of 'why growth alone is not enough'?. The section on 'approaches to development' then relates the alternative paradigms of development to the concept of 'structural adjustment' in the reforms context. An account of concerns and challenges of development (e.g. poverty, inequality, unemployment and regional disparities) exposes the readers to the persisting problems of development planning in India. Some new dimensions of development like human development and sustainable development are also discussed in the unit.

1.2 DISTINCTION BETWEEN GROWTH AND DEVELOPMENT

The terms 'growth' and 'development' are usually used to mean the same thing. Growth and development are usually indicated in terms of per capita Gross Domestic Product (GDP) or simply, per capita income. A growth in the per capita GDP is supposed to contribute to a rise in the standard of living of the people in general.

But in a strict sense 'growth' and 'development' do not mean the same. To appreciate the complexity of problems associated with development, it is necessary to understand the difference between 'growth' and 'development'. First, 'growth' refers to increase in per capita GDP, which is measured in terms of annual changes and is a short-term phenomenon. 'Development' refers to long-term aspects of the changes in per capita income. Second, growth focuses on the end product of the economic activity viz. per capita income. Development refers not only to change in per capita income but also the accompanying processes of structural changes. That is why growth is referred to as a narrow concept while development is a broader one. Development is growth-plus something more which cannot be captured by changes in per capita income alone.

Third, growth, based on per capita income, is an 'average' measure derived by dividing the total national income by the total population. One can increase growth of per capita income by reducing the growth rate of

population! That is not development. Since per capita income is an 'average', its mere growth does not necessarily indicate people are becoming better. A small proportion among population i.e. the rich may be becoming richer and a large proportion i.e. the poor may not be gaining in any way. Distribution of income resulting from growth must therefore be taken into account before something can be said definitively about the general level of development.

Fourth, growth measured in per capita income terms is an accounting entity. It is based on market valuation, which often underestimates non-market activities which make significant contribution to development. Fifth, growth, measured in terms of changes in per capita income would tell us what one has but does not tell us what one gets out of it. This is where people's capabilities make a difference to development which growth, in terms of per capita income, cannot explain.

Finally, in the context of global change, there is growing concern for development that is sustainable. Growth in per capita income is often associated with negative effects of depletion of non-renewable resources and pollution of environment. In other words, growth does not reveal these negative effects on development.

The message that growth alone is not desirable has been conveyed by the UNDP Human Development Report, of 1990's, in the following manner. We should avoid the following five types of growth processes: (1) Jobless growth, implying a growth process which does not create additional jobs or which reduce the existing job opportunities; (2) Ruthless growth, implying a growth profile, which aggravates inequalities in the system; (3) Futureless growth, implying a growth paradigm, which creates non sustainability, through environmental degradation; (4) Voice less growth, implying a growth process, which does not improve the empowerment of the deprived sections of the society; and, finally (5) Rootless growth, implying a growth process which destroys the cultural roots and traditional life styles of the society.

The perception outlined in the above paragraph, brings out that focusing on growth alone could be detrimental to the goal of realising development in a comprehensive manner.

1.3 APPROACHES TO DEVELOPMENT

For achieving the goal of economic development, there are several approaches. The approaches require specific institutional framework within which economic activities are carried on. Broadly, the market and state are two broad institutions which are expected to facilitate economic activities. What follows is a description of approaches to development which involve state and market in different degrees.

1.3.1 Market Based Approach

Under conditions of well developed perfectly competitive markets, resources are used optimally by minimising the costs and maximising profits. Price signals, including the profits, serve as incentive to investment for achieving faster growth. Therefore, ideally, perfectly functioning markets without any intervention are seen as a strategy for faster accumulation and growth. But, in the post-II world war era, when most of the former colonies which became independent and embarked upon the process of development, these countries faced serious gaps in markets as they were underdeveloped in many of these economies. The absence of markets was particularly conspicuous in the 'subsistence segments'. There were several areas of development of public goods for which there was no market but there was a pressing public need. Therefore, most of these underdeveloped countries turned to the state as an essential requirement for development process.

1.3.2 Role of State and Planning

Early writers on development emphasised the need for a major role for the state in the production process. In underdeveloped countries with subsistence agriculture, weak industrialisation, poor infrastructure, vast underemployment, low income, savings and investment, the need was for a big push in investment. With low savings and poor state of development of markets, there was neither incentive nor ability for the private sector to undertake the investment role. Hence, the need arose for the state to intervene for planned investment in a big way spread not only over industry and infrastructure sectors, but also in transforming subsistence agriculture to higher productivity agriculture by investing in irrigation infrastructure, agricultural Research and development, as also in the agricultural extension services. Thus, in India for instance, at least up to 1991, the public sector, assumed growing importance for providing accelerated growth in core sectors of the economy. These core sectors included railways, power, telecommunications, roads and shipping, and investing though moderately, in the social sectors like education and health. The protagonists for state intervention were pessimistic about the market's ability to deliver the desired economic change in key sectors, which in their view could be achieved through planned mobilisation and allocation of resources to the public sector.

More recently, however, public sector has fallen out of policy grace on the grounds of state intervention generating red-tapism, corruption (rent-seeking), inefficiency and losses. Based on these arguments, there has been a tendency towards reducing the role of the state. There are still those who argue that state's role should not be minimal particularly in the areas of health, education, infrastructure, and providing the right environment for entrepreneurial activity to flourish.

1.3.3 Mixed Economy Approach

Mixed-economy brings together the state and the market as a framework for approach to development. It involves co-existence of private enterprise side by side with public enterprise. The mixed economy combines the salient features of capitalism and socialism. Capitalist enterprises with self-interest and profit motive operate in a number of activities. Side by side, public sector production, not with profit motive, but with larger social interest operate in production as well as social sectors. India is regarded as a good example of mixed economy. The Directive Principles of State Policy of the Indian Constitution states that the State shall direct its policy to secure better distribution of ownership and control of the material resources of the community and prevent concentration of wealth in the hands of a few. This obligation brings the state into the fields of production and distribution. The planned development approach in India is also premised on a mixed-economy model with the coexistence of public and private sectors whose respective role is demarcated by the state. Initially, primary role in planned development was accorded to public sector and the private sector was to supplement the efforts of the public sector.

Since the introduction of economic reforms in 1991, there has been substantial expansion of economic space of private sector and its contraction for the public sector. Private sector has come to dominate almost all sectors of the economy often calling into question the Constitutional primacy accorded to the state in the Indian economy. Thus, the substance of mixed-economy approach in India has moved from a state with the control of commanding heights of the economy to a state with a very diminutive role leaving the commanding heights to the market.

1.3.4 Inclusive Growth

'Inclusive growth' appears as an official development strategy for the first time in India in the 'Approach Paper' of the Eleventh Five Year Plan. However, the concept of 'growth with justice' or 'growth with equity' has been part of the planning strategy in India. The basic premise for 'growth with justice' (here emphasis is on distributional justice) has been that in an economy with gross disparities in wealth and assets, growth of national product without intervention would result in perpetuation of inequalities. Since besides growth, reduction in inequalities is one of the objectives of development, it has been considered necessary that the very growth strategy should involve appropriate institutional arrangements to ensure equitable distribution of the gains of growth. An institutional framework for growth with equitable distribution envisages a substantial role for state in the productive sectors as much as in the regulation of production and distribution.

The introduction of economic reforms meant structural adjustment from a predominant role of the state in the economy to growing importance of market forces. Market driven economic structure is likely to have more emphasis on growth and less on social equity. Hence, since the early phase of economic reforms there has been a call for 'structural adjustment with human face'; 'human face' referring to equity and increased empowerment. The experience of economic reforms in India has shown relatively high growth performance. But there has been slow rate of reduction in poverty, low levels of employment growth, increase in rural-urban disparities, inequalities across social groups, and regional disparities. Agriculture suffered neglect causing widespread distress among farmers. The rate of decline in infant mortality has slowed down in the reform period. The high growth rates reflecting the growth of services, information and communication technologies, foreign trade and foreign exchange reserves, financial markets etc. brought unprecedented prosperity to a small section. But a large segment of rural and informal India has been excluded from this prosperity. There has been social exclusion in terms of regions, social and marginal groups, women, minorities, and children.

It is, in this context, that the Approach Paper to the Eleventh Five Year Plan suggests moving 'Towards Faster and More Inclusive Growth'. It acknowledges that the economic growth has failed to be sufficiently inclusive, particularly after the mid-1990s. The Eleventh Plan aims at restructuring policies to achieve a more broad-based and inclusive growth.

Check your Progress – 1

1. What is the basic difference between growth and development?

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2. What is the rationale for the role of state in an underdeveloped economy?

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3. What is the place of distributional aspect in 'inclusive growth'?

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1.4 ROLE OF TRADE AND STRATEGIES OF TRADE

Early thinking on development tended to equate 'industrialisation' as development and then focus on the role of trade in industrialisation. Trade, often, was referred to as engine of growth. This was largely on the basis of classical Ricardian inspiration that free trade served as the engine of industrial revolution in England. This is also essentially what is called as 'free trade' argument. There are two leading ideas here. Firstly, international trade overcomes the narrowness of the home market and provides an outlet for the surplus product above domestic requirements. Secondly, by widening the market, international trade improves the division of labour raising the general level of productivity within the country. But this is countered by the protectionist school by arguing that for underdeveloped countries which export raw materials and import manufactured goods, international trade has been unfavourable to these countries.

1.4.1 Export-Oriented Approach

The earlier version of export-oriented (outward-oriented) strategy of trade for development emphasised that developing countries' comparative advantage lay in highly specialised primary commodities. An open trade regime would result in each developing country's continued specialisation in a few primary commodities. The demand for these commodities are likely to be both price and income elastic. Increased export earnings and growing domestic demand would bring in investment and growth of domestic industry and the economy. It is argued that outward oriented economies are better to gain from trade because of specialisation that leads to the benefits of economies of scale, cost reduction by increased competition, etc. Further, increased competition because of open-trade breaks monopolies. Free trade also promotes flow of more direct foreign investment. To drive home the advantages of export or outward-oriented trade strategy, the example often cited is East Asia's (Singapore, Hong Kong, South Korea and Taiwan) free trade policy and growth success during the period of 1960s to 1980s.

1.4.2 Import Substituting Industrialisation

The policy of government intervention to protect domestic industrial production to replace imports has come to be known as 'import-substituting industrialisation', or ISI. An important rationale for this policy is the 'infant-industry argument'. In the face of competition from industrially developed countries, the nascent or new industries in developing countries may not develop. And imports of manufactured

commodities from developed countries will continue. Therefore, it is argued that in the initial stages of industrialisation, state protection is necessary for the development of domestic industries in the developing countries. Starting infant industries for the production of commodities hitherto imported, by banning imports or imposing high tariffs on imports, has become one of the popular policies in many developing countries.

In 1960s, a further argument in favour of the ISI was added by the structuralist school headed by Raul Prebisch of Latin America. Based on trade data, he argued that in a free trade regime, developing countries were exporting primary commodities and importing manufactured goods. Because of inherent increase in the elasticity of demand for manufactured goods and declining elasticity of demand for primary products, the relative prices or the terms of trade of primary products deteriorated over the long run. It is argued that until developing countries develop their manufacturing sector, backwardness would persist. Therefore, domestic industrialisation by substituting imports by protection becomes necessary for the development of manufacturing sector in developing countries.

Further, ISI is also advocated for infant industry because industrialisation is also a learning process and in the initial stages much effort is needed to stabilise through trial-and-error. Import substitution under protection helps developing countries to go through the process of 'learning-by-doing'.

It is important to remember that the ISI or infant industry argument supports temporary policy to aid – import-competing manufacturing. Once the learning process is complete, government help by protection is no longer justified. However, in many countries, ISI has been used perpetually because of the pressures of inefficient domestic producers and growth of monopolies. The Indian automobile sector, until the recent liberalisation, was one such example of ISI promoted incompetence.

Even within the broad strategy of import substitution oriented strategy, there could be two types of policy approaches. First, import substitution in the framework of protection, accorded primarily, by tariff policies. Secondly, import substitution in the framework of protection to the domestic industry, through a mix of policy in quantitative controls and quotas for imports and high tariff rates. In India, we adopted the latter paradigm and thus created a plethora of rigid institutions for the implementation of the license-quota system. This had led to the creation of a high cost economy and created biases against export promotion. However, India has been liberalising her trade policy regime, since the early part of 1980s by gradually removing the import licensing system and adoption of tariff policies for domestic protection. Further, it was in the period after 1991, that comprehensive liberalisation of the import control regime has taken place and this has further strengthened the role of market and competition, both in the domestic production space as

also in regard to the international trade regime. Further, with the emergence of a new global free trade regime, under the supervision of the World Trade Organisation, since 1995, India's approach to trade policy system has undergone radical shift towards free trade and export orientation.

Check your Progress – 2

1. Why did classical economists consider trade as the 'engine of growth'?

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2. What is the rationale for Import Substituting Industrialisation (ISI) strategy?

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3. What are the limitations of ISI strategy?

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1.5 SELECT CONCERNS OF DEVELOPMENT

Approaches to development have brought into sharp focus certain issues which require special attention in the designing of appropriate strategies in developing countries. Poverty, inequality, unemployment and regional disparities have emerged as critical issues in development agenda.

1.5.1 Poverty

In the post World War-II period, when many erstwhile colonies became free, the topmost priority of the newly independent countries was to achieve rapid economic development with a view to ensuring decent levels of living to the people in these countries. Most of these countries adopted development strategies with overwhelming emphasis on growth of GDP and per capita income. Though many of these countries did achieve substantial improvements in their growth rates during 1960s and 1970s, there was persistence of high levels of poverty, inequality and

unemployment or underemployment. Therefore, beginning with the 1970s, there was an attempt to place sharp focus on eradication of poverty along with achievement of high growth rates of GDP.

Poverty refers to the condition of people who are unable to meet out even their basic necessities of life. When a substantial section of a society is deprived of the minimum level of living and continues at a bare subsistence level, the society is said to be plagued with mass poverty. Frontal attack on poverty has become one of the challenges of development policy in all the developing countries.

Though in developed countries poverty is seen in 'relative' terms, in developing countries the concern is for 'absolute' poverty. Using monetary income or consumption to identify and measure 'absolute' poverty has a long tradition. One such early attempt was made in the late 19th century by S. Rowntree in the English City of York. In India, the debate on poverty issue was launched by Dadabhai Naoroji, through his famous *Drain Theory,* in the later part of the nineteenth century. The Drain theory advocated that Indian common man is left with very low per capita income, since most of the resources of the nation are *drained away* by the colonial power, viz. England, for the benefit of the British people.

The concerns of poverty, inequality, empowerment have prompted many nationalist thinkers of India, like Mahadev Govind Ranade, Gopal Krishna Gokhale and Mahatma Gandhi, to propound some alternative paradigms of development, that were best suited to the social, cultural, economic and political conditions of India. However, in practice, India has been adopting a mix of several conflicting paradigms of development, which are perhaps responsible for resulting in the unfortunate situation of poverty and inequalities, persisting for a long time.

The present estimates of poverty in several developing countries are inspired by this lead to household survey based income or consumption expenditure data. A key building block in developing income and consumption measures of poverty is the 'poverty line' – the critical cut off in income or consumption below which an individual or household is determined to be poor. A country-specific poverty line may need to be adjusted for different areas like urban and rural areas, if prices and access to goods and services differ. Once the poverty line is specified, then the extent of poverty is assessed by calculating the percentage of the population with income or consumption levels below the poverty line. This is called the 'headcount' measure of poverty and is by far the most commonly used measure of poverty. There are other poverty measures like 'the poverty gap' which takes into account the distance of poor people from poverty line, and 'the squared poverty gap' which is calculated by taking into account the degree of income or expenditure inequality among people.

1.5.2 Inequality

The relationship between growth and inequality of income has been of considerable concern in the development literature. One postulate that has received much attention is that as development process proceeds, income inequality first rises and then falls with development. A graphical representation of increase in per capita income on the 'X' axis representing economic development and a measure of inequality on the 'Y' axis would show a curve in the shape of an inverted 'U'. This has come to be called as inverted-U hypothesis of the relationship between growth of income and inequality, and is associated with Simon Kuznets. ***It is now famously called as 'Kuznets Curve'***. Kuznets observed falling inequality of incomes in some of the developed countries in the late 19th century. He visualised that inequality was falling after the early rise in the peak of industrialisation period. He reasoned that as these economies initially began their transformation from their dominant agricultural sector base to more of industrialisation and urbanisation, inequalities increased. But later, inequalities decreased as migration of people to urban areas (and their adaptation to political power structure leading to enactment of legislation in their interests), resulted in a rise in their incomes. It is Kuznets hypothesis that made many believe that higher inequality initially distributes more income to the rich, who as real savers and investors, propel faster growth.

However, recent evidence calls into question the proposition that inequality helps to generate rapid economic growth. The experience of what is called as the 'East Asian Miracle' economies such as Taiwan, South Korea, Hong Kong and Singapore, has shown that with a relatively equal distribution of income, very high rates of economic growth are possible. There is thus growing evidence that better distribution of income would result in faster growth. It is therefore argued that reducing inequality is necessary for greater economic prosperity in the long run.

In the case of India, particularly in the reform period, there has been increasing evidence of growing inequalities in levels of consumption, between urban and rural areas and between different states. ***One widely used measure of inequality is the gini coefficient.*** Beginning with the early 1990s, inequality in monthly per capita levels of consumption increased significantly for both rural and urban areas of Indian population. The rural monthly per capita income which was 66 per cent of urban monthly per capita income in 1983, declined to 61 per cent in 1993-94 and to 56 per cent in 2004-05. While there was high level of growth since early 1990s, the growth did not have adequate impact on the rate of reduction in poverty because of growing inequality in the distribution of income.

There is also gross disparity in the process of reduction of poverty among the states. In spite of overall reduction of poverty, some states still have very high levels of poverty. In 2004-05, the level of poverty

in Orissa (47 per cent) was almost six times compared to that of Punjab (8 per cent). Just four States viz. Bihar, Uttar Pradesh, Madhya Pradesh and Orissa constitute 61 per cent (2004-05) of poor in the country. Between 1993-94 and 2004-05, the absolute number of rural poor actually increased in three states viz. Madhya Pradesh, Orissa and Uttar Pradesh.

The growing inequalities in terms of levels of consumption across rural-urban areas and across different regions is a serious cause for concern and is bound to have adverse effect on overall development.

1.5.3 Employment and Unemployment

In the development strategies one of the main objectives is generation of employment as a part of growth process. Unlike in the developed countries, unemployment is not open and unemployment estimates in developing countries are likely to be underestimates as underemployment, thin employment and low productivity employment are characteristic features in developing countries. Activities like subsistence agriculture and informal activities like weaving, petty trade, and casual services occupy most of the people in these economies.

Unemployment in India

Unemployment in India is measured in terms of three types of status viz. 'usual principal status' (US), 'current weekly status' (CWS), and 'current daily status' (CDS). 'Usual principal status' (US) unemployment refers to a person who did not find employment for substantial part of the year and is still seeking employment. Given the informal nature of the economy there will be very few who do not get any work in a year. The estimates of employment and unemployment under 'usual principal status' would therefore be underestimates of the problem. 'Current weekly status' (CWS) unemployment refers to persons who did not find even an hour of work in a day in the week of survey. The weekly status unemployment are thus likely to give a more realistic picture of unemployment. The US and CWS estimates refer to 'persons' who are employed or unemployed and provide us with estimates of rate or proportion of persons employed or unemployed. In contrast, the 'current daily status' (CDS) provides us data in terms of person-days. Under CDS, the employment or not employed at least for one hour in each of the reference week is taken into consideration. The ratio of employment or unemployment is calculated in terms of rate of person days, which is quite different from the rate of persons employed or unemployed. The Economic Survey (2007-08) observes that estimates based on daily status is the most inclusive rate of unemployment giving the average level of unemployment on a day during the survey year. It captures the unemployed days of the chronically unemployed, the unemployed days of usually employed who become intermittently unemployed during the reference week and unemployed days of those classified as employed according to the criterion of CWS. According to the CDS estimates,

employment increased from 239.49 million in 1983 to 313.93 million in 1993-94 to 338.19 million in 1999-00 and 384.91 million in 2004-05. During the same period, the number of unemployed (unemployment rate) also increased from 20.27 million in 1993-94 (6.06%) to 26.68 million (7.31%) in 1999-00 to 34.74 million (8.28%) in 2004-05.

Nature of Employment in India

Employment in terms of working status is broadly divided into three categories viz. regular salaried, self-employment and casual employment. 'Regular salaried' employment indicates secure and stable employment with assured regular income. 'Self-employment' in the Indian context is largely in agriculture and other small petty economic activities. Most often, the conditions of work and earnings in self-employment are highly vulnerable and unstable. Those engaged in self-employment activities may not have any social security. With a very few exceptions like professional occupations, self-employment is often fraught with uncertain or meager returns, unless supported by adequate infrastructure and other social amenities like health and educational facilities to the dependent family members. 'Casual employment' is a kind of beck-and-call employment, with no regularity in employment, regular employer, adverse working conditions, uncertain wages and absence of any social security.

Development process is supposed to bring about shift of majority of workers from casual employment to self-employment and increasingly towards 'regular and salaried' employment. But, Table 1.1 shows that in India over the years there has been decline in 'self-employment' and increase in the share of 'casual employment', without hardly any increase in the share of 'regular and salaried' employment. There is thus an increasing tendency towards casualisation of employment, more so since the introduction of reforms in the 1990s.

Table 1.1: Distribution of Workers by Status of Employment (US)

Year	Status of Employment		
	Self-Employment	Regular and Salaried	Casual
1977-78	58.9	13.9	27.2
1983	57.4	13.9	28.7
1987-88	56.0	14.4	29.6
1993-94	54.8	13.2	32.0
1999-00	52.9	13.9	33.2

Source: *NSSO surveys.*

Check your Progress – 3

1. Why is increasing attention being paid to poverty in development strategy?

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2. What does "Kuznets Curve" explain?

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3. What is the dominant type and quality of employment in India? Why is it a cause for concern?

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Organised and Unorganised Workers

A more revealing way of looking at the Indian workforce is on the basis of its division into 'organised' and 'unorganised' workers. 'Organised Workers' consist of those working in legally incorporated entities with regular salaries, having better working conditions and social security. In contrast, 'unorganised workers consist of those working in the unorganised enterprises or households' having characteristics opposite to what obtains for their organised counterpart i.e. they often do not have employment security, work security and social security. The National Commission for Employment in Unorganised Sector (NCEUS) has grouped the workers into 'organised' (formal) and 'unorganised' (informal) workers (Table 1.2). The proportion of unorganised workers has increased from 91.2% in 1999-00 to 92.4% in 2004-05. The so-called 'organised' workers account for only 7.6% of total employment in the country in 2004-05, a decline from 8.8% in 1999-00. It is thus clear that India faces not only the problem of rising unemployment, but also deteriorating quality and conditions of employment. One of the urgent need is therefore to provide protected conditions of employment and social security to the unorganised workers.

Table 1.2: Sectoral Distribution of Organised (Formal) and Unorganised (Informal) Workers - 1999-00 and 2004-05

(millions)

Sector	Type of Employment					
	Unorganised (Informal) Workers		Organised (Formal) Workers		Total	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Unorganised (Informal) Sector	341.3 (99.6)	393.5 (99.6)	1.4 (0.4)	1.4 (0.4)	342.6 (100)	394.9 (100)
Organised (Formal) Sector	20.5 (37.8)	29.1 (46.6)	33.7 (62.2)	33.4 (53.4)	54.1 (100)	62.6 (100)
Total	**361.7 (91.2)**	**422.6 (92.4)**	**35.0 (8.8)**	**34.9 (7.6)**	**396.8 (100)**	**457.5 (100)**

Note: *Figures in brackets are percentages.*

Source: *NCEUS (2007).*

1.5.4 Millenium Development Goals

In September 2000, at the United Nations Millennium Summit, world leaders agreed to a set of time-bound and measurable goals and targets for combating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women. A road map was prepared in the form of Millennium Development Goals (MDGs), which consisted of eight goals, eighteen targets, and forty-eight indicators. These targets are to be achieved by 2015, from their levels which existed in the year 1990. The targets at the global level are set in tune with the individual country level targets for each of the Goal. Each country, including India, has set regional level targets under each goal. The following are the 8 Goals, set to be achieved by 2015, in which the status of India is indicated for each.

Goal 1: Eradicate extreme poverty and hunger

- Reduce by half the proportion of people living on less than a dollar a day.
- Reduce by half the proportion of people who suffer from hunger.

Globally, 1.2 billion people still live on less than $ 1 a day. Although, there has been considerable progress in poverty reduction, India's performance in reducing hunger and malnutrition is far from satisfactory. Even in 2008, 60% of the regions in the country are off the track in bringing down hunger (underweight) to the Millennium norms.

Goal 2: Achieve Universal Primary Education

- Ensure that all boys and girls complete full course of primary education.

Globally, 113 million children do not attend school. In India, it is reported that 95 percent of its children are reportedly in school and the target of 100% is likely to be reached soon.

Goal 3: Promote Gender Equality and Empower Women

- Eliminate gender disparity in primary and secondary education by 2005 and at all levels by 2015.

India is nowhere near reaching this target. Almost in 60% of the regions gender disparities in school enrolment, especially in secondary and higher level, are off-target. Progress is claimed in empowerment of women through formation of self-help groups (SHGs).

Goal 4: Reduce Child Mortality

- Reduce by two-thirds the mortality rate among children below five.

Globally 11 million young children die every year. India's performance even in reducing infant mortality rate (IMR) is off-target in 80% of the areas. Performance in immunisation is better but still 40% of areas are off-target.

Goal 5: Improve Maternal Mortality

- Reduce by three quarters the maternal mortality ratio.

In the developing countries, the risk of dying in child-birth is one in 48. Though there are safe motherhood programmes, the progress in India is very slow.

Goal 6: Combat HIV/AIDS, Malaria and Other Diseases

- Halt and begin to reverse the spread of HIV/AIDS.

- Halt and begin to reverse the incidence of malaria and other major diseases.

Countries like Brazil, Senegal, Thailand and Uganda have shown that we can stop HIV in its tracks. But, India, which has been supplying relatively inexpensive generic drugs to some of the countries, has no public programme to treat HIV patients freely. Malaria was reportedly eradicated in India, but there are fresh reports of its surfacing again!

Goal 7: Ensure Environmental Sustainability

- Integrate principles of sustainable development into country policies.

- Reduce by half the proportion of people without sustainable access to safe drinking water.
- Achieve significant improvement in the lives of 100 million slum dwellers by 2020.

Globally more than one billion (100 crore) people still lack access to safe drinking water. The record of India in making safe drinking water and sanitary facilities leave much to be desired.

Goal 8: Develop a global partnership for development

- Development of open trading and financial systems.
- Provide debt relief to poor countries.
- Address special needs of small and land locked countries.
- Provide accessible drugs through cooperation with pharmaceutical companies.

These are the areas where India is in a reasonably comfortable position and also should therefore strive to reach out to help other least developed countries.

The progress in MDGs since 2000 shows that many countries in East Asia and the Pacific, including China, Arab States, Latin America, and the Caribbean are on-track while countries in Africa and South Asia are off-track in achieving many MDG indicators. According to a study of 2006, progress in MDG indicators for Asia-Pacific countries shows that India is off-track in nine out of twenty one indicators. In other words, India may not fulfil 50 per cent of the MDG indicators by 2015 (Mahendra Dev 2008).

1.6 NEW CHALLENGES TO DEVELOPMENT

The growing dissatisfaction with per capita income as a measure of development, lack of proportionate improvement in the quality of life of people even in the face of growth and extensive damage done to environment and ecology in the name of faster growth have compelled rethinking on the concept of development. Two important dimensions that have come to assume significant space in the debates on development are: 'human development', and 'sustainable development'. 'Human development' combines the condition of living not only in terms of improvement in per capita income but also the quality of human beings in terms of their access to education, health and sanitation facilities. For more than a decade now Human Development Index (HDI) has emerged as an alternative measure of development as widely as the measure of per capita gross domestic product (GDP). Similarly, there has been growing awareness that human progress, if measured merely in

terms of growth of GDP, would become unsustainable because of depletion, degradation and pollution that goes with increasing mass of production. Challenging the obsession with growth in the 'business as usual' fashion, there has been growing awareness of alternative path of growth that ensures sustainable benefits not only to the present generation but also to the future generations.

1.6.1 Human Development and Human Development Index (HDI)

Human development is a much broader concept in which economic growth is one of its components. Per capita income, at best, may indicate standard of living. Human development provides room for including what people value as development. Since values differ from people to people (value heterogeneity) and also one's own values change with development (value endogeniety), the components included in human development are ones on which there is near universal unanimity. For instance, on a proposition that better development is indicative of less of infant mortality and longer life, there is unlikely to be any difference of opinion. Similarly, development seen in terms of improved capabilities and better education, also carries universal acceptance. Human development, thus goes beyond the narrow notion of development being seen merely in terms of per capita income and tries to incorporate what people get out of their income in terms of beings and doings. Since 1990, the United Nations Development Programme (UNDP) has been publishing Human Development Report every year. These reports present the place of countries in terms of human development index (HDI).

Human Development Index (HDI)

Human Development Index (HDI) is a summary measure of human development. It measures the average achievements in a country in three basic dimensions of human development:

- A long and healthy life as measured by life expectancy at birth.
- Knowledge, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight)
- A decent standard of living, as measured by GDP per capita (ppp US $).

Before the HDI itself is calculated, an index needs to be created for each of these dimensions. To calculate dimension indices – the life expectancy, education and GDP indices – minimum and maximum values (goal posts) are chosen for each underlying indicator. Performance in each dimension is expressed as a value between 0 and 1 by applying the following formula:

$$\text{Dimension Index} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$$

The HDI is then calculated as a simple average of the dimension indices. The following are goalposts for calculating the HDI:

Indicator	Maximum Value	Minimum Value
Life expectancy at birth (years)	85	25
Adult literacy rate (%)	100	0
Combined gross enrolment ratio (%)	100	0
GDP per capita (ppp US $)	40,000	100

India's global position in terms of HDI rank improved from 132 (HDI: 0.545) in 1997 to 126 (HDI: 0.6) in 2004. During the same period, China improved its HDI rank from 98 (HDI: 0.701) to 81 (HDI: 0.768).

1.6.2 Concept and Challenge of Sustainable Development

Sustainable development refers to a pattern of resource use that aims to meet human needs of not only the present generation, but also future generation. The term was used by the Brundtland Commission (1987) which defined sustainable development as development that 'meets the needs of the present without compromising the ability of future generations to meet their own needs'.

Sustainable development does not focus solely on environmental issues. The United Nations 2005 World Summit Outcome Document, refers to the four 'interdependent and mutually reinforcing pillars' of sustainable development as including: economic development, social development, and environmental protection. The fourth pillar is indigenous people and culture.

Green development is generally differentiated from sustainable development in that **Green development** prioritises what its proponents consider to be environmental sustainability over economic and cultural considerations. Proponents of Sustainable Development argue that it provides a context in which to improve overall sustainability where cutting edge Green development is unattainable. For example, a cutting edge treatment plant with extremely high maintenance costs may not be sustainable in regions of the world with fewer financial resources. An environmentally ideal plant that is shut down due to bankruptcy is obviously less sustainable than one that is maintainable by the community, even if it is somewhat less effective from an environmental standpoint.

During the last ten years, different organisations have tried to measure and monitor the proximity to what they consider sustainability by implementing what has been called sustainability metric and indices. Sustainable development is said to set limits on the developing world. While current developed countries polluted significantly during their development, the same countries encourage developing countries to reduce pollution, which sometimes impedes growth.

Environmental sustainability is the process of making sure that the current processes of interaction with environment is pursued with the idea of keeping the environment as pristine as naturally possible based on ideal-seeking behaviour. An 'unsustainable situation' occurs when natural capital (the sum total of nature's resources) is used up faster than it can be replenished. Sustainability requires that human activity only uses nature's resources at a rate at which they can be replenished naturally. Inherently, the concept of sustainable development is intertwined with the concept of carrying capacity. Theoretically, the long-term result of environmental degradation is the inability to sustain human life. Such degradation on a global scale could imply extinction for humanity.

Consumption of renewable resources	State of Environment	Sustainability
More than nature's ability to replenish	Environmental degradation	Not sustainable
Equal to nature's ability to replenish	Environmental equilibrium	Steady-state economy
Less than nature's ability to replenish	Environmental renewal	Sustainable development

Check your Progress – 4

1. What are the objectives of Millennium Development Goals (MDGs)? What is India's track record in health related goals?

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2. What are the basic dimensions of Human Development Index (HDI)?

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3. What is the significance of creating awareness about environmental sustainability in designing development?

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1.7 LET US SUM UP

A sharp distinction between growth and development was drawn in the early 1990s. This distinction was drawn as the earlier measure of economic growth, measured in terms of GDP per capita, was realised to undermine many other aspects of development which together contributes to determine the real improvement in the quality of life. The different approaches to development, alternating between a primacy accorded to the state versus the market and the mixed economy model followed by India till the early 1990s are then discussed. The recent emphasis attached to the concept of inclusive growth is especially discussed to provide a thrust on the current policy perspective in India. Some of the continued problems of developing economies like India and the global resolve to tackle them by way of Millennium Development Goals in a time phased manner are also presented in the unit. The alternative to per capita GDP as a measure of growth, by way of human development index which came into adoption in the early 1990s, and the increased emphasis on sustainable development and its associated challenges have been dealt with towards the conclusion of the unit.

1.8 KEY WORDS

Growth : Normally, annual percentage change in national income/gross domestic product.

Development : A broader concept than growth.
It relates the changes in national income to the changes in the structure of the economy in terms of the processes behind these changes.

Inclusive Growth : A process of growth that does not exclude the poor and marginal. The benefits of growth percolate to these sections as well.

Mixed Economy : Institutional arrangement of the economy where State and market play equally important role.

Infant-Industry : Industry in the nascent (early) stage of development.

Kuznets Curve : A 'Bell-shaped' (or inverted 'U' shaped) curve which shows the relationship between inequality of income distribution and the level of per capita income. As income increases, initially inequality increases, but after a certain level, inequality decreases with the rise in the level of per capita income.

Casual Employment : Employment without any regularity and any social protection.

Human Development : Refers to level of per capita income/consumption as well as education and health standards. Usually measured as an index based on a vector of indicators of per capita income/consumption, literacy, infant mortality and life expectancy.

Sustainable Development : Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

1.9 SUGGESTED BOOKS FOR READING

Amartya Sen, "The Concept of Development" in *Handbook of Development Economics-I* ed. By H.B. Chenery, 1988.

Gerald M. Meier and James E. Raunch, *Leading Issues in Economic Development*, (8th Edition), OUP, New Delhi, 2006.

Mahendra Dev, *Inclusive Growth in India*, OUP, New Delhi, 2008.

Ruddar Datt and K.P.M. Sundaram, *Indian Economy*, (57th Edition) S. Chand, New Delhi, 2008.

Subrata Ghatak, *Introduction to Development Economics*, (4th Edition) Routledge, London, 2001.

1.10 ANSWERS/HINTS TO CYP EXERCISES

Check Your Progress -1

1. See 1.2 second para
2. See 1.3.2 first para
3. See 1.3.4 especially second para

Check Your Progress – 2

1. See 1.4 first para
2. See 1.4.2 especially first para
3. See 1.4.2 last para

Check Your Progress – 3

1. See 1.5.1 especially first two paras

2. See 1.5.2 especially first para

3. See 1.5.3 especially last three paras

Check Your Progress – 4

1. See 1.5.4 first two paras and goals 4 to 6

2. See 1.6.1 especially para 2

3. See 1.6.2 especially last para

UNIT 2 THOUGHTS ON DEVELOPMENT OF SELECT VINTAGE THINKERS

Structure

2.0 Objectives

2.1 Introduction

2.2 The Early Nationalists

- 2.2.1 Dadabhai Naoroji: The Drain Theory
- 2.2.2 M.G. Ranade: Balanced Development and Industrialisation
- 2.2.3 G.K. Gokhale: Education and Economic Development

2.3 Later Nationalists: Alternative to Western Models

- 2.3.1 M.K. Gandhi: 'Swadeshi' and 'Gram Swaraj'
- 2.3.2 J.K. Mehta: Theory of Wantlessness

2.4 Development and Social Justice

- 2.4.1 B.R. Ambedkar: Small and Nationalisation of Land
- 2.4.2 R.M. Lohia: Against Caste Inequality

2.5 Debate on Models of Development Planning

- 2.5.1 J. Nehru – P.C. Mahalanobis: Mahalanobis Model
- 2.5.2 C.N. Vakil – P.R. Brahmananda: Wage-Goods Model

2.6 Development and Welfare

- 2.6.1 Amartya Sen: Capabilities and Human Development
- 2.6.2 I.G. Patel: How to Turn India's Gold for Growth
- 2.6.3 Select Leading Contributions: Development and Welfare (V.K.R.V. Rao, K.N. Raj, D.R. Gadgil)

2.7 Ancient Indian Thoughts on Development: A Contrast with the Modern Economic Thinking

2.8 Let Us Sum Up

2.9 Key Words

2.10 Some Useful Books

2.11 Answers or Hints to Check Your Progress Exercises

2.0 OBJECTIVES

After going through this unit you will be in a position to:

- discuss Indian economic thinking on issues of development;
- explain the theoretical ideas and contributions of nationalists whose views influenced the initial policy framework adopted in the country;

- contrast the views of nationalist thinkers with those of welfare and development economists; and
- discuss the development debates implicit in the process of economic planning and growth.

2.1 INTRODUCTION

Ever since political economy and economics emerged as separate academic disciplines, in the late 19th century, India has produced a galaxy of economists. Besides, a large number of scholars have contributed to the thinking on the economic development of India. Indeed the number of contributors is so large and their ideas so rich and vast, it is not possible to include the contributions of all of them in one unit. The purpose of the unit is to present the contributions of some of them relevant to understanding the aspirations and debates of economic planning and development of India. The aim and emphasis is therefore to include the ideas of major thinkers, since the late 19th century, on the issue of development. The unit thus essentially presents a glimpse of some important economists classified roughly under four broad groups viz. early nationalists, later nationalists, socialist thinkers and the more recent development economists.

2.2 EARLY NATIONALISTS

Here three important contributions from late 19th century and early 20th century are included. Under this, the first one to be outlined is the 'Drain Theory' of Dadabhai Naoroji which is rooted to India's freedom struggle and its associated economic history. Ranade's contribution on the 'Balanced Growth Theory' included next anticipates the significance of the approach much before it became popular in the second half of the 20th century. The contribution of Gokhale on 'Education and Economic Development' included towards the end of the present section is highly relevant even in the 21st century India.

2.2.1 Dadabhai Naoroji: The Drain Theory

During late 19th century and early years of the 20th, 'the drain theory' came to be seen as the symbol of Indian economic nationalism. Its message was that financial mechanisms by which British rule in India was maintained led to a transfer of wealth and income from India to Britain, imposing a 'bleeding drain' on the Indian economy. Although there were many who contributed to this explanation, the drain theory was essentially developed by Dadabhai Naoroji in his speeches and writings which were published in his book entitled Poverty and Un-British Rule in India (1901). The essence of the drain theory is that the unilateral transfers that India was compelled to make to Britain systematically stripped the country of resources and thus perpetuated poverty. Naoroji observed that: 'the chief cause of India's poverty, misery,

and all other material evils is the exhaustion of its wealth, which continuously and increasingly exhausting and weakening its production, by the excessive expenditure on the European portion of all its sources, and the burden of a large amount each year to be paid to foreign countries for interest on the public debt, which is chiefly caused by the British rule'.

We may elaborate the three items of the 'drain' emphasised by Naoroji. First, the most important item was the remittance to England of a proportion of salaries, incomes, and savings by civil, military employees of the British origin, as well as by professionals such as lawyers and doctors. These, together with the payment in sterling by the government of India of the pensions and allowances of British officials, constituted a heavy burden on the resources of India. Second item was military expenditure. Just as in the case of civil servants, the remittances of a proportion of salaries, incomes and savings by British military personnel and the payment in sterling by the government of India of pensions and other allowances to the army officers, constituted an item of drain. It was observed that a poor country like India was made to subsidise the imperial defence. The third item was the remittances made in sterling of interest on loans for construction and maintenance of public works such as railways, irrigation works, etc.

The drain theory served as a basis for wide protests, and nationalist mobilisation against the British rule.

2.2.2 M.G. Ranade: Development and Industrialisation

Some have described Ranade as the father of Indian economics. Most of his writings were in late 19th century and were published in the **Quarterly Journal,** published from Poona. Although he wrote on several issues, we shall concentrate here on his thinkings on economic development. He was a modernist and his ideas on development were influenced by western experience.

First, he was very much influenced by the German Historical School and the Friedrich List. He defined economic development as the full and all-round development of productive powers of society. This requires a proper 'coordination' between different sectors, which alone can assure adequate and sustainable development for the output of each sector. Coordination is needed between agriculture and industry, and between rural and urban employment. In underdeveloped countries like India, a substantial increase in industrial employment and output is a necessary condition for sustained development.

Second, Ranade refered to 'stages of growth'. He identified India as being at a stage of agriculture plus handicrafts. He held out the next stage to which India should move should be agriculture plus manufacturing plus commerce. This taxonomy of stages in his conception of development provided Ranade, as a nationalist, with a useful handle to press for industrialisation.

Thirdly, he exposed that manufacturing industry allowed more scope than most other sectors for what he described as 'art manipulation', meaning application of modern technology to the production process. The application of technology to industry is at the root of 'why output per head is found to be directly related to the proportion of labour force engaged in manufacturing'? He also observed that manufacturing provided opportunities for learning to improve productivity, which was not possible in agriculture. He concluded that: 'there can be no doubt that the permanent salvation of the country depends upon the growth of Indian manufacturers and commerce, and that all other remedies can only be temporary palliatives'.

2.2.3 G.K. Gokhale: Education and Economic Development

G.K. Gohkhale, widely regarded as Ranade's successor in the Indian national movement, insisted on the importance of human capital and especially of education. He insisted on the need for mass education as a prerequisite for economic development and argued that 'an ignorant and illiterate nation can never make solid progress'. He believed that the spread of primary education 'means the future salvation of our country'.

His arguments in favour of mass education had emphasised the role of mass education as investment as well as reward by higher consumption. He was aware that compared to the costs, the returns to the society by education in terms of development were substantial. His writings and speeches indicate that he could be considered a pioneer in the field of economics of education.

Gokhale pleaded for making elementary education free and compulsory throughout the country. Universal education could help the farmer to resist exploitation by the moneylender, to improve sanitation, to shake off superstition, to increase his earning capacity and to take an intelligent interest in public affairs. He introduced Elementary Education Bill in 1911 in the Imperial Legislative Council. This was modelled on the Irish Education Act of 1892 and the English Education Act of 1870 and 1876. The Bill sought to introduce the principle of compulsion into elementary education. He cited the examples of developed European countries, USA, Australia and Japan which had made elementary education both free and compulsory. He brought out the role that mass literacy had played in the economic development of these nations where whole populations were literate, and the dire need for universal elementary education in India which at that time hardly had 6 percent literacy. He argued that the costs of universal elementary education would be minimal and affordable, if implemented through schools run by local bodies. Funds could be found by economising on civil and military administration. In the Council, strangely there was some opposition from Indian Members, although both the Finance Member and the Education Member, both British, agreed with the need for mass elementary education and

felt funds could be found. However, the Bill was turned down by the then Governor of Bombay who feared that education to masses would have severe political repercussions to the British rule in India.

Check Your Progress-I

1. What are the three items of 'drain' identified by Naoroji?

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2. Why is Ranade called modernist among nationalists?

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3. Why is Gokhale called pioneer of economics of education?

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2.3 LATER NATIONALISTS: ALTERNATIVE TO WESTERN MODELS

We include in this section the contribution of two major nationalists viz. M. K. Gandhi and J. K. Mehta.

2.3.1 M.K. Gandhi: 'Swadeshi' and 'Gram Swaraj'

Mohandas Karamchand Gandhi was not an academic economist whose contribution to economics could be seen in terms of one theory or the other. He wrote on a wide ranging issues of significance to economics like consumption behaviour, trusteeship, charity, leisure and sanctity of work. But from the point of economic development, his writings on 'Swadeshi' and 'Gram Swaraj' are of great importance. These issues are broadly in the tradition of human welfare, though they do not fit into mainstream welfare economics. His concept of 'limitation of wants' is quite different from mainstream economics where human beings make choice between competing wants and choose those which give maximum satisfaction with the available resources. Not all kinds of happiness contribute to human welfare. Not all kinds of desire-satisfaction

contribute to happiness. Individuals' desire for goods and services is not a limited set. The more one gets, the more one wants and still remains unsatisfied. Multiplying one's daily wants in this fashion merely makes a person a slave to an unending sequence of desires, and there is no slavery equal to slavery to one's own desires. Such a process does not lead an individual to any sustainable steady state consumption path. He considered that Western development was driven by a culture of multiplying wants which he regarded as a flawed one. For him, deliberate restriction of material desires by individuals by means of utmost efforts offer a more rational solution. For him, material advancement is no indication of moral advancement. M.K.Gandhi's thoughts were inspired by the ancient Indian thoughts on development and human welfare, which were enshrined in the ancient scriptures of India and partly spelt out in the masterly treatise on economics and statecraft, called *Kautilya's Artha S'astra, of sixth century B.C.* We would give a brief account of these ancient Indian classical thoughts on Development, contrasting them with the modern economic thinking, which influenced many of the nationalist thinkers of India in Section 2.7. It is believed that Gandhi was also influenced by Ruskin's Unto This Last, where the emphasis was on morality which is not determined by increase in wealth.

Some natural wants, according to Gandhi, could only be specified at the village level – like clean roads, better sanitation, good transport, better drainage, vegetation, school, dispensary, clean water and a dharmashala. Similarly, at individual level, every one must have access to balanced diet, a decent house, facilities for children's education and adequate medical relief.

Gandhi's ideas on swadeshi came as a part of the struggle against the British rule. Swadeshi movement was a mass movement to encourage people to develop a habit of consuming Indian products rather than foreign products. He justified swadeshi on moral principles. The first relevant principle was that of neighbourhood. The duty of an individual is to his neighbours. This leads to swadeshi which refers to the consumption of local products. His contention was that it would be sinful to wear foreign clothes while neighbouring weavers starve due to lack of demand for their products. Spinning and wearing khaddar (khadi) became symbolic expressions of swadeshi.

His swadeshi principle made Ghandhi oppose the western model of industrialisation. He was against mechanisation for three reasons. **First**, machinery displaces human and animal labour, instead of supplementing it. **Second**, unlike human labour, there is no limit to its expansion and growth. **Third**, it has a law of its own, which leads not only to labour being displaced, but also to its being displaced at an ever increasing rate. He thus opposed machinery because they create unemployment. He was a staunch advocator of strengthening the decentralised production with the promotion of village level industries. He believed in the feasibility of self-sufficient village level production of food and clothing. Village

level resources could be managed by self-rule at the village level. His concept of development was – Gram Swaraj – in which villages enjoyed all their basic requirements through local production and village community based management of basic resources and facilities. In the 1940s, a Gandhian Plan was prepared for India (by Shiman Narayan) with an emphasis on self-sufficient village economy.

2.3.2 J.K. Mehta: Theory of Wantlessness

J.K. Mehta was a great scholar both in Economics and Philosophy. Mehta was known in the 1930s for his independent discovery of the concept of marginal revenue. Joan Robinson in her book Economics of Imperfect Competition makes a mention of this. However, Mehta, instead of his contribution to the mainstream Neoclassical Economics, is more famous for its critique and attempts to build alternative model of man than the 'maximising economic man'. We shall here concentrate on his critical tradition and his 'Theory of Wantlessness'. Through his writings like 'A Philosophical Interpretation of Economics' (1962) and 'Rhym, Rhythm and Truth in Economics' (1967), Mehta developed the Theory of Wantlessness as a counter to the Western Economists' theory of unlimited wants as the prime mover of economic activity. According to him, wants first emerge in the minds of people and subsequently surface more profusely as a source of pain when they are not able to satisfy them. Also, as soon as a want gets satisfied, a feeling occurs in their mind for a recurrent satisfaction of the want and also generation of many other allied wants. Thus, the satisfaction of a want gives birth to a new set of wants leading to a new source of pain if the wants cannot be satisfied. This cycle of satisfaction of one want giving rise to another want continues unendingly. Thus, the satisfaction of a want does not close the circle of desire and pain.

Alfred Marshall had referred to economic activity as flowing from the urge to satisfy given wants. As societies develop in material endowment, new activities would create new wants. Thus, according to Marshall, in the early stages wants create activities and at later stages activities create wants. But Mehta's approach is different. Assume a wantless society initially. It will be in a state of equilibrium. Now introduce a want. And this creates disequilibrium because there emerges a pain because the want is there but can not be satisfied. As soon as it is satisfied, it enters into his world permanently. A further want then emerges creating additional pain and puts the individual into a state of disequilibrium. When that is satisfied, there is temporary satisfaction. But for the latter to be permanent, the ever-emerging new wants have to be continuously satisfied.

Mehta's wantless individual would have satisfied his elemental desires for basic necessities. The problem arises when this bound is crossed or raised. New wants emerge for so called luxuries, which soon become necessities for comforts and as newer luxuries emerge, there is perpetual

disequilibrium. To overcome this, one has to overcome imperfections, impurities and find ones true self. Then one will not be a slave to his wants. To approach this state of wantlessness one has to discipline his bodily existence, by understanding the temporary nature of satisfaction one gets from the growing wants beyond their basic necessities. Then society does not set out with activities that would generate more and more goods which would, in turn, generate scarcity of resources. In Mehta's wantlessness there is no room for scarcity as there is no room for unsustainable resource use. His theory of wantlessness provides insights that help move towards 'sustainable development'.

Check Your Progress 2

1. How does 'Swadeshi' help India progress?

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2. How does wantlessness result in happiness?

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3. Write briefly contrasting the idea of economic activity of Alfred Marshall with that of J. K. Mehta?

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2.4 DEVELOPMENT AND SOCIAL JUSTICE

The concept of development, as you are aware by now, is not related to mere economic growth as recognised with increase in income or wealth. On the contrary, it relates to an overall development in an all inclusive manner. In other words, growth with development, does not leave out any section of the society, rather it seeks to take along all sections of the society in a socially inclusive manner. Contributing to this theme of growth with social justice, in this section, we study briefly the contribution of two socialists viz. B. R. Ambedkar and Ram Manohar Lohia.

2.4.1 B.R. Ambedkar: Small Farms, Agrarian Question and Nationalisation of Land

Dr. B.R. Ambedkar, by his education and training, was a trained economist first at Columbia University where he obtained his Doctorate in 1917 and later Doctor of Science from London School of Economics (1921). But, later he moved on to law and jurisprudence. His contributions on 'The Problem of the Rupee' and 'The Evolution of Provincial Finance in British India' are notable. But here we shall concentrate on his ideas on the small farmer agrarian economy which even now continues to be a major cause for concern in the Indian economy.

In his paper, 'Small Holdings in India and their Remedies' published in 1918, Ambedkar talks on the issue of small and fragmented farms and low productivity in India. At that time, the British experts considered Indian farms too small and fragmented, and suggested consolidation of these farms into large holdings. Ambedkar made a critical examination of the issue, and in the process arrived at some conclusions. To begin with, he struck at the very root of the proposal by arguing that there can be no such thing as a correct size of agricultural holding. As he argued, land is only one of the many factors of production and the productivity of one factor of production is dependent upon the proportion in which the other factors of production are combined. In his words: 'the chief object of an efficient production consists in making every factor in the concern contribute its highest; and it can do that only when it can cooperate with its fellow in the required capacity. Thus, there is an ideal of proportions that ought to subsist among the various factors combined, though the ideal will vary with the changes in proportions'. From this, he proceeds to point out that if agriculture 'is to be treated as an economic enterprise, then, by itself, there could be no such thing as a large or small holding'. If this is so, what is the problem? Certainly it is not due to want of efficiency in utilising whatever the peasant has. Ambedkar's answer rests on the inadequacy of other factors of production. The insufficiency of capital which is needed for acquiring 'agricultural stock and implements' arises from savings. It was non-availability of sufficient land in India to give her prosperity through the means of agriculture alone. There is almost a prophetic statement made by him long before modern theorists of development systematised notions of disguised unemployment or under-employment: 'A large agricultural population with the lowest proportion of land in actual cultivation means that a large part of the agricultural population is superfluous and idle'. Even if the lands are consolidated and enlarged and cultivated through capitalistic enterprise, it will not solve the problem as it will only aggravate the evils 'by adding to our stock of idle labour'.

Nationalisation of Land and Collective Farming

After observing the unequal holdings and persistence of tenancy with unfair rents and uncertain tenures, by 1947 Ambedkar came out with

radical solution of nationalisation of land and collective farming. He felt that neither consolidation of holdings nor tenancy legislation contributes for improving agricultural productivity. Moreover, these measures can not help in solving the persistent problems of landless labourers and small farmers. He suggested nationalisation of entire agricultural land with collective farming as the solution for the ills of agrarian conditions. It should be the state's obligation to supply the capital necessary for agriculture as well as industry. Ambedkar's scheme suggested that agriculture shall be the state industry. Agriculture shall be organised on the following lines:

i) The State should divide the land acquired into farms of standard size and let out the farms for cultivation to residents of the village as tenants (made up of group of families). These tenants may cultivate the land on the following conditions.

   a) The farm should be cultivated as a collective farm;

   b) The farm should be cultivated in accordance with rules and directions issued by the government;

   (c) The tenants should share among themselves, in the manner prescribed, the produce of the farm left after the payment of charges leviable on the farm;

ii) The land should be let out to villages without any distinction of caste or creed and in such a manner that there should be no landlord, no tenant, and no landless labourer.

iii) It should be the obligation of the State to finance the cultivation of the collective farms by way of supply of water, draught animals, manure, seeds, etc. in order to increase the agricultural output.

iv) The State should be entitled;

   a) to levy the following charges on the produce of the farm: (i) a portion for land revenue, (ii) a portion to pay the debenture holders; from land acquired, (iii) a portion to pay for the use of capital goods supplied, and

   (b) to prescribe penalties against tenants, who break the conditions of tenancy by wilfully neglecting to make the best use of the means of cultivation offered by the State or otherwise work prejudicially to the scheme of the collective farming.

Ambedkar proposed that the scheme should be brought into operation as early as possible but in no case shall the period extend beyond the tenth year from the date of the constitution coming into operation. It is a different matter that the Indian parliament and entrenched landlord class was not ready to take to this path.

2.4.2 Ram Manohar Lohia: Against Caste Inequality

Ram Manohar Lohia was a Gandhian, freedom fighter and known for his anti-caste mobilisation through his Socialist Party. In 1940, when he wrote an article 'Satyagraha Now' in Gandhiji's paper, Harijan, he was jailed. The magistrate observed: 'He is a top-class scholar, civilised gentleman, has liberal ideology and high moral character'. We shall here confine to his ideas and social mobilisation against caste.

Lohia recognised that caste, more than class, was the huge stumbling block to India's progress. It was Lohia's thesis that India had suffered reverses throughout her history because people had viewed themselves as members of a caste rather than citizens of a country. Caste, as Lohia put it, was congealed class. Class was mobile caste. As such, the country was deprived of fresh ideas, because of the narrowness and stultification of thought at the top, which was comprised mainly of the upper castes, Brahmins and Baniyas, with tight compartmentalisation even there like the Brahmins dominant in the intellectual arena and the Baniyas in the business. A proponent of affirmative action, comparing it to turning the earth to foster a better crop, he urged the upper castes, 'to voluntarily serve as the soil for lower castes to flourish and grow', so that the country would profit from a broader spectrum of talent and ideas.

In Lohia's words, 'Caste restricts opportunity. Restricted opportunity constricts ability. Constricted ability further restricts opportunity. Where caste prevails, opportunity and ability are restricted to ever-narrowing circles of the people'. In his own party, the Samyukta (United) Socialist Party, Lohia promoted lower caste candidates both by giving electoral tickets and high party positions. Though he talked about caste incessantly, he was not a casteist – his aim was to make sure people voted for the Socialist party candidate, no matter what his or her caste. His point was that in order to make the country strong, everyone needed to have a stake in it. To eliminate caste, his aphoristic prescription was, 'Roti and Beti', that is, people would have to break caste barriers to eat together (Roti) and be willing to give their girls in marriage to boys from other castes (Beti).

Propounding the 'Principle of Equal Irrelevance', he rejected both Marxism and Capitalism, which were often presented as the only alternatives for third world nations. Lohia had a strong preference for appropriate technology, which would reduce drudgery but not put the common man at the mercy of far away forces. As early as 1951, he foresaw a time of the 'monotonic mind', with nothing much to do because the problems of living had been all addressed by technology. Aside from the procedural revolution of non-violent civil disobedience, bridging the rich-poor divide, the elimination of caste and the revolution against incursions of the big-machine, other revolutions in Lohia's list included tackling Man-Woman inequality, banishing inequality based on colour,

and that of preserving individual privacy against encroachment of the collective. Many of Lohia's revolutions have advanced in India, some with greater degrees of success than others. In some instances the revolutions have led to perverse results which he would find distasteful. However, Lohia was not the one to shy away from either controversy or struggle. Lohia believed that a party grew by taking up causes. Lohia wanted to abolish private schools and establish upgraded municipal (government) schools which would give equal academic opportunity to students of all castes. This, he hoped would help eradicate the divisions created by the caste system. Lohia set up a plan to decentralise the government's power so that the general public would have more power in Indian politics. He also formed Hind Kisan Panchayat to resolve farmer's everyday problems.

Check Your Progress 3

1. What according to Ambedkar, was the basic problem of small farms?

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2. Why, according to Lohia, did India suffer reverses in the past and is failing to achieve progress even now?

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2.5 DEBATES ON MODELS OF DEVELOPMENT PLANNING

Given the large rural population depending on agriculture it is fair to think that agricultural sector reforms, of one kind or the other, to improve the lot of large poor agricultural labourers and farmers would be advocated by thinkers. Even here, to think of a mixed model which derives mutually from both the agriculture and industry, the latter suitable to the village model like the Khadi and Village Industry (KVI), is in keeping with the demands of the large agrarian base of a less developed economy like India as it was five to six decades back. But developmental planning in India has also derived from the contribution of thinkers who foresaw the need for heavy industries to provide a strong base of higher productivity avenues not only to the labour displaced from the traditional agriculture but also the huge urban educated youth force. They could foresee that besides the KVIs, modern industries would have to be

promoted by laying a strong base with state supported investment. The present section discusses the approach of four such leading philosopher-statesmen/economists coming under this genre.

2.5.1 Jawaharlal Nehru and P.C. Mahalanobis: 'Mahalanobis Model'

Jawaharlal Nehru, the first Prime Minister of India, was inspired by rapid economic development of Russia and centralised planning. He chaired the Economic Programme Committee of his party which was committed to planned economic development with a prime role for public sector. He was inspired very much by the Soviet model of concentrating investment to begin with on heavy industry to sustain long-term self-reliant development.

While the First Plan was based on a rudimentary Harrod-Domar model that links aggregate rate of growth to the aggregate rate of capital accumulation mediated through a given incremental capital output ratio, the Second Five Year Plan was designed on the basis of differentiating the Capital goods sector and Consumer goods sector, and the non-shiftability of capital goods. Encouraged by the Nehruvian emphasis on sustained self-reliant development, the basic framework of the Plan was developed by P.C. Mahalanobis and hence called 'Mahalanobis Model' with some even branding it as the Nehru-Mahalanobis Model. The strategy of the Second Plan was rapid industrialisation with an emphasis on the development of heavy industry or capital goods industry with a priority. The logic was that a large country like India, if it were to increase consumption of the people in a sustained manner, it should develop basic machinery and equipment needed to produce consumer goods. Depending on imported capital goods for production of consumer goods in the long-run would lead to increasing import dependence. On the export front, the basic argument was as follows: The development of a heavy capital goods base over a period of time would lead to the diversification of the export basket in the direction of manufactured goods, including machinery and equipment. The increase in employment leading to an expanded demand for consumer goods would be met by pursuing 'capital light' methods of production.

Mahalanobis developed a two-sector model which divided the economy into a consumer goods sector and investment/capital goods sector. The two-sector model was later extended by Mahalanobis into four-sector model. While the two-sector model was concerned with inter-temporal allocation of investment, the four-sector model was related to inter-sectoral location of investment. The four sectors included were: (i) investment goods, (ii) factory production of consumer goods, (iii) household production of consumer goods (including agriculture) and, (iv) services. The emphasis was to build a base in the investment goods production. Mahalanobis's two pronged strategy visualised that together with increase in investment allocation for capital goods, promotion of

cottage industries, which have high output-capital ratios, would sustain the consumption goods supply. Agriculture is also included under household industry under the assumption that food production has an element of high output-capital ratio, provided the sector is backed by land reforms.

The critics have pointed out several limitations of Mahalanobis model. One is that it hardly paid attention to high levels of savings needed. In an essentially agricultural country, large savings would not be forthcoming without developing agriculture. Further, it was pointed out that foreign exchange constraint was ignored in the context of limited foreign trade. The model did face problems in implementation due to supply shortage and inflation. But in the long-run many realised that Mahalanobis model, in spite of early difficulties in implementation, did lay a firm foundation for building a heavy industry base in India.

2.5.2 C.N. Vakil and P.R. Brahmananda: Wage-Goods Model

C.N. Vakil was a doyan of Indian Economics. He was the founder Director of Bombay School of Economics. He was known for his contributions to the contemporary problems of the Indian economy like the economic consequences of divided India and productivity in Indian economy. P.R. Brahmananda, who was a student of C.N. Vakil, rose to become one of the eminent economists of India. Even though Brahmananda's contributions enriched almost all areas of economics, monetary economics remained his forte. His major contribution to economic theory was reconstruction of classical economics for developing countries. He viewed the problems of welfare economics and development from an extended classical angle. Here, we shall look at more closely with his contribution of a model which got noticed as an alternative to Mahalanobis model.

In their well known work, Planning for Expanding Economy (1956), Vakil and Brahmananda offered the 'Wage-Goods Model' as a more appropriate alternative to the Indian economy, in contrast with the 'Heavy industry' model of Mahalanobis for the Second Plan. They argued that Mahalanobis's model was inspired by the Soviet experience which was quite different from the Indian conditions. Further, the international climate under which the Soviet industrialisation was carried out was not favourable for imports of capital equipment into that country. The conditions in India were quite different.

Vakil-Brahmananda argued that the major problem in India was low savings and disguised unemployment. Their model extended the Nurksian thesis of concealed 'savings-potential' in situations of rural disguised unemployment in less-developed countries. Disguised employment or under-employment was a common feature of the Indian economy. Existence of 'disguised employment' meant work available to those

employed in informal agriculture and household industry was below their capacity. Under the conditions of under-employment, workers could be shifted to projects without affecting production. Vakil and Brahmananda proposed effective use of concealed saving potential of the 'disguised unemployed' in productive projects and use the limited savings in the production of 'wage-goods' which could be supplied to meet the demand of those employed in projects which create economic overhead capital. Thus, wage-goods include consumption necessities required for subsistence and also for the performance of work. Withdrawal of surplus labour from the traditional activities like agriculture would not only lead to accumulation of capital in the form of infrastructure projects but also increases overall productivity and savings.

Check Your Progress 4

1. Why is 'Mahalanobis Model' called heavy industry strategy?

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2. What is the basic proposition of wage-goods model?

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2.6 DEVELOPMENT AND WELFARE

The emphasis on growth, even with due attention paid to benefit the agricultural sector workers by implementing the policies of land reforms and development of village industries suited to local resource use and skills, still left development of human capital largely underdeveloped. The term 'growth', thus, was realised inadequate to describe the desired societal outcome of planning. Consequent to this, towards the later half of the 20th century, the need to accord prominence to 'development and welfare' gained ground. There were many economists who contributed towards this paradigm shift in economic philosophy. The current section presents some important contributions of economists and philosopher-thinkers in this direction.

2.6.1 Amartya Kumar Sen: Capabilities and Human Development

Amartya Kumar Sen, the only Asian to receive Nobel Prize in Economics, is an extraordinary scholar whose contributions to philosophy are as

extensive as it is to economics. His contributions to economics range from choice of techniques, welfare economics with particular focus on social choice theory, economics and ethics, and poverty and famines. We shall, however, concentrate on his theory of capabilities and measurement of human development here.

Sen's revolutionary contribution to development economics and social indicators is the concept of 'capability'. He defined 'capability' as "a set of functioning bundles representing the various alternative 'beings and doings' that a person can achieve with his or her economic, social, and personal characteristics".

Capability, thus defined, is 'tantamount to the freedom of a person to lead one kind of life rather than another'. It follows, therefore, that the individual's capability can be repressed [for example by denying a person access to basic services (including food, education, land, freedom of expression, or health care)], or realised - through a person's own agency. However, supportive actions by other individuals and a range of institutions, including the 'developmentalist' state capable of public action, would also be needed for the individual to be able to realise his capabilities. The core of development itself is, therefore, the enjoyment of freedom – not just freedom of speech in a narrow sense, but freedom for individuals to realise their capability.

Sen's major contribution on this issue is *Development as Freedom* (1999). It redefines human wellbeing to mean the enhancement of capabilities. He says: 'development consists of the removal of various types of unfreedoms that leave people with little choice and little opportunity of exercising their reasoned agency'. He separates well-being into two components: well-being concerned with individual interests, and well-being concerned with the interests of others. Democracy is viewed as the most preferred system of governance with the greatest capacity to expand basic freedoms. Achieving development, then, requires the expansion and improvement of capabilities and entitlements for the poor and underprivileged (education and healthcare figure prominently in Sen's empirical work, notably on India). The purpose of the expansion of capabilities ought to be the enhancement of freedom itself, because the purpose of development is ultimately, freedom.

His philosophical and theoretical work on development helped to improve the indicators used to measure poverty rates and human development. He was instrumental in the development of the Human Development Index (HDI) and its expression in the United Nations Development Programme's *Human Development Report*, which signalled something of an alternative to the neoliberalist 'Washington Consensus' on poverty measures. Sen showed that human development was high in a number of countries, even though their per capita incomes (the standard measure of growth used by the World Bank and other international agencies) were low. Hence, he and subsequent researchers at the UNDP have

argued that development priorities should be geared more towards improving human development (capabilities) – assessed through wide-ranging multivariate indices - rather than growth-centred economic policy. This effort was part of a move towards discussing other contribution to capability, including gender roles, fertility, and gendered mortality risk. For example, Sen has argued strongly for the extension of freedom and independence to women and children in developing countries, which he says has demonstrable effects on well-being, poverty alleviation, and mortality. He regards the neglect of women's nutrition and health (not least among poor African-Americans in the USA), and sex-selective abortion in developing countries as criminal.

Major criticism against this ambassador of humane economics is about his silence on the relationship between production of 'opulence' and the deprivation of capabilities and entitlements. He is silent about the production of prosperity for an increasingly tiny minority which is related to 'unfreedoms' and the denial of capability enhancement for the majority through appropriation of surplus value. And the case for radical redistribution of wealth is not present in Sen's major works. It is also pointed out that Sen's liberalism leaves him poorly equipped to deal with questions of entrenched power and the politics of conflict and social mobilisation.

2.6.2 I.G. Patel: How to Turn India's Gold for Economic Growth?

I.G. Patel, began his career in IMF and later rose to become Economic Advisor to the Government of India, Governor of the Reserve Bank of India and later became Director of London School of Economics. His major research contribution was on India's gold problem.

India has been famously described as the perennial sink of the precious metals (Stanely Jevons). What determines the virtually insatiable appetite of India for gold and how does one mobilise its gold for productive purposes? I.G. Patel, in his early career at IMF engaged with the gold question and wrote a pioneering paper on 'India's Elasticity of Demand for Gold' (August 21, 1950). It estimated the responsiveness of India's demand for gold to changes in its relative price by attempting to correlate the net flow of gold from (or to) private hoardings during the period 1925 to 1942. He does this with two variables viz. relative price of gold and the consumption of refined sugar as a proxy for national income. The results suggested that the demand for gold was highly responsive to changes in its relative price. Patel argued that, historically, price has been a more important explanatory variable than income. However, he did not publish the paper because he was aware that the methodology used had a tendency to overestimate price-effect and underestimate the income-effect.

Patel continued to engage with the question as to how to mobilise the stock of hoarded gold and flow of smuggled gold for the purpose of

productive investment in India's economic growth. He addressed this issue in a paper, 'On Turning Gold into Base Metals' (Economic Weekly, 1958). The article is a closely reasoned evaluation of alternative modes of transferring private gold to official reserves by (i) open market purchases by the government, (ii) issue of bonds redeemable in rupees against delivery of gold or (iii) to be subscribed and redeemed in gold, and acquisition by compulsion. However, he concluded that the solution to the problem must be sought in a 'mixture of sustained propaganda, compulsion, incentives affecting people's expectations about the value of gold in future'. He was aware of the blind faith of people in just possessing gold without any productive result. He was therefore striving for a solution to this problem. He observed that 'whatever the ultimate solution, the agenda for the dethronement of gold from the position it occupies today in India deserves more serious consideration at the hands of thinking people in the country than it has received so far' (Patel 1958). Despite fifty years since he said that, there has been no serious research and debate on India's gold problem!

2.6.3 Select Leading Contributions: Development and Welfare

Post-Independent India saw a galaxy of development economists contributing to the thinking on planning for development. Three such contributions are mentioned briefly here.

V.K.R.V. Rao

Dr. V.K.R.V. Rao was an eminent economist, a well known academician, administrator and institution builder. While in Cambridge he was a member of the famous Political Economy Club presided over by John Maynard Keynes. Rao's major contribution was to scientific estimation of national income. We shall, therefore, confine to macro-economic and development aspects of his work. His early contribution (1952) was in macro-economic theory which examined the interrelation between investment, income and multiplier. His contribution was that Keynesian multiplier does not apply to underdeveloped countries like India. The main features of underdeveloped economy identified by him were: (i) prevalence of disguised unemployment, (ii) dominance of production under household enterprises, (iii) significant extent of production for self-consumption, (iv) predominance of agriculture, (v) deficiency of technical knowledge, (vi) deficiency of capital equipment, (vii) high marginal propensity to consume of almost unity and (viii) a high proportion of incremental demand towards food in any increment in income. Rao argued that while a primary increase in investment would take place, a subsequent, secondary and tertiary effect of increase in investment through the expansion of output in the consumption goods sector would not take place. Consequently, the multiplier process would not operate.

But, Rao was a staunch advocate of deficit financing for funding deficits on the capital account. Deficit financing to fund capital investment for economic development was considered by him as a positive policy. The resulting inflation, if kept within limits, could be seen as a means of forced savings. The assumption here was that by holding wages constant, one could mop up a significant portion of increase in money incomes caused by the rise in prices.

K.N. Raj

K.N. Raj was instrumental in developing the Delhi School of Economics. Raj was involved in drafting the First Five Year Plan. He later set up Centre for Development Studies at Thiruvananthapuram. He along with his colleagues worked on Kerala economy for the UN which helped shape the contours of what later came to be called the 'Kerala Model' of development. Although there are changes in the Kerala economy, Kerala Model even now stands for co-existence of low per capita income and very high physical quality of life indicators. His emphasis on education, health care facilities and small scale industries are deeply rooted in welfare economics.

D.R. Gadgil

D.R. Gadgil, a foremost nationalist of the post-Independence era, returned from Cambridge and established the Gokhale Institute of Economics and Politics in Pune and later became the Deputy-Chairman of the Planning Commission. His studies were focused on agriculture, irrigation and institutions. He laid emphasis on cooperatives for the development of agriculture and agro-based industries. He was a pioneer in decentralised planning in India.

2.7 ANCIENT INDIAN THOUGHTS ON DEVELOPMENT : A CONTRAST WITH THE MODERN ECONOMIC THINKING

It is often believed, rather, erroneously that the ancient Indian literature, mostly written in Sanskrit, is a treatise on philosophy and metaphysical dimensions of life. However, this vast literature contains many basic thoughts on economic development and human welfare. Most of the basic thoughts of this literature has had significant influence on the thinking of our *nationalist and socialist* thinkers, both of pre-independence and post-independence vintage. It is useful to get to know the broad contours of this classical wisdom of India. We refer to this model as Ancient Indian Paradigm of Development (AIPD). The AIPD can be compared and contrasted with the Modern Economic Science of Western Vintage (MES). AIPD conceives *Man in a holistic framework as a blend of materialism and normative values.* As against this, MES conceives *Man as a Rational Economic man* and formulates the goals of economic activities, in terms of material self interests. The approach

of maximisation of Profits, National Income, Foreign Exchange earnings, Consumption, etc. determines the contours of economic activities. AIPD advocates restraint on consumerism and conceives that expansion of capital formation and growth should be realised in a framework of Values, such as, equity and optimum social welfare. The goals of all activities are conceived in terms of an integrated framework of *what are called as Dharma (Values), Artha (Capital Formation), Kaama (Basic needs Consumption), and Moksha (i.e. Highest Efficiency).* AIPD gives to social equity, highest priority and advocates that concerns of social welfare should precede the urges for material self interests. In AIPD, *Gross Welfare Product* is the sum of *Gross Domestic Product and Moral Values of Life.* The AIPD detests the approach of realising high growth of GDP without the commitment to *Values and Morality in human lives.* Contentment, Self-sacrifice, Cooperation, stress on performance of one's own Duties before yearning for fulfilment of rights, simplicity in Life-Style, commitment to morality, principles of *managing oneself in such a way as to shun corruption and materialistic temptations* are some of the *Values,* which are stressed in the Ancient Indian Paradigm of Development. Kautilya's *Artha S'astra* –a treatise of economics and political science, written in 6th -7th century B.C. , spells out the various principles of efficient *Governance* and evolution of a welfare state.

Check Your Progress 5

1. How does Amartya K. Sen visualise human well-being?

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2. What is the major problem with gold in India?

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3. According to V.K.R.V. Rao, what is the role of 'deficit finance' in development?

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4. Write a note on the 'contrast between the AIPD and the MES models of development'?

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2.8 LET US SUM UP

This unit, discusses very briefly, the contribution of a select band of scholars on economic development over a period spanning from the late 19th century to the late 20th century. The problems addressed range from underdevelopment caused by colonial rule to difficulties of development experienced due to complexities arising not only out of resource constraints but also due to social and institutional factors. Problems relating to small farmer economy, inadequate spread of education, under-utilisation of certain resources like human labour, unproductive hoarding of resources like gold, etc. which were focused upon in the work carried out by the band of economists discussed, along with the path suggested by them, are outlined in the unit. While many of the suggestions made by the contributors are implemented in practice, the very nature of application in economics is beset with such complexities that the nature of problems for which the suggested solutions were applied, continue to persist even today. The contest for appropriate strategy for development thus is a continuing one. Given the constraints of changing conditions and context with which all economic theorists and philosophers should cope with, the history of development thinking that is set out in this unit is aimed at providing the learners with a perspective of wisdom displayed by the contributors to India's economic thinking and policy. There is also a brief section on the Ancient Indian Economic Thought on economic development, with a profile of its distinguishing features in comparison with the Modern Economic Science. This Unit would also be of help in throwing light on understanding the choice of future path of development in India.

2.9 KEY WORDS

Drain : Unilateral transfer of resources from India to Britain.

Art manipulation : Application of modern technology to production process (Ranade).

Swadeshi : Emphasis on consumption of local or Indian products in preference to imported foreign goods.

Wage-goods : Consumption necessities required for subsistence and performance of work.

Capabilities : A set of functioning bundles representing various alternative 'beings and doings' that a person can achieve.

Wantlessness : One's satisfaction with elemental desires for basic necessities.

Kerala Model : Low per capita income combined with very high physical quality of life indicators.

2.10 SOME USEFUL BOOKS

Ajit Dasgupta, *A History of Indian Economic Thought*, Routledge, London, 1993.

Ashok V. Bhuleshkar, *Indian Economic Thought and Development,* Popular Prakashan, Bombay.

Debendra Kumar Das (ed), *Great Indian Economists: Their Creative Vision for Socio- Economic Development*, Deep and Deep Publications, New Delhi, 2004.

Om Prakash Mishra, *Economic Thought of Gandhi and Nehru: A Comparative Analysis*, M.D. Publications, 1995.

Narendra Jadhav, Dr. Ambedkar's *Economic Thought and Philosophy*, Popular Prakashan, Bombay.

Panchamukhi V.R. *Indian Classical Thoughts on Economic Development and Management*, Bookwell Publications, New Delhi, 2000.

Raj Kumar Sen and Ratan Lal Basu (Ed), *Economics In Artha S'astra,* Deep & Deep Publications Pvt. Ltd., New Delhi, 2006.

2.11 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See Section 2.2.1 para 3
2. See Section 2.2.2
3. See Section 2.2.3 para 2

Check Your Progress 2

1. See Section 2.3.1 para 3
2. See Section 2.3.2 para 3

Check Your Progress 3

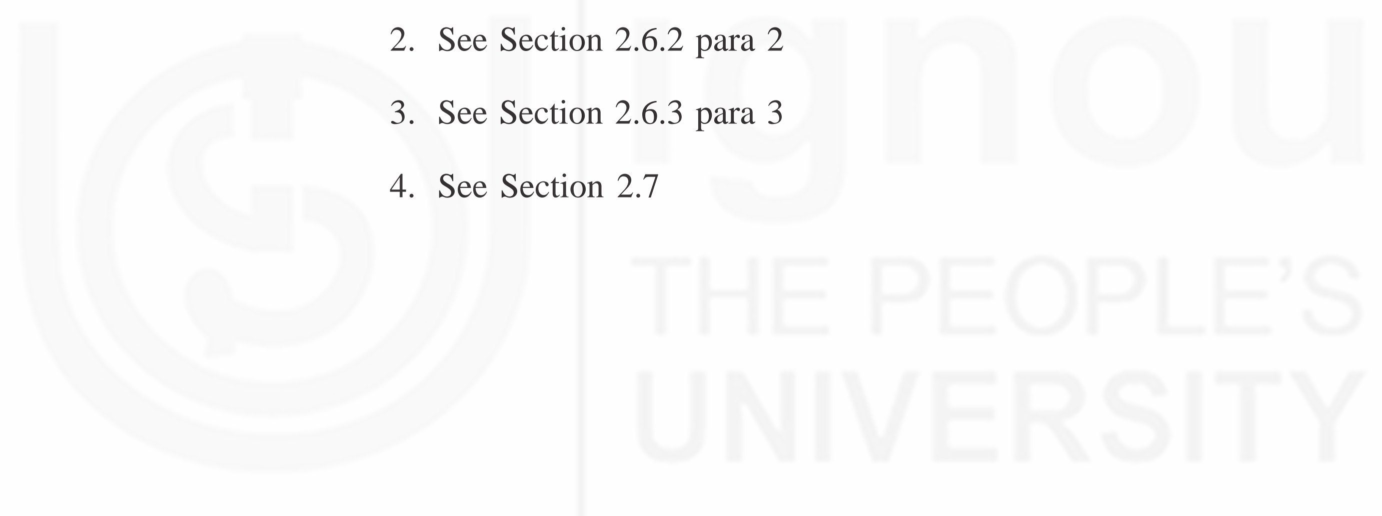
1. See Section 2.4.1 para 2
2. See Section 2.4.2 para 2

Check Your Progress 4

1. See Section 2.5.1 para 3
2. See Section 2.5.2 para 2

Check Your Progress 5

1. See Section 2.6.1 para 3
2. See Section 2.6.2 para 2
3. See Section 2.6.3 para 3
4. See Section 2.7



UNIT 3 GROWTH AND STRUCTURAL CHANGE

Structure

3.0 Objectives

3.1 Introduction

3.2 Development and Structural Change

3.2.1 A.G.B. Fisher and Colin Clark

3.2.2 Simon Kuznets

3.2.3 Experience of Developed Countries

3.3 Growth and Structural Change in India

3.4 Changes in Savings and Investment Structure

3.5 Nature of Outcomes of Growth and Development

3.5.1 Poverty in India

3.5.2 Income Distribution in India

3.5.3 Regional Disparities in India

3.6 Let Us Sum Up

3.7 Key Words

3.8 Selected Books for Reading

3.9 Answers/Hints to CYP Exercises

3.0 OBJECTIVES

After reading this unit, you will be able to:

- explain the patterns of structural change that accompany growth;
- examine the theory and empirical experience of developed countries;
- analyse the experience of India's economic development in terms of the structural change; and
- describe the sources of growth and nature of outcomes.

3.1 INTRODUCTION

Economic development may be seen as a process of transforming a poor country into a more developed country. It is often measured in terms of growth in per capita GDP. To understand this process of transformation one needs to get at the forces which need to be stimulated to achieve the GDP growth. One would then be able to see development as a process of transforming a low savings and low investment economy

into a high savings and high investment economy. Structurally, one could see it as a process of transforming a predominantly primary goods producing country into a predominantly industrialised country. In the present unit, we shall examine the theoretical and empirical evidence that explains the process of economic development by way of a certain pattern of structural change. Within this framework we shall examine the nature of structural transformation that has taken place in India. In particular, we shall examine the changes in the savings and investment pattern in India. Finally, we shall relate the outcomes of growth to the major persistent economic challenges like poverty reduction, income distribution, and regional disparities.

3.2 DEVELOPMENT AND STRUCTURAL CHANGE

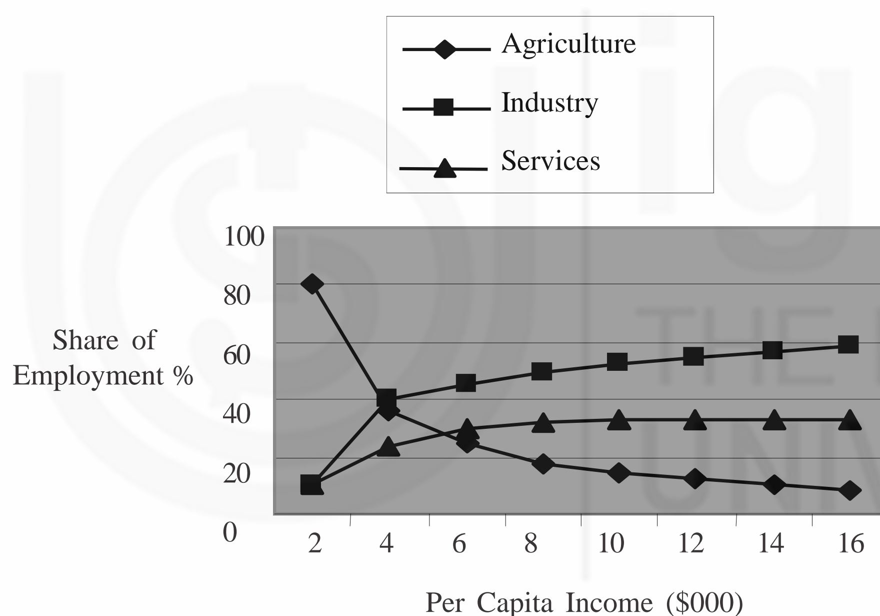
Development economics may largely be characterised as dealing with issues of structure and growth in less developed countries. In economics, there are two variants of structure. One is concerned with the functioning institutional structure like the market and state and their role in the allocation of resources. The second variant of structure refers to the interrelationship between the different sectors of economic activity. This variant views economic development as a long-run process of structural transformation that accompanies growth. The central features of this approach are economy-wide phenomena such as industrialisation, urbanisation, and agricultural transformation. We are concerned with the latter type of structural analysis that deals with growth and its resulting structural transformation. For the sake of simplicity, we may consider an economic structure consisting of three sectors viz. primary sector (consisting mainly of agriculture), secondary sector (consisting mainly industries), and tertiary sector (consisting mainly of services). We shall deal with the patterns of structural transformation during the transition from a low income, agrarian rural economy to a non-agrarian and industrial urban economy with a substantially higher per capita income.

3.2.1 A.G.B. Fisher and Colin Clark

The earliest contribution to the theory of economic development and its structural transformation is attributed to William Petty (1623-1689) and Friederich List (1789-1846). However, modern analysis of sectoral transformation originated with A.G.B. Fisher (1935, 1939) and Colin Clark (1940) who dealt with the sectoral shifts in terms of their composition of labour force. Using the tri-chotomised sectoral classification of an economy into primary, secondary and tertiary sectors, Fisher and Clark explain the reallocation of workforce during the period of modern economic growth. According to them, as economies developed there will be shift in the share of workforce initially from primary (agriculture) to secondary sector and later to the tertiary sector. The Fisher-Clark explanation can be presented in a graphical form. Figure

3.1 shows the nature of shifts in the share of workforce as an economy moves from low income per capita to high income per capita. As we move along the path of development represented by per capita income on the X axis, agriculture experiences gradual decline in the share of workforce, whereas industry experiences an increase. This increase in the share of workforce in industry is much faster as compared to the increase in services. However, after a point of peak in per capita income, the relative shares of all sectors stabilise with agriculture accounting for the lowest share. The main reasons offered for the shift in labour force to industry are: first, following Engel's Law, as the incomes rise the demand for industrial products increase more than proportionally whereas the demand for food increase less than proportionally. In other words, the elasticity of demand for industrial products is higher, whereas, for food it is less. Second, the rate of growth of productivity in industry is faster which attracts more investment and employment.

Figure 3.1: Relationship Between Sectoral Workforce Shares and Economic Development (Per Capita Income)



3.2.2 Simon Kuznets

Based on the empirical evidence of long-run transformation of a large number of countries, Simon Kuznets synthesised the broad patterns of economic growth. Extending the analysis of shifts in workforce from primary to secondary to tertiary sector, Kuznets also relates the employment shifts in the shares of contribution to national income. The resulting relationship between growth and structural transformation is captured well by distinguishing the three stages of transformation as follows:

Stage 1: Primary Production: The first stage of the transformation is identified by the predominance of primary activities – especially agriculture – which provides the main source of input for the output of other two sectors viz. the secondary and the service sectors. This initial stage of transformation is typically characterised by slow growth in

agriculture, low demand for manufacturing goods and slower overall growth rates.

Stage 2: Industrialisation: The second stage of transformation is characterised by the shift of the centre of gravity of the economy away from primary production towards manufacturing. The main indicator of this shift is the relative importance of the contribution of manufacturing to growth.

Stage 3: The Developed Economy: The transition from stage 2 to stage 3 takes place on several fronts. Income elasticities for manufacturing decline. Demand for services increase. Factor productivity growth spreads to all sectors without remaining confined to manufacturing. Services emerge as the largest contributor to both employment and national income. Agriculture turns out to be lowest in terms of labour share but labour productivity in agriculture increases to very high level. The wage gap between agriculture and other sectors starts closing.

3.2.3 Experience of Developed Countries

The ideal pattern of structural change that has been witnessed in most of the developed countries is as seen in Table 3.1. The highest percentage of workers engaged in agriculture is 5 percent. In industry it is around 25-30 percent. Services account for the bulk of the employment share i.e. in excess of 65-70 percent. Sectoral contribution to GDP is also more or less of the same order i.e. less than 5 percent from agriculture, between 25-30 percent from industry and the bulk, close to 70 percent or more from the service sector. But, the experiences of countries like India, which are latecomers to development, have certain distortions particularly in the shift of labour shares.

Table 3.1: Output and Employment Shares in Selected Developed Economies (2002)

Country	Share in Output (%)			Share in Employment (%)		
	Agriculture	Industry	Services	Agriculture	Industry	Services
United Kingdom	1	26	73	1	25	74
United States	2	23	75	2	24	74
France	2	22	76	3	25	72
Japan	1	31	68	5	31	64
Germany	1	30	69	3	33	64
Italy	3	29	69	5	32	63
Australia	4	26	69	5	21	74

Source: *World Bank (2004) World Development Indicators*

Check Your Progress – 1

1. What is the sectoral composition of an economy? Who were the pioneers in using the sectoral composition for explaining the structural transformation of economies?

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2. What is the Fisher-Clark hypothesis of workforce shifts with growth? Why does labour force shift to industry?

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3. What is the stylized explanation of structural change proposed by Kuznets?

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3.3 GROWTH AND STRUCTURAL CHANGE IN INDIA

Since the beginning of the era of planning, for almost three decades the Indian economy experienced an average real growth rate of about 3.5 per cent per annum. Since the 1980s, the Indian economy broke away from this slow growth path, and since then has been on a relatively high growth path. Associated with this growth in GDP, and per capita income, there has been considerable structural transformation especially in terms of sectoral composition of GDP. Table 3.2 shows the structural change in GDP over the period 1950-51 to 2004-05. As expected, the share of agriculture (primary sector) has come down substantially from 57.7% in 1950-51 to 20.90% in 2004-05. The share of secondary sector (industry) was 25.54% in 2004-05. In many comparable economies the secondary sector's share ranges from 35 to 45 percent. In economic literature, expansion of manufacturing sector is looked upon to play a technically dynamic role. But in India, the expansion of tertiary sector (services) is much faster than that in the manufacturing sector.

Table 3.2: Sectoral Share of Gross Domestic Product at Factor Cost in India 1950-51 to 2004-05

(1993-94 prices)

Year	Primary	Secondary	Tertiary
1950-51	57.7	14.8	27.5
1960-61	53.3	17.9	28.6
1970-71	46.3	21.6	32.1
1980-81	37.2	23.7	36.6
1990-91	32.2	27.2	40.6
2000-01	24.68	25.01	50.31
2004-05	20.90	25.54	53.56

Source: *CSO, National Income Statistics, Various Issues.*

Questions are raised whether growth, led by services, can be sustained with a lean manufacturing sector? However, in the context of the technological dynamism infused by the information and communication technology (ICT) which also spreads to the manufacturing sector, it is suggested that the traditional role of manufacturing sector as a vehicle of infusing dynamism is now assumed by the so-called services sector which includes ICT.

But, the cause for concern is the lack of proportionate shift in the share of employment along with the shifts in the share of GDP. For instance, Table 3.1 showed that the sectoral shares of workforce and the shares of GDP are almost in the same proportion, indicating uniformity in the spread of high productivity levels across the sectors to the entire economy. This also suggests less of income disparities across the sectors. In contrast, Table 3.3 for India shows that while there is a drastic decline in the share of agricultural sector in GDP, its share in workforce is still very high (57 percent in 2004-05). This indicates a low productivity and low income agriculture sector. In contrast, there is substantial increase in the share of 'services' sector in the GDP with relatively very little increase in the share of employment. The high productivity and high income levels of service sector aggravates inter-sectoral income inequalities. Thus, the structural transformation in the case of Indian economy appears to be following its own path, unlike the developed economies, creating structural distortions.

Table 3.3: Relative Sectoral Shares of GDP and Employment

(Percentage Share)

Year	Primary*		Secondary		Tertiary	
	GDP	Employment	GDP	Employment	GDP	Employment
1972-73	44.8	74.0	21.0	11.2	34.2	14.6
1993-94	33.5	63.9	23.7	14.9	42.8	21.2
2001-02	26.3	60.8	24.4	17.1	49.3	22.1

*includes mining and quarrying

Source: *Datt and Sundaram, 2008.*

Check Your Progress – 2

1. What is the nature of change in the share of agriculture in national output and employment between 1950-51 and 2004-05?

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2. What is the trend in the share of the secondary sector in employment and output in India?

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3. Is there any cause for concern in the nature of structural change in the Indian economy?

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3.4 CHANGES IN SAVINGS AND INVESTMENT STRUCTURE

Capital accumulation or capital formation, or simply investment, has been the core of classical, Marxian and modern development theory. In fact, the process of economic development is seen as a process of capital accumulation. Much of the 'development theory' has been focused on the explanation of why poor countries do not have adequate savings, and how countries have to move from low savings to high savings path. As W. Arthur Lewis (1957) wrote, 'the central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing 4 or 5 percent of its national income or less, converts itself into an economy where voluntary saving is running at about 12 to 15 percent of national income or more'. Thus, according to development theory in general, 'savings is the engine of growth'. The famous proposition of Ragnan Nurkse (1953) on 'vicious circle of poverty' also explains poverty as a result of low savings. Low income leads to low savings and investment which, in turn, results in small size of the market, low investment levels, low productivity returns, and, finally ending up in low incomes. Nurkse's basic development question, therefore, is how to break the low savings–low investment vicious circle?

Doubts were expressed on the rising savings ratio, as a proportion of national income, serving as an engine of growth. It was argued that with

increasing savings and increasing physical investment per head, there would be diminishing returns on investment and hence savings could not act as the 'engine of growth'. However, this argument was countered by the 'endogenous growth theory' which argued that savings enabled accumulation of not only physical capital but also knowledge which staved-off diminishing returns. The policies that changed savings could change the rate of growth. The 'endogenous growth theory' thus gave a firm foundation to the proposition that 'savings is the engine of growth' and that growth rates can be changed by policies that provide the incentive to save. The experience of East Asian countries and that of India in recent years provide ample evidence of the need for high levels of savings and investment to achieve higher rates of growth.

Savings and Investment (Capital Formation) in India

The Indian economy moved from a position of very low levels of savings and investment in 1950s and 1960s to relatively higher levels of savings and capital accumulation in recent years. Estimates of savings in India are available for three sectors viz. the household sector, the private corporate sector and the public sector. The household sector includes, besides individuals, all non-government and non-corporate enterprises like sole proprietorships, partnerships and institutions. Table 3.4 provides the source-wise savings in the Indian economy for the period 1950-51 to 2004-05. Examination of savings data presented in Table 3.4 shows that until late 1960s, the rate of growth of savings was low due to higher share of low productive (and consequently low saving) agriculture in the GDP

Table 3.4: Source-wise Gross Domestic Savings and Gross Capital Formation in India (1950-51 – 2006-07)

(As percentage of GDP at Market Prices)

Year	Household Sector Savings	Private Corporate Sector Savings	Public Sector Savings	Total Savings	Gross Capital Formation
(1)	(2)	(3)	(4)	(5)	(6)
1950-51	6.2	0.9	1.8	8.9	8.7
1960-61	7.3	1.6	2.6	11.6	14.4
1970-71	10.1	1.5	2.9	14.6	15.4
1980-81	13.8	1.6	3.4	18.9	20.3
1990-91	19.3	2.7	1.1	23.1	26.3
1995-96	18.2	4.9	2.0	25.1	26.9
2000-01	21.2	3.6	- 1.8	23.6	25.9
2006-07	23.8	7.8	3.2	34.8	35.9

Note: The difference between savings (col. 5) and investment (col. 6) is accounted for by net-capital inflows from abroad.

Source: 1. CSO, National Accounts Statistics, 2006.
2. For 2006-07, Economic Survey 2007-08, 2008.

and also due to lack of development of institutions for the mobilisation of savings, particularly in rural areas. There was considerable increase in the savings during 1968-69 to 1975-76 due to bank nationalisation, rapid expansion of bank branches and improved performance of the agricultural sector. Beginning with late 1970s, savings experienced rapid surge contributed mainly by sharp increases in foreign remittances leading to increase in household savings. Corporate savings too started increasing during this period. During the 1990s, savings remained stable at a relatively high level of about 24 per cent. Beginning with 2000-01, there was another spell of steep rise in savings, mainly as a result of considerable increase in the corporate savings, taking the aggregate country's saving to an impressively high level of 34.8 percent in 2006-07. In recent years, the savings and investment levels in India, have reached high levels comparable to those of South East Asian countries. High levels of sustained savings and investment are among the main forces of sustained high levels of growth experienced in recent years in India.

Changes in Investment Structure

Over the years, there have been changes in structure of investment in terms of industry of use. Table 3.5 shows the changes in the share of investment of different productive sectors (the 3-sector classification of the economy further broken down into the 9-sector 1-digit classification as per NIC-1987) in India between 1950-51 and 2004-05. There are several factors contributing towards these shifts in the industry shares. **First**, as observed earlier, with economic development there will be shift in the productive sectors in overall national product and income generation. For instance, the share of agriculture and primary sector in general declines in the national product, while the share of industry and service sector increases. These shifts are also reflected in the changing structure of investments. **Second**, with development process, industries with higher capital intensity like energy and manufacturing are likely to attract more investment. **Third**, there are policy induced priorities which may shift investment away from some sectors. For instance, neglect of agriculture in policy priorities may lead to decline in its investment share. Further, like shifts in the share of investments among productive sectors, there may also be shift in the relative share of investments in public and private sectors. For instance, economic reforms and diminished role of state in productive sectors has brought about decline in the share of public investment, compared to the share of private investment which increased substantially (vide Table 3.4).

Table 3.5: Structure of Gross Capital Formation by Industry of Use: 1950-51 – 2004-05

(Percentage Distribution)

Sl. No.	Productive Sector	1950-51	2004-05
(1)	**(2)**	**(3)**	**(4)**
1	Agriculture, forestry & fishing	19.3	7.8
2	Mining and quarrying	0.9	1.7
3	Manufacturing	19.2	34.8
4	Electricity, gas & water	2.2	8.1
5	Construction	0.6	2.0
	A. Commodity Sector (1 to 5)	42.2	54.4
6	Trade, hotels & restaurants	12.4	3.7
7	Transport, storage and communication	12.7	12.6
8	Finance, insurance, real estate & business services	21.3	13.8
9	Community, social and personal services	11.3	13.5
	B. Non-Commodity Sector (6 to 9)	57.8	45.6
	Total	**100**	**100**

Source: *Datt and Sundaram (2008).*

Check Your Progress – 3

1. How does Lewis explain the central problem in the theory of economic development?

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2. Explain savings behaviour in the Indian economy during the last two decades.

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3. Explain the changes in the structure of investments in the Indian economy during 1950-51 and 2004-05.

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3.5 NATURE OF OUTCOMES OF GROWTH AND DEVELOPMENT

There is now a wider recognition that economic growth is not an end in itself but only a means for improved conditions of living. The critical concern now is therefore with the results or outcomes of growth. Whether growth has brought about reduction in poverty? Are we moving towards eradication of poverty? Whether growth has brought about reduction in employment? Or, is there increase in employment? If, yes, what type of employment and with what effect on condition of living? Is growth leading to reduced inequalities? Are regional disparities declining? These are the important questions in understanding the nature and impact of growth. With a view to focusing on the implications of growth on the different aspects of development, as stated earlier in Unit 1 (section 1.2), the UNDP Human Development Report of 1995, had advocated that the following five types of growth are not desirable: (i) Jobless growth, implying a growth profile which does not imply expansion of employment; (ii) Ruthless Growth, implying growth that increases inequalities; (iii) Futureless Growth, referring to growth that destroys environment and ecological balance; (iv) Voiceless Growth, implying growth that does not expand the level of empowerment of the deprived sections of the society, such as, women, tribals, scheduled castes etc.; and finally (v) Rootless growth, implying growth, which destroys cultural roots and life styles of a society.

We have already discussed earlier (in Unit 1, section 1.5.3) issue of employment and unemployment, here we shall discuss the issues of poverty, income distribution and regional disparities in India.

3.5.1 Poverty in India

Beginning with the early 1970s, there have been a number of individual and official estimates of poverty in India. Most of them are based on the household consumption expenditure data collected every five years by the National Sample Survey Organisation (NSSO). The generally accepted norm of poverty is a minimum level of living often indicated in terms of certain minimum calorie (energy) consumption. The so-called 'income poverty line' is derived first by determining the minimum energy or calorie requirements, then convert them into physical quantities like cereals, pulses, milk etc. and then estimate their monetary equivalents

in terms of the prices of commodities prevailing in the market. The resulting minimum per capita consumption expenditure required is expressed as the 'poverty line'. In India, poverty lines are estimated separately for urban and rural areas as well as for the country as a whole.

In 1989, the Planning Commission constituted an 'Expert Group' to consider the methodological and computational aspects of estimating the number of poor in India. The Report of the Expert Group (1993) recommended certain norms for the calculation of poverty level consumption standards. It suggested a minimum monthly per capita consumption expenditure of Rs. 49 for rural areas and Rs. 57 for urban areas. This was anchored on the recommended per capita daily intake of 2,400 calories for rural areas and 2,100 calories for urban areas. The Expert Group recommended that these norms may be adopted uniformly by all states.

The official estimates of poor in India are broadly based on the recommendation of the Expert Group. There are, however, a number of deficiencies in the official estimates. **First**, in a country of vast regional differences, using a uniform national average price index has distorted the estimates of poverty level in different states. **Second**, the official estimates are based merely on adjusting for the price changes without any reference to the changed consumption basket, and the changed expenditure requirements to meet the minimum calorie or energy norms. **Third**, the official estimates based sometimes on 'thin sample' and different 'recall period' are often not comparable and are therefore misleading.

There are a number of alternative estimates of poverty in India estimated by individual scholars. Table 3.6 presents the official estimates of poverty in India.

Table 3.6: Estimates of Poverty in India

(percentages of poor below poverty line)

Year	Rural	Urban	All
1973-74	56.4	49.0	54.9
1977-78	53.14	45.2	51.3
1983	45.7	40.8	44.5
1987-88	39.1	38.2	38.9
1993-94	37.3	32.4	36.0
2004-05	28.3	25.7	27.5

**1999-00 data is not given since it is based on a different recall method and not comparable.*

Sources: i. Ministry of Finance, GOI, Economic Survey 2000-01 and ii. Planning Commission, Press Release March, 2007.

Independent estimates of poverty based on the same source of data (NSSO) differ from the official estimates due to differences in the methodology adopted (e.g. using different price indices for States, making adjustments for differences in recall period, etc.). Notwithstanding these differences, over a period of roughly 20 years between 1973 and 2004, there has been a sharp decline in poverty. Since 1993-94, there has been decline in the absolute number of poor both in rural and urban areas. However, in the reform period, beginning with the 1990s, there has been slowing down of the rate (speed) of decline in poverty. During the pre-reform period between 1983 and 1993-94, poverty ratio declined at the annual rate of 0.85 percentage points, while the corresponding rate of decline in the reform period of 1993-94 and 2004-05 was 0.70 percentage points. Another dimension of change is the growing gap in the poverty levels of backward States and relatively fast growing States.

Apart from problems of measurement associated with the poverty estimates, there is a growing realisation that poverty is a multidimensional problem and a mere reduction in the headcount ratio may not indicate a real picture of the problem. Poverty is increasingly concentrated in poorer states, rural areas and among weaker communities. These communities not only suffer from low levels of consumption but also multiple deprivations like lack of access to education, better health, housing and living facilities. There is, therefore, a growing shift in poverty studies to deal with multiple dimensions of the problem.

3.5.2 Income Distribution in India

Though India has an extensive and comprehensive statistical system, there are no official statistics on income distribution. Therefore, much of the discussion on inter-personal income distribution is carried on the basis of the household consumption expenditure data collected by the National Sample Survey Organisation (NSSO) every five years. Consumption expenditure, as we know, as a share of household income progressively declines with increase in income levels. Yet, it is also true that absolute consumption expenditure increases with the level of income. It is for this reason that we use the distribution of per capita monthly consumption expenditure as a proxy for income distribution.

The popular measure of income inequality is in terms of Lorenz Curve or Gini Coefficient. Gini Coefficient ranges from 0 to 1; the larger the coefficient, the greater the inequality. Thus ‘0’ Gini Coefficient represents perfect equality, and 1 represents perfect inequality. Therefore, to measure income inequalities in India, we use the Gini ratios of distribution of per capita monthly consumption expenditure. Since early 1980s, India has been experiencing high growth rates. In the pre-reform period between 1983 and 1993-94, there was marginal decline in inequalities both in rural and urban areas. The Gini ratio of monthly per capita consumption expenditure (MPCE) in rural areas declined from

0.31 to 0.29. However, the difference between rural and urban MPCE increased. The ratio of rural MPCE to that of urban declined from 0.66 to 0.61 during this period.

In the post-reform period between 1993-94 and 2004-05, inequalities in income distribution of both the rural and urban areas have increased. There was also further increase in income disparities between rural and urban areas. The Gini ratio of rural MPCE increased marginally from 0.29 to 0.30. For urban areas too it increased marginally from 0.35 to 0.36. The ratio of rural MPCE to urban MPCE further declined from 0.61 to 0.56. Thus, although economic reforms have brought about high economic growth rates, the income distribution is worsening. Further, although there has been poverty reduction, it has been on a slower rate. The poor have improved their consumption marginally, but the rich have become richer with the result that there is growing income inequality between the rich and the poor.

3.5.3 Regional Disparities in India

In a federal structure like that of India, it is essential to ensure that economic development brings about balanced regional development. But in India, even after more than fifty years of planed economic development, there has been no tendency towards balanced development. Over the years, especially during the past two decades, there has been growing inter-state disparities in India. More developed states like Punjab and Haryana have a per capita development expenditure of about two and a half times the level of less developed states like Bihar. In the post-reform period, most of the investments have been flowing to relatively better developed states, starving poorer states of fresh investments. There have been efforts to infuse more investment to backward states by a system of incentives introduced. The National Development Council appointed two Working Groups [called Pande (1968) and Wanchoo (1968) Groups respectively], to identify industrially backward states and Union Territories and another to recommend fiscal and financial incentives for starting industries in backward areas. Based on their recommendation, 246 districts were designated backward and made eligible for concessional finance and other facilities. Examining the role of fiscal and financial incentives in stimulating industrialisation of backward areas, the Wanchoo Working Group recommended: (i) granting of higher development rebate to industries located in backward areas, (ii) granting of exemption from corporate income tax for a period of five years, (iii) exemption from import duty on plant and machinery imported for location of industries in backward districts, (iv) exemption from excise duties and sales tax for a period of five years, and, (v) provision of transport subsidy. The impact of these measures have, however, not been assessed properly. Most of these fiscal and financial incentives have also since been withdrawn. The post-reform era is known for states competing for growing private corporate investments of both foreign and domestic origin. Most of these investments are cornered by

a few developed States in the South and North-West region, leaving the Central, East and North-East regions much behind.

The Eleventh Five Year Plan recognises that growth performances across states have been varied and the performance of poorer states with poorer infrastructure has been lagging behind. The Eleventh Plan accords highest priority to improving connectivity to the North Eastern States by upgrading transport infrastructure. It is also proposed to launch a Backward Regions Grant Fund to be used for investment in identified backward districts.

Check Your Progress – 4

1. Discuss the nature of declining poverty in India since 1993-94.

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2. How is the income distribution measured in India? What are its trends in recent years?

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3. What are the trends in regional disparities in India? What are the measures to combat the same?

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3.6 LET US SUM UP

We began with the understanding that an economy consists of broadly three economic sectors, viz. primary, secondary and tertiary. As economic development takes place there will be changes in the economic structure. The historical experience of the developed countries shows that with growth in the national income the economic structure changes from being predominantly agricultural to industrial. With further progress, the services account for major share in output and employment.

In the case of India, we have seen that while there has been a structural

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change over the past more than fifty years, it is not exactly on the lines of the experience of developed countries. **First**, though the share of agricultural sector in the national income drastically declined (and presently it accounts for the lowest share), the share of agriculture in the total workforce still remains the largest. **Second**, the share of industrial sector, both in output and employment, has remained low. **Third**, the share of service sector output has increased much faster than that of the industrial sector, although in employment its share is just about 22 percent. The question that is raised therefore is: whether development with such a low share of industrial sector share is desirable and sustainable in the long run?

The unit has also looked at the main factors behind economic growth in India and has observed that there has been a relatively faster growth in savings and investment in recent years. This shows that the macro economic fundamentals behind the present growth process in India is strong. But in case of outcomes on the fronts of poverty reduction, income distribution and regional disparities, the picture is less satisfactory.

3.7 KEY WORDS

Economic Sectors : Economy is normally divided into three sectors viz. primary ('agriculture'), secondary ('industry') and tertiary ('services').

Economic Structure : In terms of growth and development, it refers to relative position (shares) of primary, secondary and tertiary sectors in national output and employment.

In terms of institutional arrangement, it refers to the role of state and market in the economy.

Structural Change : Changes in the composition of national output and employment in sectoral terms.

Gini Coefficient : Statistical measure of inequality. It measures the gap between perfect equality and the actual equality. Higher the coefficient greater is the inequality and vice versa.

Poverty Line : A monetary indicator of normative minimum per capita consumption requirement, below which one is categorized as 'poor'.

3.8 SELECTED BOOKS FOR READING

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Norman Gemmel, *Structural Change and Economic Development: Role of Service Sector*, Mac Millan, 1986.

Ruddar Datt and K.P.M. Sundaram, *Indian Economy*, 57th Edition, 2008, S.Chand, New Delhi.

3.9 ANSWERS/HINTS TO CYP EXERCISES

Check Your Progress – 1

1. See 3.2.1 and answer.
2. See 3.2.1 and answer.
3. See 3.2.2 and answer.

Check Your Progress – 2

1. See 3.3 and answer.
2. See 3.3 and answer.
3. See 3.3 and answer.

Check Your Progress – 3

1. See 3.4 and answer.
2. See 3.4 and answer.
3. See 3.4 and answer.

Check Your Progress – 4

1. See 3.5.1 and answer.
2. See 3.5.2 and answer.
3. See 3.5.3 and answer.

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UNIT 4 PLANNING, GOVERNANCE AND INSTITUTIONS

Structure

4.0 Objectives

4.1 Introduction

4.2 Priorities and Strategies of Five Year Plans

4.2.1 First to Sixth Five Year Plan

4.2.2 Seventh to Eleventh Five Year Plan

4.3 Growth Targets and Achievements in Five Year Plans

4.4 Economic Policies and Shift Towards Reforms

4.4.1 Trade Policy

4.4.2 Fiscal Policy

4.4.3 Monetary Policy

4.4.4 Banking and Financial Sector Policies

4.5 Economic Reforms

4.5.1 New Economic Policy

4.5.2 Structural Adjustment and Economic Reforms

4.5.3 Institutional Reforms

4.6 Let Us Sum Up

4.7 Key Words

4.8 Some Useful Books

4.9 Answers or Hints to Check Your Progress Exercises

4.0 OBJECTIVES

After going through this unit, you will be in a position to :

- explain the basic strategy of five year plans over the era of planning;
- discuss the target and achievement of growth-oriented objectives in each five year plan;
- review the major economic policies and the shifts in policies leading to initiation of economic and institutional reforms in 1991; and
- provide an outline of the policies and changes in economic performance during the period of implementation of Economic Reforms in the country.

4.1 INTRODUCTION

One of the major concerns during the period of freedom movement in India was poverty and under-development of the country due to exploitation under the colonial rule. One of the major objectives of freedom struggle was, therefore, to liberate India from colonial rule and chart out a course towards rapid development. There was widespread consensus among the political leadership and the indigenous business community that free India would embark on rapid industrialisation with substantial state investment in heavy industry as well as infrastructure. Thus when planning process in India began, the public sector occupied the commanding heights of investment. Second, given the primacy of public sector, the strategies and priorities under each plan were decided based on the immediate economic conditions. However, by early 1980s, there were challenges to planning process that raised questions about the basic policies and strategies that had a heavy bias in favour of the role of state, not only in respect of investment, but also in respect of regulation and control of private sector. The major policies were subjected to review by a number of committees set up during the late 1970s and early 1980s. The outcome was a shift in economic strategies towards economic reforms and market driven growth, and towards reduced role of state with declining share of public investment even in plan investment. This unit outlines the growth performance in each plan, the shifts in plan priorities and strategies, and the shifts in major economic policies leading to the present regime of economic reforms with a central place to market induced investment and growth.

4.2 PRIORITIES AND STRATEGIES OF FIVE YEAR PLANS

As mentioned earlier, the emphasis on sectoral priorities and strategy of development under each plan is often dictated by the economic exigencies of the period. Over a period of time, there was also change in the overall policy framework and the relative roles of public and private investment. To capture these broader shifts, this section is divided into two parts. The first part deals with the first six plans and the second part with the seventh to eleventh five year plan.

4.2.1 First to Sixth Five Year Plan

Formulation of the First Five Year Plan (1951-56) was done in the face of major problems which needed immediate attention. First, partition of the country resulted in huge influx of refugees who had to be rehabilitated. Second, there was severe shortage of food grains, that needed to be addressed on priority. Third, there was growing inflation that had to be contained. A positive factor was the availability of foreign exchange reserves which could be used to meet the needs of growing food and other imports. The strategy of the First Plan was rapid

development of agriculture in order to move towards food self-sufficiency. Priority to agriculture was thus placed within the broad objective of all-round balanced development.

The Second Plan (1956-61) was conceived in an atmosphere of stability. Agricultural targets of the First Plan were met. Prices were stabilised. It is in this atmosphere, that the Second Five Year Plan was aimed at giving a big push to industrialisation. The Mahalanobis model with thrust on heavy industries became the strategy of the Second Plan. The political party in power adopted a resolution to move towards a Socialistic Pattern of Society. This was reflected in the Industrial Policy Resolution, 1956 that spelt out the primacy of public sector in the basic, heavy and strategic industries, and laid the foundation for regulation of the private sector.

By the end of the Second Plan, there were clear signs of agricultural growth lagging behind and food production falling short of demand. Therefore, the Third Five Year Plan assigned higher priority to agriculture, besides giving emphasis on self-reliance and basic industries. But the Plan priorities received a set back because of diversion of resources to meet the border conflicts with China in 1962 and later Pakistan in 1965. In fact, the entire planning process was disturbed not only by the wars, but also due to the nation-wide severe drought and stagflation (i.e. low growth with high inflation) for two years - 1965-67 and 1967-68. Food grain production suffered severely and food imports reached peak levels of about 12 million tones per annum. The economy faced severe foreign exchange crisis. The original draft outline of the Fourth Plan was abandoned in 1966 and a kind of 'Plan Holiday' was introduced. Amidst this, in 1966, rupee was devalued and there was a brief period of resort to deregulation and induction of market forces. However, by 1968, there was a return to the strategy of controls and subsidies with state interventions. During the period of 'Plan Holiday', three Annual Plans (1966-69) were implemented. The mid-1960s, thus, experienced not only the worst economic crisis but also political crisis. The political response was to bring about radical reforms like bank nationalisation and stricter regulation of monopolies and foreign exchange. With this background the Fourth Plan (1969-74) set itself, in principle, the objectives of growth with stability and social justice. The aim was the progressive achievement of self-reliance with emphasis on improving the conditions of weaker sections of the community. The programmes for the latter came to be known as 'Garibi Hatao' (Removal of Poverty). The Fourth Plan saw substantial emphasis on agriculture in which 'Green Revolution' technology started taking roots showing improvements in food production.

The owes of the economy which began in the mid-1960s continued into the 1970s. The Fifth Plan (1974-79) was introduced at a time when the country was reeling under severe inflation fuelled by the 'oil shock' of 1973. There was a great deal of debate on the appropriate strategy of

the Fifth Plan. Finally, two main objectives viz. removal of poverty and attainment of self-reliance, emerged as priorities. The objectives were to be achieved through promotion of higher rate of growth, better distribution of income and a significant step-up in the domestic rate of saving. But because of political changes, the Plan was terminated by the Janata Party which came to power in 1977. The new Plan was supposed to shift emphasis from the Nehruvian heavy industry to decentralised industrial development with emphasis on small and household industries and employment generation. During 1978-79, the country has had huge accumulation of foreign exchange reserves as a result of massive inflow of remittances from the Indian workers, who had gone to the middle east region. The committee on Import-Export Policies and procedures, set up in 1977, recommended gradual liberalisation of the import regime and inducted a shift towards a strategy of export promotion and domestic liberalisation. Thus, the basic beginning of liberalisation policy regime had begun in the late 1970's. It was during this period that the approach of 'rolling plan' was inducted, thereby, diluting the rigour of the erstwhile approach of 'Five Year Plans'. Subsequently, the Sixth Plan got its new incarnation (1980-85) when the Congress Party came back to power in 1980. The strategy once again shifted to a direct attack on poverty by creating conditions of an expanding economy.

4.2.2 Seventh to Eleventh Five Year Plan

Beginning of 1980s marked a turning point in the growth performance of the Indian economy. The economy broke out of the much vexed so called 'Hindu Rate of Growth' of 3.5 per cent and hitch-hiked to a higher growth path. The Sixth Plan (1980-85) experienced an annual growth rate of 5.4 per cent. By the end of the Sixth Plan the country almost reached self-sufficiency in food grains production. The Seventh Plan (1985-90) was formulated under conditions of optimism towards sustained high level growth. Certain measures of liberalisation were initiated in trade and industrial policies. The main objectives of the Plan were: accelerated growth of food grains production, increase in employment opportunities and improvement in productivity levels. For the first time, the Seventh Plan placed employment at the centre by incorporating the words: 'The central element in the development strategy of the Seventh Plan is the generation of productive employment'. To tackle an estimated number of unemployed (openly unemployed plus severely underemployed in need of alternative jobs) placed at 23 million in 1992, and an expected addition to the labour force of 35 million during 1992-97 and another 36 million during 1997-2002, the Plan set a target of 2.6 to 2.8 per cent annual growth of employment with a view to achieving the goal of 'employment for all' by 2002.

The approach to Eighth Plan went through several revisions because of unstable political situation and changing governments at the centre. Finally, the fourth version of Eighth Plan (1992-97) was approved under conditions of severe economic crisis, high rate of inflation, meagre

foreign exchange reserves, widening budget deficits, rising debt burden and recession in industry. Further, the background of the introduction of Eighth Plan was also marked by initiation of economic reforms in all sectors. The year 1991 is regarded as a water shed in the policy regime of India, since it marked the beginning of a new era of reforms, with extensive liberalisation in the domestic and international policy regimes. Liberalisation, Privatisation and Globalisation, together, defined the framework of the new policy regime of radical reforms with market-driven paradigm of development. The Plan emphasised high growth and employment generation. For the first time, employment was considered to be important enough a subject to merit an independent chapter in the Plan document.

The Ninth Plan (1997-2002) also witnessed delays and modifications in its finalisation. When it was finally approved, almost two years after the process was underway, it emphasised 'growth with justice and equality'. It was pitched at a high targeted growth rate of 7 per cent per annum. The Plan expected to generate more employment through agriculture and rural development. But the Plan performance was a disappointment with a very poor growth of agriculture and reduced overall GDP growth of 5.35 per cent per annum. At the formulation of the Tenth Plan (2002-07), there was concern about slow growth of employment and poor agricultural growth threatening the sustainability of food production. In spite of reasonably high growth performance of about 5.7 per cent GDP growth rate over the decade of 1990s, the rate of decline in poverty decelerated compared to 1980s. In light of this, besides fixing a target of high growth rate of 8 per cent for the Plan, emphasis was laid on reduction of poverty and creation of additional gainful employment. For this purpose, agricultural development was viewed as the core element. Social sector, especially universal primary education and reduction in infant and maternal mortality rates, were also accorded high priority.

The Eleventh Plan (2007-2012) began with an impressive Tenth Plan growth rate of 7.7 per cent per annum, the highest achieved in any plan period so far. The strengths were that savings and investment rates increased significantly. There has been positive response of industry to global competition. In view of the liberalisation of the policies in regard to foreign capital inflows and expansion of domestic capital markets, the country experienced a surge in the volume and rate of capital inflows. Exports and foreign exchange reserves reached very high levels. However, the growth is not perceived as being sufficiently 'inclusive' for many groups. The rate of decline in poverty also was not commensurate with the growth in GDP. The absolute number of poor people declined only marginally from 320 million in 1993-94 to 302 million in 2004-05. There was hardly any decline in child malnutrition. Considering these factors, the Eleventh Plan set not only a high target of 9 per cent growth rate in GDP but emphasised the need for focusing on 'inclusive growth'. The central vision of the Eleventh Plan is to initiate a development

process which ensures broad-based improvement in the quality of life of the people, especially the poor, SCs/STs, other backward castes (OBCs), minorities and women. The broad vision of the Eleventh Plan includes several inter-related components like rapid growth that reduces poverty and creates employment opportunities, provides access to essential services in health and education especially for the poor and empowerment through education and skill development.

Check Your Progress 1

1. What was the basic strategy of Second Five Year Plan?

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2. What was the nature of crisis faced by India in mid-1960s? And what was its impact on Planning?

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3. Which was the Plan that set 'employment for all' as the objective to be achieved by 2002? What was the perceived need for focusing on it?

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4. What is the Central Vision of the Eleventh Plan?

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4.3 GROWTH TARGETS AND ACHIEVEMENTS IN FIVE YEAR PLANS

The discussion of Plan priorities and strategies naturally raises interest as to what actually happened during the Five Year Plans in terms of

economic performance. Table 4.1 gives the targets and realisation of growth rates in the Five Year Plans. During the first thirty years of planning (1951-1980), i.e. up to the Sixth Plan, the growth performance of the economy was far below expectations, averaging about 3.5 per cent annual growth rate in GDP. With over 2 per cent growth rate of population, this period experienced about 1.5 per cent annual growth rate in per capita income. The period between 1951 and 1980 became synonymous for slow growth. Whatever the Plan targets, the realised growth rate turned out to be a low growth of 3.5%, so much so, that it began to be connotated as a period of 'Hindu growth rate'. But, the beginning of 1980s marked a turning point in the Indian economy. During the Sixth and Seventh Plans (1980-89) annual average growth rate increased to 5.6 per cent. There was a temporary set back in 1990-91 in which the growth rate achieved was a low 3.4 percent. Subsequently, however,

Table 4.1 Growth Performance in the Five Year Plans

Sl. No.	Plan Period	Target	Realisation
1	First Plan (1951-55)	2.1	3.5
2	Second Plan (1956-60)	4.5	4.2
3	Third Plan (1961-65)	5.6	2.8
4	Annual Plans (1966-68)	—	3.9
5	Fourth Plan (1969-73)	5.7	3.2
6	Fifth Plan (1974-78)	4.4	4.7
7	Annual Plan (1979-80)	—	-5.2
8	Sixth Plan (1980-84)	5.2	5.5
9	Seventh Plan (1985-89)	5.0	5.6
10	Annual Plan (1990-91)	—	3.4
11	Eighth Plan (1992-96)	5.6	6.5
12	Ninth Plan (1997-2001)	6.5	5.5
13	Tenth Plan (2002-2006)	7.9	7.7
14	Eleventh Plan (2007-2012)	9.0	—-

***Note**: The growth targets for the first three five year plans were set with respect to National Income. In the Fourth Plan, it was Net Domestic Product. The actual growth rates are in terms of GDP at factor cost. Average growth rates over a short period can be misleading because of fluctuations in agricultural output due to varied monsoon.*

***Source**: Planning Commission, GOI, Eleventh Five Year Plan 2007-2012, Vol. I, Inclusive Growth, OUP, p. 25, New Delhi 2008.*

the economy grew at a high rate of 6.5 per cent in the Eighth Plan period (1992-96). Compared to this, Ninth Plan (1997-2001) experienced a deceleration and recorded a lacklustre performance of 5.5 percent. But the economy recovered sharply to achieve a growth rate of 7.7 per cent during the Tenth Plan (2002-06). The last four years of the Tenth Plan recorded an average of about 8.7 per cent and this momentum continued into 2007-08 which was the first year of the Eleventh Plan. This experience of Tenth Plan prompted fixing of 9 per cent as the target growth rate for the Eleventh Plan.

4.4 ECONOMIC POLICIES AND SHIFT TOWARDS REFORMS

The first thirty years of planning era, with a few minor changes, was dominated by the Nehru-Mahalanobis investment strategy of primacy of public sector with an emphasis on heavy industries. The policy framework of this strategy was reflected in the Industrial Policy Resolution of 1956 which emphasised on a strong licensing and regulatory system and inward looking trade policy with import substituting industrialisation (ISI). The crisis in the Indian economy in mid-sixties saw further intensification of the role of state through nationalisation of coal, wheat, trade and tightening of controls on monopolies and restrictive trade practices and the regulation of foreign-exchange outflow. By late 1970s, there were clear signs of failure of state regulation and control as seen in terms of extensive 'rent seeking' (i.e. corruption) in the shadows for obtaining licences and permits. Corruption went hand-in-hand with tax evasion and black money. The extensive parallel economy crippled efficiency, reduced the revenues of the state and resulted in growing public debt in the absence of commensurate increase in productive investment.

The changing political conditions and the pressure of economic management necessitated a review of the existing policies. A series of Committees were appointed by the Government of India to review the existing policies and suggest measures for improvement. The result was a number of reports which initiated a shift towards liberalisation and economic reforms. This section briefly refers to some of these reports which suggested reforms on several policy fronts. These could be seen as antecedents to the major neo-liberal economic reforms introduced beginning with 1991.

4.4.1 Trade Policy

There were several shifts in trade policy but, in the initial years, there was considerable 'export pessimism', meaning that without industrialisation, India had not much to offer by way of trade to serve as engine of growth. Therefore the emphasis was on 'inward orientation' or import substituting industrialization (ISI). The first two five year plans, especially the Second, had thus accorded the thrust on heavy inward

orientation. By the time of the Third Plan, importance of exports was recognised and certain 'outward orientation' to promote exports was initiated through export-subsidies. Towards the end of the Third Plan, rupee was devalued with the specific objective of making Indian goods relatively cheaper and promoting exports. But during 1966-1976, i.e. the Fourth and Fifth Plans, little attention was paid to foreign trade. It was more of crisis management than any clear policy thrust. In late 1970s, policy of import substituting industrialisation was diluted and imports liberalised to an extent.

The Report of the Committee on Trade Policies (Abid Hussain Committee, 1984) emphasised the need for balance between export promotion and import substitution. The government in mid-1980s, therefore, initiated a policy of export promotion and import liberalisation. Following this, exports increased at a record rate in the later half of 1980s, though imports did cause problems of foreign exchange shortage. Nevertheless, these shifts towards trade liberalisation in 1980s laid the foundation for the total dropping of the policy of ISI in 1991 and move towards liberalisation of trade as a part of overall economic reforms.

4.4.2 Fiscal and Trade Policies

Fiscal policy plays an important role in economic development. Through fiscal policy, the Government creates and sustains the public economic policies consisting of the provision of public services through public investment. It is also an instrument for reallocation of resources according to national priorities, achieve redistribution, promotion of private savings and investments, and maintenance of stability.

During the first thirty-five years of India's planning, the achievement of mobilisation through tax revenue apparently was satisfactory. But it posed several problems when one probed from the point of view of equity and efficiency. First, let us look at the positive side. The tax-GDP ratio increased from 7% in 1950-51 to 17 % in 1984-85. For a country with low income and relatively slow growth of about 1.5 percent in per capita income during this period, tax mobilisation effort could be considered commendable. Except land revenue and personal income tax, all taxes performed very well. In the context of Five Year Plans, targets set for additional resource mobilisation were over-fulfilled.

On the negative side, there has been extensive tax evasion and 'black economy' became pervasive. One of the main reasons cited for tax evasion and generation of black money was high effective rates of taxation. Besides loss of revenue, tax evasion reduced built-in elasticity of the tax system and constrained tax reforms. Another problem that arose was the erosion of equity. The share of direct taxes, in total tax revenues, had fallen from 37 percent in 1950-51 to 15 percent in 1984-85. And the share of personal income tax dropped from 21 percent to 5 percent over the same period. It is well-known that taxes like personal

income tax have an important redistributive role in the tax structure, and cannot be substituted by indirect taxes on commodities.

In 1977, a high powered committee was set up under the chairmanship of Dr. P.C.Alexander, the then commerce secretary, for reviewing the nature of import-export policies and procedures. Based on the recommendations of this Committee's Report, a beginning was made to liberalise the import regime in the late 1970s. By mid-1980s, tax evasion and the related black economy came to be attributed to the controls and regulations as much as to the very high levels of personal income taxes and complex commodity taxation system. The submission of a number of influential reports prepared under Government auspices, including the Report of the Committee to Examine Principles of a Possible Shift from Physical to Financial Controls (the Narasimham Committee 1985), the Report of the Committee on Trade Policies (the Abid Hussain Committee 1984), a series of reports prepared by the Economic Administration Reforms Commission (L.K. Jha 1984-86), the Report of the Working of the Monetary System (the Chakravarthy Committee 1985) and the Report on the Black Money by National Institute of Public Finance and Policy (NIPFP) resulted in certain bold initiatives taken on fiscal policy front. These developments suggested the following type of changes in the fiscal policy:

i. a systematic effort to simplify both tax structure and tax laws,

ii. a deliberate shift to a regime of reasonable direct tax rates and better tax administration, and

iii. the fostering of a stable and predictable tax policy environment.

The Long Term Fiscal Policy (1985) incorporated these changes and many more measures to improve tax administration, paving the way for greater tax reforms later. Reforms in the trade policy regime implied, elimination of the import licensing system, and import quota systems, reduction in the tariff rates , gradual reduction of export subsidies and opening up of the economy for imports and capital flows. These reforms generated a new wave of competitive environment in the economy and combined with the liberalisation of domestic policy systems, the economy was poised to enter into a new era of high growth and market-driven paradigm of development.

4.4.3 Monetary Policy

Since Independence, the Indian monetary system has helped in the resource mobilisation for the implementation of Five Year Plans. It has also attempted to control the inflationary process inherent in economic development. With several vibrant changes taking place beginning with the 1980s, the Reserve Bank of India wanted a fresh look at the Indian monetary system and towards this end appointed a Committee in

December 1982 with Sukhamoy Chakravarty as its Chairman to review the working of the Indian monetary system.

According to the Chakravarty Committee Report (submitted in 1985), the operation of monetary system should be consistent with plan priorities, so that the process of mobilisation of savings and utilisation of these resources, became socially purposive. Though savings in the country increased from 10 percent to 23 percent between 1950-51 and 1983-84, it was not adequate to finance public sector investment. Hence the Government of India was forced to resort to deficit financing creating inflationary pressures in the economy. The Committee emphasised financing Five Year Plans in a non-inflationary manner by:

i. tapping the savings of the public in a greater measure than in the past, which could be done by raising the yield from government bonds;

ii. raising higher savings from the public sector enterprises, and

iii. improving efficiency in both revenue gathering and expenditure functions.

Other important recommendations of the Committee related to monetary targeting, change in the definition of budgetary deficit and interest rate policy. Most of the recommendations of the Committee were accepted by the GOI by late 1980s.

4.4.4 Banking and Financial Sector Policies

One of the major landmarks in the Indian banking sector was the nationalisation of banks in 1969. Since then, there has been spectacular geographical and functional spread of banking and financial sector in the country. However, over the years, several distortions have crept into the banking and financial system in mobilising resources and extending credit. Several public sector banks and financial institutions had become weak and some public sector banks had been incurring losses year after year. To take measures to rectify this situation, the Government of India appointed a high level Committee on the Financial System under the Chairmanship of M. Narasimham in 1991.

The Narasimham Committee (1991) made recommendations which have come to set in motion major reforms in the financial system. The recommendations were aimed at: (i) ensuring a degree of operational flexibility, (ii) internal autonomy for the public sector banks, and (iii) greater degree of professionalism in banking operations. Some of the major recommendations of this committee are:

i. reduction of Statutory Liquidity Requirements (SLRs) as well as Cash Reserve Ratio (CRR). In the view of the Committee, high SLRs and CRRs are idle lock up of productive resource of the banks.

ii. phasing out of directed credit programmes, which meant withdrawing

differentiation of 'priority sector'. According to the Committee, agriculture and small industry had already grown to a mature stage not requiring any special support.

iii. the level and structure of interest rates should be broadly determined by market forces.

iv. bring about greater efficiency in banking operations by a substantial reduction in the number of public sector banks through mergers and acquisitions.

Because of the politically sensitive nature of the recommendations, many of the recommendations like removing 'priority sector' status, and mergers have not been put into force. However, the SLR has been reduced from 38.5 percent to 25 percent. Similarly, CRR was reduced from 15 percent to 5.5 percent. The merger proposals were partially implemented in the case of Regional Rural Banks (RRBs). The RRBs were allowed to extend their services to non-weaker sections with interest rates realistic to market rates. One more Committee under the same Chairman was appointed in 1998 to look into the needs of further reforms.

Check Your Progress 2

1. Which is the period of 'Hindu growth rate' and why is it called so?

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2. Which is the period when the need for balance between export promotion and import substitution was felt and adopted as trade policy? What was the basis for this measure?

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3. What were the causes for the rise and perpetuation of 'black economy' in the Indian economy?

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4. What were the recommendations of Chakravarthy Committee for non-inflationary financing of plans?

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5. What were the major recommendations of Narasimham Committee (1991)?

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4.5 ECONOMIC REFORMS

As seen from the above explanation, owing to a number of changes in economic policies, the decade of 1980s not only witnessed a higher growth period, breaking away from the low growth path of three decades, but also ushered in a period of substantial rethinking and reformulation in the planned regime of economic development. In this section, we briefly discuss, first, the changes in 1980s which came to be known as New Economic Policy and then major changes that were subsequently introduced in 1991 under what is known as the period of 'Structural Adjustment and Economic Reforms'.

4.5.1 New Economic Policy

The shifts in policies which began in 1980 and gained momentum, in mid-1980s, marked new trends away from the Nehruvian framework of dominant public sector and greater regulation of the private sector. These policy changes, particularly under Rajiv Gandhi regime, came to be known as New Economic Policy which provided greater role for private sector. The new policy made a number of changes in industrial licensing, export-import policy, foreign capital equity, removal of controls and restrictions, rationalising and simplifying the system of fiscal and administration regulation. Under the New Economic Policy, the government turned towards dismantling the edifice of controls and provided greater scope for unfettered expansion of private corporate sector, including the multi-national enterprises.

4.5.2 Structural Adjustment and Economic Reforms

When the Congress Government assumed power at the Centre in June 1991, the country was under a serious economic crisis. The three major problems were the balance of payments crisis, high rate of inflation and

huge public debt. The liberalised trade policy in 1980s resulted in undue increase in imports. By 1990-91, the balance of payments situation became precarious and the foreign exchange reserves depleted to a level which was hardly adequate to meet import payments for a few weeks. The rate of inflation reached an unprecedented level of about 17 percent. The public debt, including external borrowings, rose to a level of 60.6% of GDP and the interest payment alone amounted to 21.4% of GDP.

Under the shadows of this economic crisis, Government of India sought external assistance which came from International Monetary Fund (IMF). The assistance was accompanied by a package of conditionalities that insisted on 'structural adjustment' measures. Structural adjustment, in simple terms means, adjustment of the role of institutions in economic management. The two major economic institutions are **state** and **market**. Therefore, structural adjustment means a shift in the dominant role of the state and public sector to a regime where market and the private sector would play the dominant role. Under the economic reforms, the major thrust was to reduce the investment and regulatory role of state and increase the room for free play of market forces by dismantling protective measures on trade and controls on domestic and foreign investment in economic activities.

The immediate steps towards overcoming the economic crisis included devaluation of rupee by 22%, liberalisation of trade policy and measures to control fiscal deficit by cutting down public expenditure. A series of liberalisation, privatisation and globalisation (LPG) measures followed. The Government justified these measures as needed for achieving: (i) increased efficiency and competitiveness of industrial production, (ii) much greater utilisation of foreign investment and technology than in the past, (iii) improved performance of public sector and (iv) for modernising the financial sector.

The second wave of economic reforms followed in almost all economic policies and strategies. Fiscal policy aimed at reducing fiscal deficit by regulating public expenditure in general. Towards this end, streamlining public sector by methods like disinvestment and privatisation, and withdrawal of budgetary support to public sector, wherever necessary, were adopted as the approach in the policies followed. Monetary policy aimed at controlling inflationary pressures and achieving improvement in balance of payments position. In price policy, the measures involved progressive reduction of subsidies and promotion of more flexible price structure. To control prices, the emphasis was laid more on competition than on regulation and budgetary support through subsidies. The immediate and major changes under economic reforms were in policies relating to trade, industry, foreign investment, and public sector. On the trade policy front, besides reduction in tariffs, there was a gradual shift from quantitative restrictions to tariff based system. By April 2001, all quantitative restrictions were abolished.

Industrial Policy 1991

The Industrial Policy announced on July 24, 1991 included the following reforms:

i. Industrial licensing was abolished for all projects except a shortlist of 15 industries related to security of strategic or environmental concerns.

ii. The regulation under Monopolies and Restrictive Trade Practices (MRTP) Act were relaxed in a manner that there was hardly any need to get Government approval for expansion or starting new venture.

iii. The areas hitherto reserved for public sector were drastically reduced and even some areas reserved for public sector was thrown open to private investment.

Foreign Investment Liberalisation

Foreign investment in industry and services were liberalised to an extent of:

i. 40% equity, relaxed up to 51% in a wide range of industries. Subsequently, this was raised further to 100% for many industries.

ii. Automatic royalty payments to foreign technology were allowed up to 5% to domestic sales and 8% of export sales.

4.5.3 Institutional Reforms

As we have observed, India's development process began in the framework of planning with focus on import substitution and domestic protection. This strategy had necessitated the setting up of a number of institutions for 'controlling' imports, 'regulating' capital flows and domestic investments. There was the institution of 'Chief Controller of Imports and Exports' (CCI&E), Director general of Technical Development (DGTD), Controller of Capital Issues in the Ministry of Finance etc. However, with the induction of radical policy reforms, since 1991, many such institutions of the earlier policy regime had become redundant. The office of CCI&E was reconstituted with a different focus on export promotion and import management (instead of import controls) and was called as Directorate General of Foreign Trade (DGFT). The DGTD was abolished. The institution of MRTP (Monopolies and Restrictive Trade Practices) has been replaced by a new Competition Act in 2002 and a new institution called Competition Commission of India has been set up. A new body called Securities and Exchange Board of India (SEBI) has been set up to monitor and regulate the capital market operations.

Since 1995, the World Trade Organisation (WTO) has been set up at the

global level, in place of the earlier GATT and this has implied many radical changes in the policies and institutions at the national level as well.

In regard to the structure of Governance, there has been a major shift towards decentralisation of governance with the 73rd and 74th amendments of constitution making the Panchayat Raj system an important system of governance in the country.

The challenges of 'corruption', 'inefficiency', inter-regional and interpersonal inequalities, empowerment, 'failures' of the state and 'failures' of the market continue to plague the system thereby necessitating a constant review of the administrative and governance systems in the country. As a response to meet these challenges, the Government of India has recently set up an 'Administrative Reforms Commission' to review the entire institutional framework of governance in the country.

Public Sector Reforms

The major changes in the public sector reforms were:

i. The number of industries reserved for public sector was reduced from 17 to 8. Even in the reserved areas, private sector participation was allowed selectively. Joint ventures with foreign companies was encouraged.

ii. Public sector enterprises, that were chronically sick would be referred to Board for Industrial and Financial Restructuring (BIFR) and closed or privatised if necessary.

iii. there would be increasing emphasis on profitability and rate of return, and budgetary support to public enterprises would be progressively reduced.

iv. Loss making enterprises would be considered for privatisation and selective disinvestment would be introduced to strengthen the resource position of public enterprises. The Disinvestment Commission was established for deciding on the selection and modalities of equity dilution.

Following the implementation of the above measures, there has been a drastic shift in the overall investment level in favour of private sector. Table 4.2 shows that even in the Plan outlays, the balance has shifted drastically in the post-1991 years in favour of the private sector.

Table 4.2 Plan Outlays in the Public and Private Sector

(Percentages)

Plan	Public Sector Outlay	Private Sector Outlay	Total
First Plan (1951-56)	53.5	46.5	100
Second Plan (1956-61)	60.8	39.2	100
Third Plan (1961-66)	64.7	35.3	100
Fourth Plan (1969-74)	63.9	36.1	100
Fifth Plan (1974-79)	69.7	30.3	100
Sixth Plan (1980-85)	61.4	38.6	100
Seventh Plan (1985-90)	51.7	48.3	100
Eighth Plan (1992-97)	34.7	65.3	100
Ninth Plan (1997-2002)	29.0	71.0	100
Tenth Plan (2002-2007)	22.0	78.0	100
Eleventh Plan (2007-2012)	21.9	78.1	100

Source: 1. Five Year Plan Documents.

2. Eleventh Five Year Plan 2007-2012, Vol. I, p. 28.

Public Private Partnership (PPP)

In financing and developing social and physical infrastructure, economic reforms laid considerable emphasis on public-private partnership (PPP). The PPP projects typically involve transfer or lease of public assets, delegation of government authority for recovery of user charges, operation and control of public utilities, etc. PPP again indicates the growing entry of private sector into the sphere of public sector activities.

Impact of Policy Changes

There is wide acclaim that economic reforms have put the Indian economy on the higher growth path. During the last ten years, India has emerged as one of the top ten fastest growing economies in the world. However, one of the major weaknesses recognised is that the benefit of growth are not reaching many groups which still feel excluded from the growth process.

Inclusive Growth

Conscious of the exclusionary tendencies of market driven fast growth performance, the Eleventh Plan adopts a strategy of 'inclusive growth'. The object of 'inclusive growth' is to ensure broad-based improvement in the quality of life of the people, especially the poor, SCs/STs, other

backward castes (OBCs), minorities and women. While recognising the possibility of achieving higher growth rates of 9% in GDP and even 7.6% in GDP per capita, the Eleventh Plan mentions that 'the target is not just faster growth but inclusive growth, that is, growth process which yields broad-based benefits and ensures equality of opportunity for all'. But there are serious doubts whether unbridled economic reforms, that build institutional structures like commercialised education and health facilities which actually generate exclusionary processes while yielding a high growth, would facilitate in the realisation of pro-poor inclusive growth. If there are no proper institutional correctives and regulatory mechanisms, fears of vast exclusion may become a reality.

Check Your Progress 3

1. What is meant by 'structural adjustment'?

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2. What were the immediate steps taken by the Government to overcome the economic crisis in 1991?

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3. What were the major changes in Industrial Policy 1991, as a part of economic reforms?

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4. Briefly state changes in public sector policy as a part of economic reforms.

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4.6 LET US SUM UP

We have seen in this unit the changing policies and strategies of development in the era of planning from the First Plan to the Eleventh Plan. Priorities of each plan depended on the immediate concerns in the economy, and quite often, responses to meet the challenges of short term were adopted. But, over a long term, the framework or approach to planning changed. The Nehru-Mahalanobis framework for planning with an emphasis on heavy industry, import substituting industrialisation and, with a key role to public sector lasted over three decades. A shift in this approach involved a great deal of review and reformulation of policies. Though there were changes towards loosening of controls and some degree of liberalisation in 1980s, it was only in 1991 that there was a decisive shift on the policy front. This shift came about in the form of structural adjustment measures marking a change from a dominant role played by the state to a more substantial role for the market driven growth brought about by economic reforms. The experience shows that such economic policies, in a dynamic context, may bring about unexpected adverse effects too like social exclusion. There is, therefore, a need for correctives by way of regulatory institutions to ensure considerations of equity and social justice.

4.7 KEY WORDS

Mahalanobis Model : Also known as 'heavy industry' strategy. The economy is divided into two sectors, one producing capital/investment good and the other producing consumer goods. The argument is that, for long-run sustained growth of consumer goods, initial build up of investment goods sector is essential.

Garibi Hatao : 'Remove Poverty' – the thrust of Fourth Five Year Plan (1969-74).

Hindu Growth Rate : Whatever the plan targets, a persistent realisation, like Hindu 'karma', of an annual growth rate of 3.5%.

Import Substituting Industrialisation (ISI) : A strategy of industrialisation of protecting nascent domestic industry from competition by foreign industries achieved by imposing high tariffs or quantitative restrictions on imports.

Export Pessimism : Belief that without industrialisation, there would not be much scope to pursue export promotion as a strategy.

4.8 SOME USEFUL BOOKS

Charan D. Wadhwa (ed), *Some Problems of India's Economic Policy*, 2nd Ed., TMH, New Delhi, 1997.

Planning Commission, GOI, *Eleventh Five Year Plan 2007-2012*, Vol. I, Inclusive Growth, Oxford University Press (OUP), 2008.

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Terence J. Byres (ed), *The State and Development Planning in India*, OUP, Delhi, 1994.

Uma Kapila (ed), *Indian Economy Since Independence*, 17th Edition, Academic Foundation, New Delhi, 2006.

P.R. Brahmananda and V.R.Panchamukhi (ed), *Indian Economy*, Himalaya Publishing House, 1987.

4.9 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See Section 4.2.1 para 2
2. See Section 4.2.1 para 3
3. See Section 4.2.2 para 1
4. See Section 2.2.2 para 4

Check Your Progress 2

1. See Section 4.3 para 2
2. See Section 4.4.1 para 2
3. See Section 4.4.2 paras 3 and 4
4. See Section 4.4.3 para 2
5. See Section 4.4.4 para 2

Check Your Progress 3

1. See Section 4.5.2 para 2
2. See Section 4.5.2 para 3
3. See Section 4.5.2 para 5
4. See Section 4.5.2 para 7

UNIT 5 MONETARY AND FINANCIAL RESOURCES

Structure

5.0 Objectives

5.1 Introduction

5.2 Savings and Investment

- 5.2.1 Concept of Saving
- 5.2.2 Concept of Investment

5.3 Trends of Saving in India

- 5.3.1 Rate of Saving
- 5.3.2 Sectoral Composition of Saving

5.4 Trends in Investment in India

- 5.4.1 Distribution Pattern of Investment

5.5 Net Capital Inflow

5.6 Financial System in India

5.7 Banking Sector in India

- 5.7.1 Evolution of Banking Since Independence
- 5.7.2 Constituents of the Commercial Banking System
- 5.7.3 Banking Reforms in India

5.8 Capital Market in India

- 5.8.1 Changes in the Capital Market
- 5.8.2 Globalisation and the Indian Capital Market
- 5.8.3 Deficiencies in the Capital Market

5.9 Federalism in Resource Linkages

- 5.9.1 Federal Finance in India
- 5.9.2 Evolution and Provisions

5.10 Let Us Sum Up

5.11 Key words

5.12 Some Useful Books

5.13 Answers or Hints to Check Your Progress Exercises

5.0 OBJECTIVES

After reading this unit you will be able to

- define the concept of saving and investment;

- explain the importance of saving and investment in the growth process;
- identify the trends in saving and investment in India;
- distinguish between the different sources of savings and their relative importance in the Indian economy;
- discuss the evolution of banking sector in India and its present state of development;
- describe the present state of the capital market in India; and
- explain the institutional arrangements in place to ensure the smooth conduct of federalism in India.

5.1 INTRODUCTION

The pace and pattern of development in an economy is determined, to a large measure, by the amount of monetary and financial resources that can be mobilised for use in the development process. These directly determine the rate of capital formation, which, in turn, depending upon the productivity of capital, sets the direction in which the economy grows. In this process, a critical role is played by banking institutions and capital market. The process is also influenced by the existing institutional arrangements for the transfer of resources between different tiers of government in a federal structure. The present unit discusses these aspects which have a crucial bearing on the flow of monetary and financial resources needed for the development of the economy.

5.2 SAVINGS AND INVESTMENT

In a broad sense, the total savings in an economy is expressed as a percentage of its GDP. In a more technical sense, it has certain specific connotation (or forms of expression) about which you will read shortly. Normally, a rate of savings of 30 percent is essential to regard an economy as a high saving economy. India is a high savings economy, when viewed from this yardstick. As a matter of fact, history knows no example of a country, which could achieve some respectable growth with a saving rate of less than 20 percent. The 5-year Tenth Plan average savings for India crossed the 30 percent mark registering an annual average of 31.4 percent. This is remarkable when one considers India's per capita income which is just about 1,042 dollars (giving it a rank of 138 out of a total of about 198 countries in 2007) from an international perspective.

5.2.1 Concept of Saving

Saving constitutes that part of national product that has not been used up in consumption expenditure. The economy's gross domestic product

(Y) is divided among four components viz. consumption (C), investment (I), government purchases (G) and net exports (N_x). Consumption is spending by households on goods and services. Investment is the purchase of capital equipments, inventories, and structures. Government purchases include spending on goods and sevices by local, state, and the federal governments. Net exports equal the purchases of domestically produced goods by foreigners (exports) minus the domestic purchases of foreign goods (imports). The 'net' in exports refers to the fact that imports are subtracted from exports i.e. $N_x = X - M$, where X stands for exports and M for imports. The subtraction is made because imports of goods and services are included in other components of the GDP.

Total expenditure on the economy's output of goods and services is the sum of C, I, G and N_x. We state it as follows:

$$Y = C + I + G + N_x \qquad \text{............................(1)}$$

National savings is the income of the nation that is left after providing for current consumption and government purchases. Thus, national savings, S, equals Y - C – G. If we rearrange equation (1) to reflect this fact we get:

$$Y - C - G = I + N_x \qquad \text{................................(2)}$$

$$S = I + N_x \qquad \text{...............................(3)}$$

Now, net exports of an economy always equal net foreign investment. An open economy interacts with the rest of the world in two ways – in world market for goods and services and in world financial markets for credits and investments. Net exports and net foreign investment each measure a type of imbalance in these markets. While net exports measure the imbalance between a country's exports and its imports, net foreign investment measures the imbalance between the amount of foreign assets bought by domestic residents and the amount of domestic assets bought by foreign buyers. An important but subtle fact of accounting states that, for an economy as a whole, these two imbalances must offset each other so that net foreign investment (NFI) always equals net exports (N_x) so that:

$$NFI = N_x \qquad \text{................................(4)}$$

Equation (4) holds because every transaction that affects one side of this equation must also affect the other side by exactly the same amount (i.e. ideally, if an imbalance is to be avoided). Since N_x always equals NFI, we can re-write equation (3) as:

$$S = I + NFI \qquad \text{.........................(5)}$$

i.e. Savings = Domestic Investment + Net FI.

Savings in an economy is usually measured and expressed as a proportion of GDP. This ratio is called as the rate of saving. The rate of saving may

be (i) gross rate of saving, or (ii) net rate of saving. The two are expressed and measured as follows:

i) GROSS SAVING RATE (GSR) is measured as:

$$GSR = \frac{\text{Gross Domestic Saving}}{\text{Gross Domestic Product}}$$

ii) NET SAVING RATE (NSR) is measured as:

$$NSR = \frac{\text{Gross Domestic Saving} - \text{Consumption of Fixed Capital}}{\text{Net Domestic Product}}$$

Consumption of fixed capital is the amount of depreciation that the capital stock undergoes during the proces of production. Both, GSR and NSR, reflect average savings rates. In the development process, it is important to find out what happens to incremental income i.e. how much proportion of additional income is consumed (or correspondingly saved). The amount of additional income consumed in an economy depends on its marginal propensity to consume (MPC), which is defined as $\Delta C/\Delta Y$. Correspondingly, marginal propensity to save (MPS) is defined as $\Delta S/\Delta Y$. MPC and MPS add up to unity i.e. MPC + MPS = 1. Therefore, it is the value of MPC that determines what proportion of additional income generated in an economy becomes available for capital formation.

It is important to note here that when the total spending on goods and services rises from one year to the next, one of the two things must be true: (i) either the economy is producing a larger amount (output) of goods and services, or (ii) goods and services are being sold at higher prices. Therefore, when studying changes in the economy over time, economists want to separate out these two effects. In other words, they want a measure of the total quantity of goods and services the economy is producing that is not affected by (or free from the effect of) changes in prices. To achieve this, economists use a measure called 'real GDP'. The real GDP answers a hypothetical question: what would be the value of the goods and services produced this year if we valued them at the prices that prevailed in some specific year in the past? By evaluating current production using prices that are fixed at past levels, real GDP shows how the economy's overall production of goods and services have changed over time.

The Planning Commission in its plan exercises emphasise the use of gross saving rate. The use of gross saving rate and gross investment rate have both a positive and a negative aspect. On the positive side, it is quite correct to say that it is the total investment (including replacement of existing assets) which is of material significance. This is as opposed to the concept of net investment, wherein, capital consumption is estimated under diverse assumptions of the life of assets and their

replacement cost. On the negative side, since in modern industry, the pace of obsolescence is increasing at a much faster rate than the actual wear and tear of capital assets in the process of production, it would not be wise to ignore the problem of obsolescence (quite apart from the problem of the finite physical life of assets). The other practical problem that arises with the planning commission's treatment of resources is that, with depreciation provision included in the totality of plan resources, there has been a tendency to use up as much of available financial resources as possible for funding new projects. This tendency too, in effect, neglects the effect of maintenance and replacement of existing capital assets.

5.2.3 Concept of Investment

The concept of investment actually means 'expenditure incurred on acquisition of capital goods' that results in capital formation. We can distinguish between gross domestic capital formation (GDCF) and net domestic capital formation (NDCF). GDCF is defined as the sum of gross domestic fixed capital formation (GDFCF), changes in stocks in a year (CS), and the net acquisition of valuables (i.e. value of acquisition less value of disposals) by enterprises and households (NAV). Symbolically:

GDCF = GDFCF + CS + NAV

NDCF is equal to the difference of the sum of GDCF and current replacement cost (CRC), also known by different names as consumption of fixed capital, depreciation or capital consumption. Again, symbolically:

NDCF = GDCF - CRC

All these estimates can be derived at current prices or with reference to some base year prices; the former estimates represent the nominal value or money value, whereas the latter estimates represents the real value.

Capital formation, thus, signifies addition to the reproducible wealth of a country. It measures that part of national wealth that is retained for use in further production.

Like saving, capital formation too may be either (i) net capital formation, or (ii) gross capital formation. Net capital formation is distinguished from gross capital formation by that, the former is arrived at after deducting from the latter the part relating to depreciation. Depreciation itself, as said before, refers to obsolescence and damage to fixed capital due to wear and tear. Thus, net capital formation is the addition to fixed capital and producers' stock of working capital. Addition to fixed capital specifically takes the following three forms: (i) existing buildings (residential and non-residential), (ii) construction and other works currently in progress, and (iii) machinery and equipment.

5.3 TRENDS OF SAVING IN INDIA

Historically, India's average saving rate has been higher than that of many of the Latin American economies. But the latter have posted a better economic growth record than India. On the other hand, the East and Southeast Asian Economies have been successful in achieving both high saving rates as well as high growth. All the same, a higher domestic saving rate makes larger investment possible in an economy and hence is a ***necessary*** condition for economic development (although *not a sufficient* condition). Furthermore, it is important to note that in an open economy framework, domestic savings are supplemented by foreign savings. Since foreign savings may imply liability to the domestic economy, it is necessary that domestic savings rates should be increased and resort to foreign savings should be to the minimum. As said before, experience indicates that a saving rate of up to 20 percent is essential for any economy to achieve respectable growth rate. This makes us interested in knowing the trends in saving in India, and analyse as to how far domestic saving has been sufficient to finance the development needs of the economy.

5.3.1 Rate of Saving

Rate of saving is measured as a proportion of GDP at market prices. The rate of saving in India in 1950-51 was 10.2% of the GDP. Over the next twenty years, its trend varied marginally, to touch a rate of 16.3 percent in the year 1972-73. During the decade of 1970s, there was a significant improvement in the saving rate which rose to 26.0% in 1979-80. In light of this, the late 1970s was referred to as the golden era in the Indian savings scene. Comparing these rates with the ratios for other group of countries, the planning commission remarked: 'it is apparent that the country has achieved a high saving rate, despite its low per capita income. In fact, our saving rate is comparable to the rate in middle income and even some high income industrialised countries'. These rates of saving were not, however, sustained as it dropped substantially during the 1980s: it fell to 18.2 percent in 1984-85. In the subsequent years, although it recovered somewhat to reach 22.0 percent in 1992-93 and reached its late 1980s level of 26.9 percent in 1995-96, it declined again to below 25% mark in late 1990s. The decline during the late 1990s is attributed to a sharp decline in public saving as we shall see in section 5.3.2.

The saving rate began to increase steadily in the 2000s with the Tenth Plan average (for 2002-07) registering 31.4 percent (Table 5.1). The growth in saving is attributed to factors like: (i) rising per capita income; (ii) continued deepening of the financial system; and (iii) the diminishing share of agriculture in GDP (as this would mean a rise in the share of the manufacturing and services sector's share which are relatively known to offer greater scope for income and saving).

Table 5.1 : Rate of Gross Domestic Saving

(Percent of GDP at current market prices)

Year	Rate of Saving
2001-02	23.5
2002-03	26.4
2003-04	29.8
2004-05	31.8
2005-06	34.3
2006-07	34.8
Tenth Plan Average	31.4
2007-08*	35.0

* Estimated

5.3.2 Sectoral Composition of Saving

Domestic saving accrue from three sectors viz. (i) government or public sector, (ii) private corporate sector, and (iii) the household sector. The public sector includes government administration, departmental undertakings, government companies and statutory corporations. The private corporate sector comprise non-governmental non-financial corporate enterprises. The rest is termed household sector. Thus, the household sector, being residual in character, includes a host of economic agents who engage in production/consumption activity as shown in Table 5.2 below. Among the three sectors, as in most other countries, the

Table 5.2: Sectoral Composition of Savings

(at current prices - percentages)

Year	Household	Public	Corporate
1950-51	73.7	17.2	9.1
1960-61	66.0	20.6	13.4
1970-71	71.8	18.5	9.7
1980-81	75.9	16.2	7.9
1990-91	84.0	4.5	11.5
2000-01	89.3	-7.4	18.1
2001-02	93.7	-10.4	16.7
2002-03	89.1	-3.66	14.56
2003-04	82.75	3.1	15.51

Year	Household	Public	Corporate
2004-05	75.7	8.63	15.66
2005-06	68.83	5.39	25.78
2006-07	67.65	5.88	26.47
X Plan Average	75.47	5.42	19.11
2007-08	65.71	8.58	25.71
2011-12 *	61.54	10.26	28.20

* Projected

household sector in India too contributes the bulk - more than two-third of the total savings. The government sector and the corporate sector contribute the balance i.e. about one-third of total saving in the country.

A closer analysis of the temporal trend, presented below, reveals that the sectoral shares show varying degrees of growth and change over the years.

I **Household Savings:** The household sector is the largest contributor to domestic saving. It is important as it reflects how efficiently savings are converted into investment with the role of financial sector's intermediation in the process. Household savings can be divided into three parts as follows.

(a) **Physical Assets**: The physical assets include housing, machinery, furniture, fixture and real estate.

(b) **Financial Assets:** This takes the form of currency, bank deposits, shares and debentures, claims on government, mutual funds, national savings certificates, life insurance funds and provident and pension funds.

(c) **The Unaccounted Savings of the Household Sector:** The unaccounted savings of the household sector are always kept in the form of gold, sliver and durable goods on which information is very scanty. However, on the basis of estimates (relating to the ratio of black money to GNP) the proportion of these assets is placed in a range of 3 to 10 percent of the GNP in any year.

Relative Share of Financial and Physical Assets in the Economy

(a) Pre-Reform Years

Estimates of the distribution between the physical and financial assets for the decades of 1950s, 1960s and 1970s reveal that, by and large, financial assets averaged around 45 percent during this period. The reasons for this relatively low share of financial assets are attributed to habit, illiteracy and absence of alternatives in the form of a well developed banking and financial sector. Towards the end of the 1970s,

the share of financial assets moved up to around 50 percent and since then, with a few jumps and falls, it has been steady at around 50 percent of the total household sector savings in the economy. Improvement in the share of financial assets during this period are attributed to:

i) increase in household income that has taken place due to economic development and the accompanying distribution and consumption factors; and

ii) expanded infrastructure of banking and other facilities providing increased access to greater segments of the population.

Post-Reform Years

The change in the financial assets portfolio of the household sector investments, during the post-reform years of 1991-2007 is presented in Table 5.3.

Table 5.3 : Savings of Households in Financial Assets (%)

Instruments	1990-91	1999-00	2003-04	2006-07
I Currency	10.6	8.9	10.1	8.6
II Bank deposits	31.9	33.7	42.8	46.2
III Non-banking deposits	2.2	3.6	0.2	0.9
IV Life insurance	9.5	11.4	14.9	15.0
V Provident and pension fund	18.9	23.7	13.0	9.2
VI Claims on government (Incl. small savings)	13.4	12.7	17.7	5.2
VII Shares and debentures	8.4	6.3	9.8	6.3

The analysis of data in Table 5.3 brings out the following.

1. The three fairly steady avenues of household savings are: bank deposits, life insurance and currency.

2. Despite the growth of the capital market in mobilising funds, the household savings channelled to the stock markets as a proportion to total savings is relatively low.

3. Households continuously moved their savings back and forth between instruments of different kinds in response to changes in returns, market trends, etc.

II **Government Savings:** Government savings come from surpluses of public enterprises and other public financial institutions. Government savings formed 17.2 percent of total savings in the economy in the year 1950-51, which increased to 20.6 percent in 1960-61. Since then,

there has been a steady decline in government savings which touched a low of minus 2 percent in 2001-02. Among the factors responsible for this trend, the most important are identified as follows:

i) Deterioration in the overall tax GDP ratio, and

ii) The increasing losses over time made by public sector utilities such as state Electricity and Water Boards, State Road transport Corporation, and the Railways.

Since 2003-04, government savings have shown a turn around accounting for about 2% of the GDP in 2005-06 and 2006-07. This further went up to 3.0% in 2007-08. This change is attributed to: (a) economic upturn; and (b) the efforts to improve fiscal management at the centre and in the states. With the central government keen to abide by the targets set by the Fiscal Responsibility and Budget Management Act and most of the state governments enacting similar legislation, one can expect a further improvement in the savings of government administration. These are projected to go up to 4% of the GDP in 2011-12. Even at this, it would account for only 10.26 percent of the total savings which is less than the level in which we were in the decades of 1950s and 1960s.

III **Private Corporate Savings:** The share of private corporate sector in total savings was 13.4 percent in 1960-61. This, however, came down to 7.9 percent in 1990-91. But it has been moving upwards since then, reaching an average of 17.4 percent during the Ninth Plan period and 19.1 percent during the Tenth Plan period. However, even with this improved performance, when compared with that of the other countries, it has been disappointing. Whereas in developed countries the corporate sector contributes significantly to national savings, it has not done so in India, in spite of the development within the secondary and tertiary sectors of the economy and the significant increase in manufactured output. This is attributed to the following factors:

i) massive increase in the use of loan capital in Indian industry and the fall in the share of profits in factor incomes;

ii) significant position of the unincorporated private sector in Indian manufacturing and commerce which is reflected in household savings and not in the 'private corporate savings'; and

iii) the taxation policy which discourages the accumulation of undistributed profits in companies and corporations coupled with a low profitability syndrome.

Check Your Progress 1

1. How is saving defined and measured in an economy?

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2. What do you understand by investment? Distinguish between gross capital formation and net capital formation.

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3. What are the major sources of savings in India? Which sector makes the largest contribution to savings in India?

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4. Mention the factors that are responsible for the growing share of financial assets in the household savings in India.

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5.4 TRENDS IN INVESTMENT IN INDIA

The gross domestic capital formation (GDCF) in the economy has shown an upward trend ever since the beginning of economic planning in 1950-51. However, there have been breaks in between. In the pre-reforms period the rate of investment as a proportion of GDP went up from 10.0 percent in 1950-51 to 24.8 percent in 1978-79. The increase in the succeeding years was less steep with the rate of investment touching only 26.3 percent in 1990-91. Subsequently in the post-reforms period, the rate of investment experienced a decline, during the decade of 1990s. A major increase occurred in 2004-05 when it crossed the 30 percent mark (Table 5.4). Comparing the trends in gross domestic savings presented in Table 5.1 with that of gross domestic capital formation in India presented in Table 5.4, it would be seen that the investment rate has moved in consonance with the growth in domestic saving rate. Such a trend in investment linked to domestic savings augurs well for sustained economic growth.

Table 5.4: Rate of Investment

(percent of GDP at current market prices)

Year	Rate of Investment
2001-02	24.2
2002-03	25.2
2003-04	26.8
2004-05	31.6
2005-06	34.5
2006-07	36.0
X Plan Average	30.8
2007-08	36.3

5.4.1 Distribution Pattern of Investment

The distribution pattern of investment can be studied in three ways as follows:

1. **Distribution of Capital Formation by Type of Asset:** Capital formation by asset in an economy can take three forms viz. (a) construction, (b) machinery and equipment, and (c) changes in stocks (i.e. inventories). Presently, construction accounts for about 40 percent of GDCF, machinery for 50 percent and inventories for about 10 percent.

2. **Distribution of Capital Formation by Industry of Use:** Investment has been done in all the three sectors of the economy (viz. primary, secondary and tertiary) with varying degrees of concentration. Presently, the tertiary sector accounts for the largest share of capital formation (more than 42 percent) followed by the secondary sector with a share of about 35 percent. The agricultural sector has thus relatively lagged behind the other two sectors in attracting investment.

   The trends in investment over the period 1950-51 to 2006-07 tell us that the sub-sectors which have received higher investment are manufacturing, mining, construction and electricity. On the other side of this investment profile, sectors which have experienced a declining trend in investment include real estate, agriculture, transport and public administration. In the remaining sectors (viz. trade, hotels & restaurants, law & order and judiciary) the changes over the period are marginal, [see key words for a sectoral classification of industries]

3. **Distribution of Capital Formulation by Management:** We can also study the distribution of capital formation by sectors of management viz. the public and the private sectors. The gross capital

Table 5.5 : Gross Capital Formation In India

(Rs. Crore)

Year	Public	Private	Total
1950-51	294 (28.3)	743 (71.7)	1037 (100.0)
1960-61	1259 (50.1)	1253 (49.9)	2512 (100.0)
1970-71	3104 (43.0)	4107 (57.0)	7211 (100.0)
1980-81	12994 (48.2)	13990 (51.9)	26964 (100.0)
1990-91	49707 (43.0)	65982 (57.0)	115689 (100.0)
2000-01	144038 (29.2)	348647 (70.8)	492685 (100.0)
2006-07	321753 (22.3)	1120851 (77.7)	1442604 (100.0)

Note: Figures in parentheses are percentage to row totals.

formation in the public sector has increased from Rs. 294 crore in 1950-51 to Rs.3,21,753 crore in 2006-07 (Table 5.5) maintaining an upward trend throughout the five decades period. The gross capital formation in the Private Sector too has been rising. During the period 1950-51 to 2006-07, it went up from Rs. 743 crore to Rs. 11,20,851 crore. Leaving out the year 1950-51, during the period 1961-81, the gap in the relative shares of GCF between the public and the private sector was marginal. This difference began accentuating from 1990-91 and widened steeply to reach the 1950-51 level by the year 2000-01. This difference further increased by the year 2006-07. Evidently, public sector investment was a low-key affair in the post-reform phase. The trends are also suggestive of the fact that the policy of economic liberalisation succeeded in inducing larger investment in the private sector.

5.5 NET CAPITAL INFLOW

Net capital inflow is the difference between 'net domestic capital formation' and the 'net domestic saving'. It can be measured as a proportion of national income, or alternatively expressed as the difference between the domestic saving and investment rates. If the domestic investment rate exceeds the domestic saving rate, the rate of net capital inflow will be positive. Conversely, the net capital inflow will be negative if the investment rate falls short of the saving rate.

As reviewed above, there has been a significant increase both in the saving rate and the investment rate in India since 1950-51. The investment rate, by and large, has exceeded the saving rate to yield a small positive net capital inflow. As percentage of NDP, the net inflow of foreign capital to India has been very modest at around 1 to 2 percent (Table 5.6). You will study more about foreign investment in unit 18 later.

In future, as the investment rate is pushed up to achieve the postulated higher rates of growth, increasing resort to foreign resources may become inevitable. This implies that the flow of foreign investment has to increase. Any attempt to slow down this trend will affect the growth and lead the economy to stagnation. A positive change in this scenario in more recent years has been that the FDI is becoming a major component of foreign capital inflow. Such capital not only bears the risk of investment decisions, but is also not easily reversible. Earlier, the balance of payments deficit was primarily financed by debt inflows. The rise of investment inflows implies that the economy can now absorb a larger balance of payment deficit.

Table 5.6: Net Inflow of Foreign Capital (as % of NDP)

Year	Net Inflow	Year	Net Inflow
1950-51	-0.2	2001-02	0.9
1960-61	3.1	2002-03	0.8
1970-71	1.0	2003-04	2.2
1980-81	1.7	2004-05	0.1
1990-91	3.4	2005-06	1.4
2000-01	1.4	2006-07	2.0

Check Your Progress 2

1. What has been the long-term behaviour of investment in India? What change has occurred in it during the last few years?

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2. In which sector of the economy, public or private, larger share of investment has taken place?

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3. Define 'net capital inflow'? What has been its trend in India in the recent years as percentage of NDP?

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5.6 FINANCIAL SYSTEM IN INDIA

The financial system influences the pace of economic development as it performs the role of intermediation between the saver and investor. Financial intermediation facilitates the mobilisation of financial resources on the one hand and its allocation to potential investments on the other. Financial institutions thus act as a important vehicle for mobilising and transferring the economy's surplus to the ultimate users.

Among the financial institutions, the most important, both in terms of their numbers and spread, are the commercial banks. The commercial banking system is spread through the length and breadth of the country. It has three components viz. public sector banks (consisting of the State Bank of India and its seven associate banks, 20 other banks principally owned by the government), private sector banks and the foreign banks. Besides, there are also co-operative banks and regional rural banks performing commercial banking functions. The relative significance of private sector banks and foreign banks is increasing in the emerging new economic environment. We will learn more abut the banking sector, in the section 5.7 of the unit.

In a liberalised economic environment, the most significant role of financial intermediation is played by the capital market. The capital market in India has also been spreading both in its depth and spread. This has been facilitated by the emergence of new institutions and instruments, both capital market instruments and money market instruments. It is a paradox of an open economy that the more liberalised a system, greater is the need for watchdog bodies. The Security Exchange Board of India (SEBI) has emerged as an important regulatory body overseeing the functioning of the capital market, and directing its growth along the desired course. You will learn more about capital markets in section 5.8 of the unit.

The state also participates in the financial system both as a borrower and lender. It has the responsibility to define the policy parameters, and help in building up a conducive banking environment to support its growth and welfare objectives. Adequate institutional arrangements need to be

put in place to ensure the smooth flow of resources to the governments (at different tiers, i.e. union, state and local government levels) and the non-governmental agents in the economy i.e. private sector economic agents of which the credit needs of the entrepreneurial class including petty retail traders need to be ensured. For this, a sound banking sector is vital. It is, therefore, time to take a look at the banking sector development in India.

5.7 BANKING SECTOR IN INIDA

Modern banking business was initiated by British Agency Houses set up in Kolkata and Mumbai. The first bank called the Bank of Hindustan was established in 1770. By the time the country achieved independence in 1947, India had a fairly well-developed and closely knit banking system.

5.7.1 Evolution of Banking Since Independence

Since independence, banking in India has evolved through four distinct phases.

1. **Foundation Phase:** It lasted through the decade of 1950s and 1960s. This phase witnessed the development of necessary legislative framework for facilitating the functioning of the banking system for meeting the requirement of the Indian economy.

2. **Expansion Phase:** This began in mid 1960s and gained momentum after the nationalisation in the late 1960s.

3. **Consolidation Phase:** This phase began around 1985. During this phase, attention was paid to improving housekeeping, customer service, credit management, staff productivity and profitability of the banks.

4. **Reform Phase:** Beginning 1991, this phase saw important initiatives like introduction of new accounting practices, development of norms relating to income recognition and capital adequacy. This phase also saw an increasing trend towards the consolidation process driven by competition.

Presently, the commercial banking system consists of 181 banks and 71,781 branch offices.

5.7.2 Constituents of the Commercial Banking System

As said in the previous section, the three constituents of the commercial banking structure in India are: (i) public sector banks, (ii) private sector banks, and (iii) foreign banks.

Public Sector Banks: The nationalisation of the banks took place in two phases. In the first phase, 14 major commercial banks were nationalised in 1969. In the second phase, 6 more banks were nationalised

in 1980. With the nationalisation, banks in India came to acquire two faces viz. (i) a commercial side i.e. to generate income for building the financial strength necessary to satisfy the regulatory standard and also provide for the wherewithal of future growth; and (ii) a non-commercial side i.e. to finance the setting up of economic enterprises in backward areas so as to aid the process of balanced regional development and social uplift.

Public sector banks account for a little over 70 percent of total deposits and total advances of all banks in India.

Banks in the Private Sector: The area of operation of private sector banks had considerably narrowed down after the two-phase nationalisation. Private sector banking received a boost with the announcement of the New Economic Policy in 1991. The RBI issued a set of guidelines on January 22, 1993 for private sector companies wishing to enter the banking sector. Following this, initially eight new private banks were set up. There has been a gradual expansion of the private sector banks accounting for a market share of 20 percent of total deposits and advances of the banking sector. At present, there are 28 banks with 7,099 branches. A recent study has brought out that the private banks are performing better than the nationalised banks in terms of loans advanced, growth, average yield on earning assets, innovative provisions and low operating expenses to emerge as the frontrunners in the industry.

Foreign Banks: The foreign banks in the private sector are branches of those banks which are incorporated in foreign countries. There are at present 29 such banks with 272 branches. Most foreign banks perform essentially the same range of services as commercial banks, except that their focus in terms of product and customers are different in that they mainly cater to the upper-end segments of the society. Besides, these banks have been introducers of modern financial engineering products - such as swaps, electronic fund transfers, etc.

5.7.3 Banking Reforms in India

The Government had appointed two committees (both under the chairmanship of M. Narasimham) the first to examine the aspects relating to the organisation, structure, functions and procedures of the banking system, and the second to examine the issue of banking reforms. Acting on the recommendations made by these two committees, the government initiated a series of reforms in the banking sector.

Goals of Reforms

Goals of banking sector reforms are defined as follows:

i) To correct and improve the macro-economic policy setting within which the banks operate. This involves monetary control reforms

including rationalisation of interest rates, redesigning direct credit programmes, and bringing down the levels of resource pre-emption;

ii) To improve the financial health and condition of banks by recapitalising and restructuring the incentive system under which banks operate;

iii) To establish the related institutional infrastructure to assist in and of monitoring, audit, technology up-gradation and legal support;

iv) To improve the level of managerial competence and the quality of human resources by reviewing the policies relating to recruitment, training, placement, etc.;

v) To improve access to financial savings;

vi) To reduce intermediation costs and distortions in the banking system;

vii) To promote competition by the establishment of a level playing field allowing for free entry and exit of operators in the sectors under a regulatory framework; and

viii) To develop transparent and efficient capital and money markets.

The major reforms introduced so far may be broadly classified as follows:

i) There are overall monetary policy issues relating to interest rates and exchange rates, reduction in SLR and CRR, modification in refinance facilities, development of alternative system of monetary controls, development of securities and capital markets, etc.

ii) There are measures for strengthening banks by way of transparency in the financial statements of banks, clearing up of balance sheets by way of prescription of prudential norms for income recognition, asset classification and provisioning for impaired assets, and improving the risk absorption capacity by adopting prudential norms for capital adequacy. Computerisation of banking transactions, reorganisation of individual institutions to enhance competitive capabilities and to facilitate provision of better services to managements in managing the affairs of individual banks, machinery for customer grievances redressal, etc. fall into this category.

iii) There are steps to enhance competition in the financial sector by allowing entry of private – Indian and foreign – banks with state of the art technology, giving more freedom to expand the operations of existing private banks, and widening the scope of activities of banking and non-banking institutions.

iv) There are issues relating to strengthening the regulation and supervision over banks and more particularly over the very large number of non-banking financial institutions.

v) Further, a number of steps have been taken to ensure balanced development of various segments of the financial market as also to preserve the integrity and transparency of the banking system.

Outcome

The outcome of the implementation of various reform has been impressive with the banks responding to the deregulation measures by restructuring their operations and upgrading their performance standards. Introduction of a new balance sheet format, attainment of capital adequacy and institution of many prudential norms have helped to bring out the true strengths and weaknesses of each bank. The reforms have thus created strong compulsions for improvement in the working of banks. This resulted in some banks, which were making losses in successive years, achieve a turnaround.

Focus Areas for Future

Focus areas for future include:

1. Cost management which is a key to sustainability of banks' profits as well as their long-term viability.

2. Recovery management which is the key to the stability of the banking sector.

3. Technological intensity of banking which is an area in which India needs to significantly catch up.

4. Risk management practices which is important to stay ahead in a competitive environment. Banks need to formulate 'early warning indicators' suited to their own requirements, business profile and risk appetite.

5. Improved corporate governance which would provide an opportunity to accord greater freedom to the banks' boards and help move away from micro regulation to macro management.

Check Your Progress 3

1. Trace the evolution of banking sector in India since independence.

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2. State in brief the major constituents of the commercial banking system in India.

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3. Mention in brief the goals of banking reforms in India.

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5.8 CAPITAL MARKET IN INDIA

In the liberalised economic environment, the capital market is all set to play a highly critical role in the process of development. The capital market has to arrange funds to meet the financial needs of both the public and private sector units. The capital market has also to arrange for the other resource needs of both the domestic and foreign units. What is more critical is that the changed environment is characterised by cut throat competition. Ability of enterprises to mobilise funds at cheap cost will determine their competitiveness vis-à-vis their rivals. Capital market, thus, consist of all those institutions and arrangements that are required to ensure the smooth functioning of different players (e.g. banks, stock exchanges, regulators, etc.) charged with the responsibility of arranging financial resources for production units in the economy. The capital market in India has witnessed metamorphic changes in recent past.

5.8.1 Changes in the Capital Market

Three sets of changes in the Indian capital market can be identified which set the market of the 21st century different from what obtained earlier.

a) Establishment of New Institutions

The composition of the capital market has undergone a complete change. Till recently, the capital market in India was dominated by Bombay Stock Exchange. The daily turnover on the Bombay Stock Exchange (BSE) alone exceeded the total turnover of all other exchanges put together. The BSE, with its monopolistic share of the market, was an impediment to the spread and diversification of capital market structure. In response to this situation, the National Stock Exchange (NSE) was set up. The NSE has since emerged as the largest exchange of the country. The NSE has also served as a catalyst of change for other exchanges in introducing on-line trading systems.

Along with NSE, we have also witnessed the emergence of mutual funds.

Different types of mutual funds catering to the needs of different types of investors have been set up in the country.

The increasing growth of the capital market has also witnessed the emergence of foreign institutional investors (FIIs) as significant players. Their sale and purchase decisions make a significant impact on the market conditions.

Along with these new players, a set of new supporting institutions have emerged. Among these, specific mention may be made of: (i) Discount and Finance House of India, (ii) Securities Trading Corporation of India, (iii) Stock Holding Corporation of India, and (iv) Settlement and Depository Systems.

b) Introduction of New Instruments

Along with new institutions there have emerged new instruments on the capital market. These encompass both the domestic instruments as also foreign instruments. Despite this, it is argued that there is tremendous scope to deploy new financial instruments connected to equity, debentures, bonds, add-on products and derivatives. This requires appropriate changes in certain economic legislations. The initiative on the part of the Indian corporate enterprises to take risks by fine tuning their decision-making mechanisms to suit the investor psychology and market preferences is an important factor which influence the development of these new financial instruments.

c) Changes in the Administrative Framework

Responding to the changes in the environment, the administrative framework has also undergone a overhaul. The earlier chains have been removed and the capital markets made free to find their own depth and strength. However, it is important to note that in a free market economy whenever chains are removed effective watchdogs or regulatory bodies have to be employed. Such bodies are required not only to ensure proper functioning of the capital market agents but also to ensure other goals of development such as equity, competition and fair play. In India, these functions has been entrusted to the Securities and Exchange Board of India (SEBI). The SEBI, in turn, has been laying down guidelines to be followed by different players in the different segments of the market.

5.8.2 Globalisation and the Indian Capital Market

With the gradual opening up of the Indian economy there has been an increasing presence of foreign portfolio investment in the Indian markets. The Indian capital market is thus acquiring a global image. Indian capital market has responded to all these developments favourably. However, globalisation of the capital market will also mean the following:

i) The market will be more sensitive to developments that take place abroad.

ii) There will be a power shift as domestic institutions are forced to compete with the FIIs who control the floating stock.

iii) Structural issues will come to the fore with a plain message i.e. reform or despair.

iv) Significance of mutual funds will increase for the individual investor as they would be managed by professional managers insulating from the risk of the volatile stock market operations.

5.8.3 Deficiencies in the Capital Market

In view of the changing global environment, it is necessary that the deficiencies in the Indian capital market are identified and proper solutions found to tackle these deficiencies. Important deficiencies in the Indian capital market are identified as follows:

i) lack of diversity in the financial instruments;

ii) lack of control over the disclosure of financial information;

iii) under development of secondary market;

iv) prevalence of insider trading and front running leading to manipulation of security prices;

v) existence of unofficial trade in the primary market, prior to the issue coming into the market;

vi) absence of proper control over brokers and sub-brokers;

vii) 'wholesale' nature of the market which makes it more suitable for institutional investors and high worth individuals than for the numerically large small investor class;

viii) passive role of public financial institutions in checking the malpractices; and

ix) high cost of transactions and intermediation, which is mainly due to the absence of well-defined norms for institutional investment.

All these issues fall within the domain of the SEBI. The SEBI is engaged in the task of finding meaningful solutions to these.

Check Your Progress 4

1. What are the changes in the capital market that have taken place in recent years?

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2. What is the impact of globalisation on the Indian capital market?

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3. Mention in brief the deficiencies in the Indian capital market.

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5.9 FEDERALISM IN RESOURCE LINKAGES

Besides being a facilitator, the state has a more direct stake in the financial system, as it needs financial resources to meet its own expenditure liabilities. In a federal set up, governments are set up at different tiers to discharge different functions and responsibilities. Each of these governments, thus, has its own stake in an efficiently functioning financial system.

5.9.1 Federal Finance in India

India with a federal form of government, has a federal finance system. The essence of the federal form of government is that the Central and the State Governments should be independent of each other in their respective, constitutionally demarcated, spheres of action. The constitution should spell out distinctly and separately the functions to be performed by respective governments. Once the functions of the Governments have been spelt out, it becomes equally important that each of the Governments should be provided with competent sources for raising adequate revenue to discharge the functions entrusted to it. Thus, for the successful operation of the federal form of government, two important conditions are essential viz.

i) Each government should have independent sources of revenue; and

ii) Each government should have total command over its resources to meet its needs.

In short, financial independence and adequacy constitute the backbone of the federal finance system.

5.9.2 Evolution and Provisions

The evolution of the federal finance system in India can be traced to the Government of India Act, 1935. This Act was based on the general principles of financial independence for the provinces. The constitution of independent India accepted this basic principle of federal finance to achieve the following:

1. **Financially strong Centre:** This is sought to be achieved through the following measures:

   i) Powers of concurrent taxation have been avoided.

   ii) The centre has been assigned the more elastic and higher-yielding sources of revenue.

   iii) The centre has been given the subjects of money and banking, currency and coinage, and the power to resort to deficit financing.

   iv) The centre has been provided with certain exclusive sources of revenue.

   v) The residuary powers are with the centre.

2. **Efficient allocation of functions and financial powers:** The constitution has divided the various functions into three lists viz. (i) The Union list, (ii) The states list, and (iii) The Concurrent list. Financial powers have, likewise, been divided between the centre and the states.

3. **Provision for resource transfer:** To this end, the constitution provides three means viz. (a) tax-sharing, (b) grants, and (c) loans.

4. **Flexibility in resource transfers:** Resource transfers from the centre to the states are recommended every five years by the Finance Commission.

A detailed discussion of the issues of federal finance is provided in unit-10 of the course.

5.10 LET US SUM UP

Monetary and financial resources play a critical role in the process of economic development serving to lubricate the growth engine. The origin of finance lies in the amount of savings that are generated in the economy and the financial system by which they are mobilised and lent for purposes of capital formation. India has attained high rates of saving and investment enabling the realisation of high economic growth rates achieved in recent years. The process of capital formation is facilitated by the presence of a healthy banking and capital market structure. Both the banking and capital market structure have undergone dramatic changes over the last two decades or so. These are responding, very actively, to global developments, and, in the process, are getting modified to suit the

requirements of the increasingly globalising Indian economy. It is important at this stage of development to carefully monitor the growth of banking and capital market institutions to make sure that these do not get afflicted by the ailments from which similar institutions in developed market economies have suffered in the recent past.

5.11 KEY WORDS

Saving/Savings : Saving represents that part of national product that has not been used up in consumption. It is usually expressed as a percentage of GDP where upon it is indicated as 'rate of saving'. Savings, on the other hand, refers to the 'stock of saving' representing the availability of saving at a particular point of time.

Investment : Refers to expenditure incurred on acquisition of capital goods

Net Capital Inflow : Is the difference between 'net domestic capital formation' and 'net domestic savings'.

Industrial Classification : The economy is classified into nine broad industries. These are: (i) agriculture & allied (ii) mining & quarrying, (iii) manufacturing and repair, (iv) electricity, gas and water, (v) construction, storage & communications, (vi) trade, hotels & restaurants, (vii) transportation, storage & communications, (viii) financing, insurance, real estate and business services, and (ix) others (e.g. law & order, judiciary, educational, health and personal services).

5.12 SOME USEFUL BOOKS

1. Reserve Bank of India, Report on Currency and Finance 2006-08, Vol. I and Vol. II.

2. Government of India, Economic Survey, 2007-08.

3. Planning Commission, Eleventh Five Year Plan: 2007-12.

5.13 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See sub-section 5.2.1

2. See sub-section 5.2.2
3. See sub-section 5.3.2
4. See sub-section 5.3.2

Check Your Progress 2

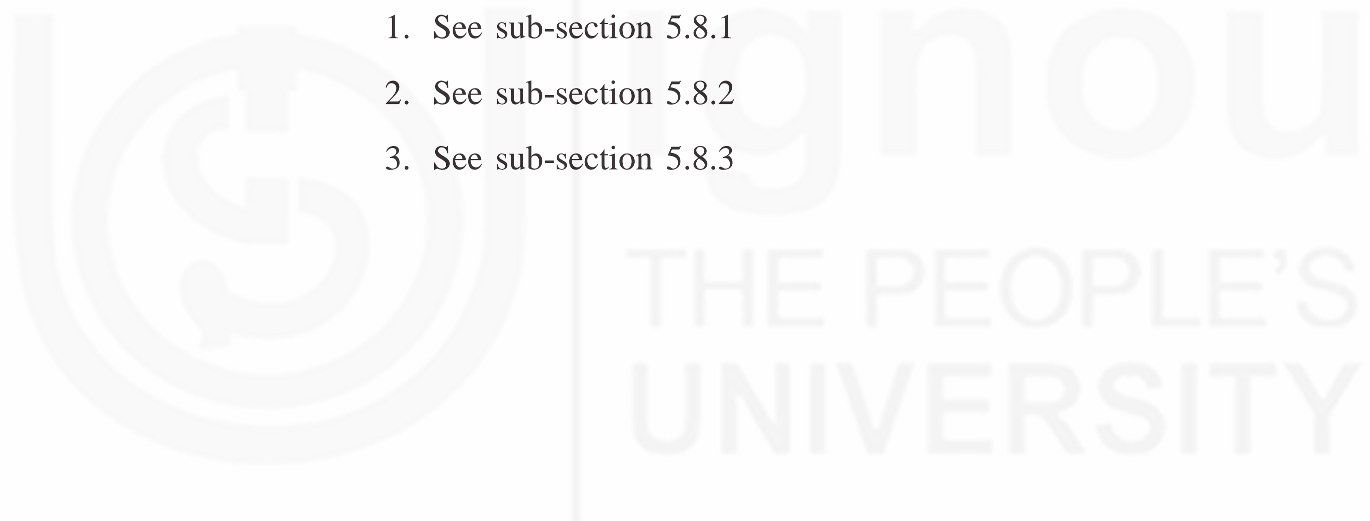
1. See section 5.4
2. See sub-section 5.4.1
3. See sub-section 5.4.2

Check Your Progress 3

1. See sub-section 5.7.1
2. See sub-section 5.7.2
3. See sub-section 5.7.3

Check Your Progress 4

1. See sub-section 5.8.1
2. See sub-section 5.8.2
3. See sub-section 5.8.3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UNIT 6 PHYSICAL NATURAL AND ENVIRONMENTAL RESOURCES

Structure

6.0 Objectives

6.1 Introduction

6.2 Physical and Natural Resources

- 6.2.1 Land
- 6.2.2 Water
- 6.2.3 Forests
- 6.2.4 Minerals

6.3 Energy Resources

- 6.3.1 Sources of Energy
- 6.3.2 Nature of Energy Problem
- 6.3.3 Energy Policy

6.4 Infrastructure

- 6.4.1 Transport and Roads
- 6.4.2 Ports
- 6.4.3 Communication

6.5 Let Us Sum Up

6.6 Key Words

6.7 Some Useful Books

6.8 Answers or Hints to Check Your Progress Exercises

6.0 OBJECTIVES

After reading this unit you will be able to:

- discuss the availability, utilisation and issues associated with the different type of physical and natural resources in India;
- explain the sources of energy and the policy for augmenting its supply to aid the growth targets in the country; and
- discuss the infrastructural availability and its adequacy vis-à-vis the policy initiatives to improve the same in India.

6.1 INTRODUCTION

Natural resources, as conventionally understood, include all those objects and products that human labour, combined with inputs of capital and enterprise, can extract from nature and make use of them to produce goods and services. Natural resources are not static but dynamic in their nature i.e. they keep on changing. As the process of economic development gathers momentum, the demand for natural resources increase. In such a situation, it becomes critical that the exploitation of natural resources is avoided keeping in view the interests of future generations. In other words, 'sustainable development' should be the goal.

Transport, communication and energy constitute the most important part of economic infrastructure. The different modes of transport, that have evolved with a premium on greater speed, point out to how the world is positioned on the fast changing time-space-speed vectors. Distances are measured on the basis of speed and not in spatial terms. In all these, consumption of energy is the single most important parameter that distinguishes a developed economy from that of a developing economy.

In this unit, we examine the state of the Indian economy in the context of these resources and their adequacy or otherwise to meet the growing needs of a rapidly developing economy.

6.2 PHYSICAL AND NATURAL RESOURCES

Land, water, forests and minerals are four important sources of resource critically used in economic process. In this section (6.2) we deal with each one of these four resources, before we move on to the energy and infrastructural resources in the subsequent two sections, 6.3 and 6.4, respectively.

6.2.1 Land

The total land area in a country sets definite limits within which the process of economic development needs to be organised. As this process advances, the demand for land increases vis-a-vis new and better use for land recognised. Economic theory tells us that this shift is from the agricultural use to the non-agricultural uses. More specifically, the non-agricultural uses are for industrial, construction and trading purposes. In the case of a developing labour-surplus agro-based economy, the pressure on land used predominantly for agricultural processes, is a matter of serious concern. Nonetheless, any diversion of land from agricultural to non-agricultural uses disrupts not only the agricultural supplies but also the very way of life of those engaged in farming. Such a shift or change carries the potential of adversely affecting the entire process of growth. Therefore, in the face of increasing requirements of land, what is generally stressed is that the inaccessible, wasteland and

the land which have hitherto been lying unutilised, should be focussed upon and made serviceable for agricultural and non-agricultural uses.

It is in this context, that statistics relating to the land utilisation pattern become significant. These help to determine the contours of future development as far as the availability of land resources is concerned.

Pattern of Land utilisation

The pattern of land utilisation in India is indicated in Table 6.1. The available land, on the basis of its use, is classified into two parts, viz. (i) agricultural land, and (ii) non-agricultural land.

Table 6.1: Land Utilisation in India

(Million hectare.)

	Use	Area
1.	Area under non-agricultural uses	23.57
2.	Barren and uncultivable land	19.26
3.	Net sown area	141.10
4.	Forest lands under good tree cover	69.41
5.	Miscellaneous tree crops and groves	3.37
6.	Cultivable wastelands	13.66
7.	Current fallow (i.e. land currently left unutilised)	14.80
8.	Old fallow	10.19
9.	Permanent pastures and grazing grounds	10.90
	Total *	306.25

** total geographical area for which land utilisation statistics are available*

(i) Agricultural Land: It includes net sown area, current fallows and land under miscellaneous tree crops and groves. Agricultural land in India totals a little over 50 percent of the total geographical area in the country. This is the highest among the large and medium-sized countries of the world. This indicates:

a) the influence of favourable physical factors (like size, extent of plains and plateaus, etc.) and

b) the extension of cultivation to a large proportion of the cultivable land.

But, because of the large population of the country, the per capita arable land (i.e. land suitable for agriculture) is low: 0.16 hectares against the world average of 0.24 hectares, and only one-fourth of that in US (0.67 hectares). The per capita arable land in some other countries are: Australia (2.75 hectare), Canada (1.53 hectare), Brazil (0.33 hectare), etc.

About 15% of the sown area is multi-cropped (i.e. sown more than once in a year). While, most of the multi-cropped area is irrigated, only one-fourth of the gross cropped area is irrigated. The security provided by the irrigation facilities is a major factor in intensive application of labour and other inputs to obtain high yields.

i) **Non-agricultural land:** This includes (i) land under forests and permanent pastures, (ii) land under other non-agricultural uses (towns, villages, roads, railway, etc.) and (iii) land classified as cultivable waste as well as barren and uncultivated land of mountain and desert areas.

Trends in Land Utilisation

Two important changes in the land utilisation pattern witnessed during the last five decades are as follows:

A. **Reclamation of waste and fallow lands:** Reclamation of waste and fallow land was relatively rapid during the 1950s, following land reforms, such as the abolition of Zamindari and Jagirdari systems. The dispossessed Zamidars reclaimed land which had been left to them for 'personal cultivation' while their former tenants reclaimed waste and fallow lands to which they had acquired rights. The process was aided by loans and subsidies from the government.

B. **Significant increase in the area sown more than once:** The 'area sown more than once' has also shown a significant increase during the last five decades. Also, the (a) demand for land in non-agricultural uses is constantly increasing, and (b) a further increase in net sown area may not be feasible. It is, thus, imperative that attention is paid towards an improvement in agricultural technology. This should make it possible to raise three to four crops a year as many other countries are doing. With the new agricultural strategy having very much come to stay, the objective should be within easy reach.

Perspectives

It is clear that as the total supply of land is a fixed factor, what is required is an effective rationing of land among the varied users. As far as possible, no further encroachments on cultivable land should be allowed. This requires priority to be given to the use of only non-cultivable land for non-agricultural uses. This will not only save cultivable land for agriculture, but will also promote balanced regional development.

6.2.2 Water

Water is another basic important resource. It is also an important source of energy. About 25% of electricity generated in the economy is from the hydel sources. The other important use of water is in irrigation. In a country where agriculture gives sustenance to a large proportion of population, provision of water for irrigation can make crucial difference i.e. it can either stimulate the economic activity or depress it altogether.

Sources of Water

The important sources of water can be classified into two parts: (i) surface water, and (ii) ground water. Surface water is available from rivers, lakes, etc. Ground water is available from wells, springs, etc. Other sources of water which have not yet been tapped but represent a potential source are: saline lakes, saline springs, snow and ice-fields. Surface water sources are replenished by rainfall. Surface water is available in the form of vast network of rivers available in the country.

Rivers

The rivers in India may be classified as follows:

i) The Himalayan rivers are generally snow fed and have, therefore, a continuous flow throughout the year. During the monsoon months, the Himalayas receive heavy rainfall and the rivers discharge the maximum amount of water causing frequent floods.

ii) The Deccan rivers are generally rain-fed and, therefore, fluctuate in volume.

iii) The Coastal streams, especially of the west coast, are short in length with limited catchment area. Most of them are non-perennial (i.e. not long lasting).

iv) The streams of the inland drainage basin of Western Rajasthan are few with most of them of seasonal character.

Thus, although India possesses many reservoirs of water, they are inadequate as compared to the requirements. A UN report ranks India 133rd in a list of 180 countries for its poor water availability. It also ranks India 120th for water quality in a list of 122 countries. A recent World Bank report also estimates the per capita availability of water in India as 1,185 cubic metres (cm) as against 9,628 cm in the US, 3,371 cm in Japan, and 2,183 cm in China.

Issues Relating to Water

The principal issues relating to water are as follows:

i) increased demand for water from all sectors;

ii) lack of a rational water pricing policy impacting demand adversely;

iii) widespread conflicts over groundwater across the country;

iv) inefficient management of conflicts by policies and institutions mandated to solve the conflicts; and

v) new conflicts arising within states.

Groundwater is under serious threat of overuse in many parts of India. 360 districts have reported declining water level of over 4 metres during the past 20 years. In nearly one-third of the blocks in the country, ground water reserves have been or are close to drying-up and this figure is estimated to cross 60% in another 25 years. In this context, four interconnected programmes assume significance:

i) watershed development programme;

ii) renovation of all water bodies linked to agriculture which have fallen into disuse;

iii) correcting the deterioration of public irrigation works, notably state canal systems, arising due to cumulative neglect of maintenance and repair over the years, and

iv) rain water harvesting.

Check Your Progress 1

1. Briefly outline the trends in land utilisation in India during the last five decades.

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2. Mention in brief the different sources of water in India.

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3. What are the different water related issues in India?

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6.2.3 Forests

Forests produce the raw materials for industries, defence, communications, domestic use and other public purposes. They contribute to the country's exports generating a large volume of employment in the primary, secondary and tertiary sectors. They also provide materials like

fuel wood, small timber, fodder, etc. for direct use of many rural families. The benefits from forests in the matter of soil conservation, recreation, wildlife, etc. are well recognised.

Forests occupy about 711.03 lakh hectares, or about 23.68 percent of the total geographical area. Of this, dense forest category (i.e. 40 percent or more of the area covered by trees) amounts to about 58.0 percent.

Among the states, Madhya Pradesh has the maximum forest area of 77,265 sq. km., followed by Arunachal Pradesh (68,045 sq. km.) and Chattisgarh (56,448 sq. km.).

The area under forests in India is low as compared to the forest area in countries like Sweden (66%), Japan (64%), South Korea (63%), and USA (25%). It is also much less than the norm of 33% of the total reporting area recommended in the National Forest Policy of 1952.

The per capita forest land in India is less than 0.06 hectares as against the world average of 2.06 hectares. Further, the productivity of Indian forests is very low: 1.2 m^3 (cubic meters) per hectare as against the world average of 2.1 m^3. The demand for forest products is likely to increase fast in future. It is therefore necessary to review comprehensively the national forest policy, so as to ensure the attainment of 33% land area under forests on the one hand and a substantial improvement in forest productivity on the other.

6.2.4 Minerals

The mineral resources of India encompass a wide range of products which are necessary for a modern developed economy. According to the Geological Survey of India, there are 50 important minerals in 400 major sites in the country.

Minerals in India can be divided into four categories as follows:

1. Minerals of which India's exportable surplus can dominate the world market (e.g. iron-ore and mica);

2. Minerals of which the exportable surplus forms an important factor (e.g. manganese ore, bauxite, gypsum and others);

3. Minerals in which it appears that the country is self-sufficient (e.g. coal, sodium salts, glass sand, phosphates, bauxite, etc.);

4. Minerals for which India has to depend largely (or entirely) on foreign markets (e.g. copper, nickel, petroleum, lead, zinc, tin, mercury, platinum, graphite, etc.).

Minerals provide a base for the rapid industrialisation of the economy. The change over to an open market economy has opened up further

avenues for faster industrial growth requiring greater quantity of minerals. The geological setting of the country holds great promise for a boom in mineral production. However, for this, there are a few essential aspects that need to be worked into a proper mineral policy. The New Mineral Policy (2007) has noted these factors which are as follows.

i) The mineral resources are very unevenly distributed.

ii) The country is deficient in certain minerals like crude oil or petroleum, a large part of the present demand of which is being met by imports. In view of the rising prices of these minerals in international markets, it would be necessary to curb their growing use in the economy on the one hand, and make sustained efforts to explore the domestic sources of supply of these minerals on the other.

iii) There are minerals which are lucrative foreign exchange earners. Efforts should be made to devise a suitable policy to have a proper utilisation of these minerals in the national interest.

iv) The mining industry is mired in obsolete technology which need to be tackled.

Check Your Progress 2

1. Write a few lines on the present position of forests in India?

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2. Briefly mention the present position of minerals in India.

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3. Mention the important aspects that need be worked into a proper Mineral Policy in India.

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6.3 ENERGY RESOURCES

The need for energy in a developing economy needs no emphasis. It is a basic input required to sustain the economic growth and also to provide basic amenities of life to the entire population of a country. It is energy which is the dividing line between a subsistence economy and a developed economy. In the affluent United states, an average American consumer consumes nearly 40 times as much energy as an average Indian does. Annual consumption of commercial energy in kilograms (kg) of oil equivalent per capita in India is estimated at 513 (kg) as against 7,943 (kg) in USA. Empirically, it has been established that inadequate supplies of energy can inhibit development whereas even an assurance of an adequate supply can be a great stimulus to development.

6.3.1 Sources of Energy

Energy in India is produced from different sources. These can be classified into two groups as follows:

1. commercial sources - thermal power, hydel power, power from oil, gas, nuclear, etc. and

2. non-commercial sources - like firewood, dung cakes, etc.

Of the two sets of sources, commercial sources occupy a more prominent position. Electricity generation has increased from 264.2 billion kwh in 1990-91 to 662.50 billion kwh in 2006-07. The relative contribution of the different sources to electricity generation is provided in Table 6.2.

Table 6.2: Electricity Generation by Sources

(billion kwh)

Year	1990-91	2000-01	2006-07
Hydel	71.6	74.5	85.00
Thermal	192.6	408.1	537.40
Nuclear	-	16.9	17.68
Total	**264.2**	**499.5**	**662.50**

Presently, about 80% of total electricity is generated by thermal sources which has also made big progress in production since 1990-91. Further, nuclear energy has appeared on the scene, although, as yet it makes a small contribution.

The bulk of the commercial energy is consumed by the industrial sector followed by the transport and household sectors. A large part of the energy requirement in the rural and domestic sectors is met from non-commercial sources. The relative share of non-commercial energy is

expected to fall over the next decade. The energy requirements of the economy is expected to multiply by two to six times over the next decade depending upon the rate of growth of the economy. Even if India achieves a nominal annual average rate of growth of 5 percent, the per capita consumption of energy is expected to multiply by about 2.5 times. It is therefore imperative to accord high priority to power generation.

6.3.2 Nature of Energy Problem

By 'energy problem' we mean the problem of providing fuels for energy generation. It also includes its viable generation i.e. transmitting and distributing the energy produced at reasonable cost to those who need them, wherever they are.

The adverse energy situation is reflected from the reduced level of self-sufficiency in oil, widening gap between power demand and supply, the declining share of hydel power in total power generation, increasing dependence on oil imports and insignificant commercialisation of non-traditional sources of energy.

At present, India faces an energy shortage of 8% and a peak load shortage of 11.6%. With an estimated elasticity coefficient of 0.95, for an annual 8% growth in GDP, the demand would translate to 7.6% annual growth in electricity generation. In order to meet this demand, our power generation capacity would have to increase more than six times by the year 2032.

6.3.3 Energy Policy

For a healthy development of the power sector, the following factors need to be kept in view:

1. Minimise investment costs to enable better utilisation of available financial resources by opting for the low-cost production methods and technologies;

2. Minimise net outflow of resources, especially foreign exchange;

3. Minimise costs of energy production to bring about economies in power supply and keep power tariff at affordable levels without having to resort to heavy and unsustainable subsidisation; and

4. Maximise security of power supply by insulating from external and international events of catastrophic nature.

In pursuance of these objectives, various measures taken by the state can be divided into two parts viz. (a) energy pricing measures, and (b) non-pricing measures.

A. **Energy Pricing Measures:** Policies adopted in India under the energy pricing measures have aimed at the following:

i) meeting the energy needs of low income consumers on a priority;

ii) encouraging the shift from oil products as source of energy generation to domestically produced fuels;

iii) providing pricing subsidies to sectors such as agriculture and specific industries to keep the energy prices low; and

iv) priority for general price stability avoiding frequent and abrupt adjustments in energy price levels.

The trend in the recent pricing decisions is one in which the burden of increased import prices were passed on fully and, by and large, equitably to all stake holders.

B. Non-Pricing Measures: These include the following**.**

i) On the demand side, efforts have been towards regulation and management of energy demand, as also to improve the efficiency of energy use in different sectors of the economy.

ii) On the supply side, efforts have been intensified for larger production of both crude oil and refined products, as also of alternative sources of energy, both conventional and non-conventional.

iii) The other important steps have been:

- improving asset utilisation
- reducing transmission losses
- encouraging power generation by the private sector
- promoting low voltage equipments, largely to industrial sector and public utilities. Increasing the production of low voltage equipments which, in turn, is related to: (a) investment in technology and availability of power for production; and (b) level of investment needed in production units having a bearing on growth in the industrial sector in general.

iv) In 2002, the Accelerated Power Development and Reforms Programme was launched. It has since become the focal point of reforms in the distribution segment.

v) Power Grid Corporation is implementing the National Power Grid Projects. The project is estimated to cost Rs. 80,000 crore and is scheduled to be completed by 2012. Under this project, all the existing power grids will be integrated to form a national grid which will be accessible from any point in the country. This will help in shifting the excess power to power-deficit states.

vi) India Power Fund has been set up with the aim of:

- facilitating expeditious completion of power projects;
- accelerating investment in power sector; and
- promoting competition in line with the Electricity Act, 2003.

vii) Non-conventional energy is increasingly considered as a long-term strategy. A threefold strategy has been pursued in this respect which includes:

a) providing budgetary resources from the government for demonstration projects;

b) extending institutional finance for commercially viable projects, with private sector participation and foreign assistance;

c) promoting private investment through fiscal incentives, tax holidays, depreciation allowance, and remunerative price for the power supplied to the grid.

viii) Private sector participation is also being allowed in renovation and modernisation of hydro and thermal power projects. For this purpose, detailed guidelines have been laid down. These guidelines envisage three options which include: (i) lease, rehabilitate, operate and transfer (LROT), (ii) sale of plant, and (iii) joint venture between state electricity boards and private companies.

6.4 INFRASTRUCTURE

Infrastructure covers those supporting services that help the growth of directly productive activities like agriculture and industry. These services include a wide range starting from the provision of health services and education facilities to the supply of such needs as power, irrigation, transport, communication, etc. The subjects of health and education are separately covered in a later unit (unit 24) of your present course. Here we are dealing with some of the later mentioned services.

Infrastructure and Economic Growth

Infrastructure has a two-way relationship with economic growth. One, infrastructure promotes economic growth, and two, economic growth brings about changes in infrastructure. The first, the forward linkage, between infrastructure and economic growth, derives from the following factors:

i) Output of infrastructure sectors such as power, water, transport, etc. are used as inputs for production in the directly productive sectors viz. agriculture, manufacturing, etc. Therefore, insufficient availability of the former results in sub-optimal utilisation of assets in the latter.

ii) Infrastructure development such as transport improves productivity significantly.

iii) Infrastructure provides the key to modern technology in practically all sectors.

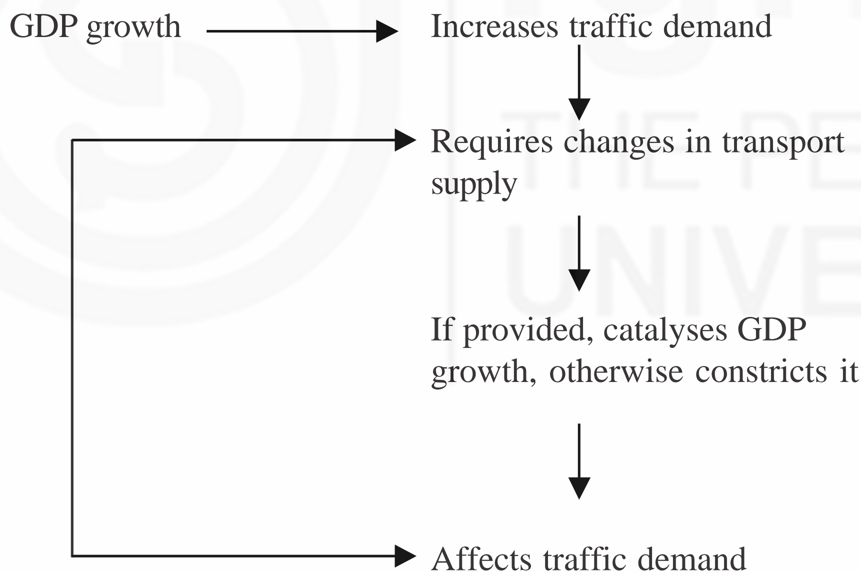
iv) A close association between infrastructure and GDP growth is observed in many studies. These studies have indicated that 1% growth in the infrastructure stock is associated with 1% growth in per capita GDP.

v) Studies have also revealed that generally around 6.5% of the total value added is contributed by infrastructure services in low income countries. This proportion increases to 9% in middle income countries and 11% in high income countries.

Thus given the above type of linkage, infrastructural development is important not only for economic growth, (vis-a-vis globalisation and technological innovation in manufacturing) but also for poverty reduction.

Second, the backward linkage, between economic growth and infrastructure, derives from the following.

Growth, in turn, makes demands on infrastructure. This can be illustrated with the help of the relationship between GDP growth and demand for infrastructure, as follows:



As a result, with increase in income levels, the composition of infrastructure changes. For instance,

a) In low income countries, basic infrastructure such as water, irrigation are more important.

b) In middle income economies, demand for transport grows fast.

c) In high income economies, power and telecommunications occupy more importance. Due to such linkages between infrastructure and the rest of the economy, efficiency, competitiveness and growth of

the economy hinges upon the state of development in the infrastructure sector.

Studies have indicated that with a 20 percent sustained increase in public investment in infrastructure, the government can accelerate real growth by 1.8 percentage points in the medium to long term i.e. six to ten years. This is further estimated to accompany a 0.2 percentage decline in the rate of inflation with the increase in resulting income leading to a 0.7 percentage point annual reduction in poverty in rural India. This shows the potential for achieving the much-debated 8-9 percent aggregate real GDP growth in the Indian economy.

In the rest of the present section of the unit we will focus on a few select aspects of infrastructure like roads, ports and communication.

Check Your Progress 3

1. What are the different sources of energy in India? What is the relative importance of different sources of commercial energy?

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2. Outline the objectives of an appropriate energy policy in India.

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3. What are the various initiatives taken by the government to solve the energy problem in India?

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4. State in brief the relationship between infrastructure and economic growth.

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6.4.1 Transport and Roads

Transport System and Efficiency: Linkage

The transport system in India (for that matter any country) is dependent on many important supporting services. The different modes and services on which the broad transport system depends are: railways, roads, ports, inland water transport, coastal shipping, airports and airlines. Railways and roads are the dominant means of transport in India carrying more than 95% of total traffic in the country. Although other modes such as coastal shipping and inland water transport also play a crucial role, the railways and roads dominate the transport land scape in the country.

It is necessary to foster the development of the various transport modes so that they together lead to the realisation of an efficient, sustainable, safe, and regionally balanced transportation system in an integrated manner. Since each mode of transport operates in its particular field of economy, such an integrated development facilitates the evolving of a 'competitive and non-discriminatory price structure' crucial to support the progressive development of 'transport infrastructure' in the country. In other words, it would enable the realisation of comparative advantages of economic efficiencies to be properly reflected in the user costs.

The liberalisation of the economy has instilled the urgency of recognising the necessity of an efficient transportation system for increasing productivity and enabling the country, in the process, to compete effectively in the world market. Adequate and reliable transport infrastructure (and services) are important factors which contribute to enhancing the ability of the country to increase its international trade attracting foreign direct investment. The government has a major role to play in this sphere because, for the success of a market economy, the economic base that the governments provide for the transport sector largely determines the cost of services. It is, therefore, necessary to create a policy environment that encourages co-ordination between alternative modes of transport in order to provide an integrated transport system with maximum efficiency and minimum cost.

Road Network: Importance, Magnitude and Policy Thrust

A good road network is a critical infrastructure requirement for rapid growth. It facilitates the growth process by providing: connectivity to remote areas; accessibility to markets, schools and hospitals; and opening up backward regions to trade and investment. Roads also play an important role in inter-modal transport developments establishing links with airports, railway stations and ports.

The components of India's road network consist of: (i) national highways (NH), (ii) state highways (SH), (iii) major district roads (MDRs), and (iv) rural roads (RR) including other district roads and village roads. The NHs (with a total length of 66,590 km) comprise only 20% of the road

network but carry 40% of the road traffic. SHs (with a length of about 1,37,000 km) and MDRs (with a length of 3,00,000 km) together constitute the secondary system of road transportation contributing significantly to the development of the rural economy and industrial growth of the country. The secondary system also carries about 40% of the total road traffic, although it constitutes only about 13% of the total road length (33.14 lakh kms) in the country. RRs (comprising the large residual of 28.1 lakh km length), once adequately developed, hold the potential to provide the vitally needed rural connectivity for generating higher agricultural incomes and productive employment opportunities besides promoting access to economic and social services.

The road network is, thus, grossly inadequate offering poor riding quality. In order to improve the situation, besides speedy implementation of projects like the Golden Quadrilateral (GQ) and the North-South and East-West (NS-EW) corridors, addressing the deterioration in large stretches of NHs and other improvements in the road network are being accorded high priority in the planning process. A road development programme has been drawn up with the following objectives:

i) Develop roads as an integral part of transport system, supplementing other modes, with high priority being accorded to balanced development of road network (primary, secondary and tertiary systems).

ii) Expedite implementation of national highways development programme (NHDP).

iii) Phased removal of deficiencies in existing NHs concomitant with development of traffic over the next 10-15 years.

iv) Formulate comprehensive master plans for development of 15,600 km of access-controlled expressways.

v) Prioritise development of high-density corridors in SHs/MDRs.

vi) Promote private sector participation for development of the national and state road networks.

vii) Achieve Bharat Nirman target of providing rural connectivity through all-weather roads to all habitations with a population of 1000 plus persons (500-plus in hilly/tribal areas) by 2009 thereby improving the quality of life in rural areas and ensure balanced regional development.

viii) Focus on proper upkeep and maintenance of the existing road network and on attaining higher maintenance standards for optimum utilisation of existing network capacity and preserving road assets already created. For this, adopt modern management techniques for scientific assessment of maintenance strategies/priorities.

ix) For priority road safety, prevent overloading of trucks, encroachments, unplanned ribbon development, etc.

x) Focus on issues like energy conservation and environment protection.

xi) Provide world-class wayside amenities along highways.

xii) Reduce transportation costs by maintaining better riding surface, use of containers, multi-axle vehicles in the haulage of goods, etc.

xiii) Ensure road connectivity where rail link is not possible.

xiv) Integrate road development with railways and other modes of transport.

xv) Develop a road data bank by computerising project monitoring system and promoting the use of information technology in the road sector.

6.4.2 Ports

Ports constitute the inter-modal interface between maritime and land (road & rail combined) transport. India has a coastline of around 7,517 km with 12 major ports and 187 notified non-major (minor/intermediate) ports along its coastline and sea islands. Almost 95% by volume and 70% by value of India's global merchandise trade is carried through the sea route. In 2006-07, the 12 major ports handled about 73% of the maritime cargo of the country. The balance 27% was handled by the non-major ports. Overseas cargo accounts for about 77% of the total cargo handled at Indian ports.

Issues in Port Development

There is immense potential for modernisation and growth of Indian ports. The main problem is that, due to pressure from trade unions, the government has not been able to modernise the major ports. As a result, Indian ports are highly over manned making a direct effect on efficiency. Political pressure, lack of autonomy, absence of incentives, excessive bureaucracy, and hierarchical rigidities are contributors to the current state of the Indian ports.

Compared to the larger international ports, India lags behind badly. For instance, the largest port in the world in Hong Kong, processes more than 20.01 million TEUs (20-foot equivalent units) in a year. The tenth largest port, Antwerp, processes about 5.4 million TEUs. In contract, the Jawaharlal Nehru Port (JNP), India's largest container port, handles only about 2 million TEUs. There are also problems with the average pre-berthing time, which is in the range of 11 hours, and the average turnaround time, which is around three days. In Singapore, for instance, the corresponding numbers are 3 hours and half a day respectively. These

low performance indicators are primarily because of the poor road and rail container evacuation infrastructure from the port.

Recent Policy Initiatives in Port Development

The **first** imperative is to decongest leading ports like the JNP (in Navi Mumbai) and improve the rail and road connectivity of others. Improving the productivity of the existing ports by adding to their capacity is the key policy objective. Towards achieving the former, new kinds of contracting arrangements are being made. The latter problem is also being addressed albeit slowly.

Secondly, given the shortage of public funds, private participation is now being solicited. Around $ 800 million have been invested so far by foreign firms. The eventual potential is estimated at around $35 billion. To make this possible, policies and procedures have been significantly liberalised. The areas identified for private participation are: (i) leasing of existing assets of port, (ii) allowing for creation of additional assets such as the construction and operation of container terminals, (iii) construction and operation of bulk, break bulk, multipurpose and specialised cargo berths and warehousing facilities, and (iv) improving container freight stations, storage facilities and tank farms, handling equipment, and dry docking and ship repair facilities.

Thirdly, by amending the 1963 Major Ports Trust Act, a tariff authority for major ports has been set up.

Fourthly, the government has also decided to give a boost to coastal shipping by setting up a string of minor ports along the entire peninsula.

Fifthly, foreign investment cap has been raised up to 51 percent on an automatic basis in support services like operation and maintenance of piers and loading and discharging of vessels. FDI up to 100 percent is permitted under projects for vehicular tunnels, ports, and harbours. The BOT model is being used for private sector participation, with the assets created reverting to the port after the concession period. Major ports have been permitted to form joint ventures with foreign ports, minor ports, and other companies to attract new technology and better management practices. Concessional import duty has been allowed. A ten-year tax holiday has been extended under the Income Tax Act.

Check Your Progress 4

1. Briefly explain the present position of roads in India.

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2. State in brief the objectives of road development programme in India.

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3. Mention the recent policy initiatives for development of ports in India.

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6.4.3 Communication Network

Development of world-class telecommunication infrastructure is the key to rapid economic and social development of the country. Driven by various policy initiatives, which include New Telecom Policy (NTP) - 1994 and later the NTP-1999, the Indian telecom sector has witnessed a complete transformation in the last decade. During this period, it has achieved phenomenal growth and is poised to bring about further accelerated growth with the modernisation plans laid down to bring the country in line with those of other developed countries.

Present Status of Telecom Network

The telecom services network has expanded from about 84,000 connections (fixed line) at the time of independence to about 206.83 million working connections as on March 31, 2001 (consisting of 40.77 million fixed telephone lines and 166.05 mobile phones). India's present 207 million robust telephone network is one of the largest in the world and second largest among the emerging economies (after China). With a wide range of services such as basic, cellular, internet, paging, very small aperture terminal (VSAT), etc. the status of the present telecom network is impressive. Table 6.3 presents some related facts on the status of telecom network in India.

Table 6.3: Telecom Network Status in India

1. Number of telephone connections	20,683 million
2. Number of telephone exchanges	38,388
3. Switching capacity (public)	88.82 million
4. Village public telephones (VPTs)	564,610
5. Rural phones	2,26,55,691

6. Wireless subscribers 166.05 million
7. Internet connections 9.21 million
8. Broadband subscribers 2.28 million
9. Optical fibre route length (public) 5,19,155 route km.
10. Microwave route length (BSNL) 64,506.64 km.

Although the telecom sector has grown rapidly in India, viewed in the context of global growth pattern and indicators, it needs to achieve more in terms of tele-density. A positive correlation between the tele-density and the GDP of a country is observed in empirical investigations as the growth in the telecommunication sector has linkages with the growth of other sectors in the economy.

New Initiatives in Telecommunication Sector

It has been seen that broadband penetration has a multiplier effect on the economy. Experience has shown that broadband penetration has a positive correlation with the national income of the country.

Keeping this in view, a need to put in place an appropriate internet-broadband policy is recognised. Major aspects of such a policy framework are identified as follows:

1. **Pricing Policy:** India has a highly price-sensitive market. If the price is right, the acceptance of a service or good is also high. The telecommunications market has amply proven this fact. Bandwidth, if looked at as a commodity, needs to be priced rightly for bringing in the desired take-off. Reselling of bandwidth for domestic usage should be allowed as it is recognised to create competition leading to expansion of infrastructure.

2. **Fiscal Policies:** The following aspects need to be considered on the fiscal policy front:

   (a) Encouragement of low-cost access devices;

   (b) Decreased duties on items used in broadband networks and equalisation of duties on inputs for domestically manufactured goods comparable with those on finished import products; and

   (c) Providing appropriate tax structure to enable growth without foregoing revenue to government.

3. **Co-ordination between PSUs:** The public sector major BSNL should be encouraged to co-ordinate with the consortium of PSUs to identify the additional villages that could be provided broadband connectivity by utilising the latter's infrastructural base. For this, suitable financial incentives should be evolved to facilitate the coordination programme.

Check Your Progress 5

1. State the present status of telecom network in India.

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2. What policy initiatives are suggested for the rapid growth of telecommunication network in India?

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6.5 LET US SUM UP

Adequate availability of good quality physical, natural and infrastructural services is an essential prerequisite for rapid economic development. India has been blessed with varied natural resources rich in volume and content. However, it has not been possible to exploit them due to non-availability of adequate financial resources and appropriate technology. The growth process in the Indian economy has been severely constrained by infrastructural inadequacies. Concerted policy initiatives and well-formulated programmes have been initiated to overcome these limitations in the Indian economy.

6.6 KEY WORDS

Sustainable development : Adopting growth strategies by consuming the available natural resources in such a manner that its consumption by the present generation does not deprive the future generations of its availability.

Fallow land : Unplanted or unirrigated land.

Infrastructure : Covers those supporting services like energy, water, roads, railways, ports, etc. that help the growth of directly productive activities like agriculture and industry.

Ports : Important infrastructure at sea coasts providing inter-modal interface between maritime and land transport systems.

6.7 SOME USEFUL BOOKS

1. Planning Commission: Eleventh Five Year Plan 2007-2012.

2. Kaushik Basu (ed.): The Oxford Companion to Economics in India, Oxford University Press, New Delhi, 2008

3. Ishwar C. Dhingra: The In(kg)(kg)dian Economy, Environment and Policy, 2009.

6.8 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See sub-section 6.3.2

2. See sub-section 6.4.1

3. See sub-section 6.4.3

Check Your Progress 2

1. See sub-section 6.5.1

2. See sub-section 6.6.1

3. See sub-section 6.6.1

Check Your Progress 3

1. See sub-section 6.7.1

2. See sub-section 6.7.3

3. See sub-section 6.7.3

4. See sub-section 6.8.1

Check Your Progress 4

1. See sub-section 6.9.1

2. See sub-section 6.9.2

3. See sub-section 6.10.2

Check Your Progress 5

1. See sub-section 6.11.1

2. See sub-section 6.11.2

UNIT 7 DEMOGRAPHIC FEATURES

Structure

7.0 Objectives

7.1 Introduction

7.2 Size of Population

7.3 Growth of Population

7.4 Vital Rates

7.5 Demographic Transition

7.6 Urbanisation

7.7 Sex Ratio

7.8 Population Pyramid

7.9 Dependency Ratio

7.10 Population Ageing

7.11 Demographic Window or Dividend

7.12 National Population Policy (NPP) - 2000

7.13 Let Us Sum Up

7.14 Key Words

7.15 Some Useful Books/References

7.16 Answers/Hints to Check Your Progress Exercises

7.0 OBJECTIVES

After going through this unit, you should be in a position to:

- define the important concepts used in demographic analysis;
- explain the importance of vital statistics in developmental planning;
- discuss the progress made by India in respect of the demographic indicators during the past six decades of planning since independence;
- indicate the initiatives taken by the government in regard to its current population problems;
- outline the objectives and the targets in its current National Population Policy; and
- provide an assessment of the urgent steps needed to be taken in order to reap the benefits of demographic dividend.

ignou THE PEOPLE'S UNIVERSITY

7.1 INTRODUCTION

Population contributes an important factor-input, namely, labour, to the development process. It is also the ultimate beneficiary of development. The demographic features of a country relate to the size of population, its structure in terms of different characteristics, distribution by regions, changes in these over time and space and factors that influence these or are affected by these, etc. A demographic profile of India can be prepared with the help of census data. A census is conducted every ten years in our country. The last such census was conducted in the year 2001 with March 1st as the reference date. The present unit provides a detail of the conceptual aspects related to the important demographic features of India.

7.2 SIZE OF POPULATION

India's population according to the 2001 census was 1028.74 million (a million is equal to 1,000,000 i.e. 10 lakhs). India is the second most populous country in the world, the most populous being China. India, with only 2.4% of the world area, accounts for 16.9% of the world's population, while China, with nearly 7% of the world area, accounts for 21% of the world's population. The corresponding shares of the United states of America are 5% and 7% respectively. Clearly, India and China have more people living in a smaller area than is the case with USA. In other words, the USA has a smaller ***density of population*** than India and China.

Density of population is defined as population per square kilometre (sq. km.) of land area. Thus:

$$\text{Density of Population} = \frac{\text{Population living in a geographical area}}{\text{Land Area in square kms. of that geographical area}}$$

The density of population in India is 325. The population of India is not distributed uniformly within the country. Some areas in the country like Delhi (density - 9340), Kerala (919) and West Bengal (903) are more densely populated than others. Hilly areas like Arunachal Pradesh (13), Jammu & Kashmir (109), Himachal Pradesh (109) and Uttaranchal (159) and territories with large forest areas like Andaman & Nicobar Islands (43), Chattisgarh (154) and Madhya Pradesh (196) and the State with a desert, namely, Rajasthan (165) are more sparsely populated than others. Normally, fertile areas, industrial areas and areas in and around an administrative capital or, in general, areas where economic activities abound, tend to be densely populated. This is because these areas provide a relatively larger number of opportunities for earning a livelihood than others and thus exert a *pull* on the population of other areas.

7.3 GROWTH OF POPULATION

The size of the population of a given area changes over time through (i) migration and (ii) natural factors like *births and deaths*. *Migration* consists of two components: *emigration or out-migration and immigration or in-migration.* The difference between emigration and immigration is called *net migration.*

Net migration is negligible at the national level in India and the growth in India's population is, therefore, mainly due to natural increase.

We are usually interested in finding out how fast the size of the population is changing over time. The population in India was 361.0 million in 1951; it increased to 439.2 million in 1961, 548.1 million in 1971, 683.33 million in 1981, 846.30 million in 1991 and 1028.74 million in 2001. Thus, the population increased by about three times in a course of five decades. In absolute size therefore, the population of India has been continuously increasing. But what is significant is that the rate of growth of population has come down in recent years. *The ratio of the increase in population over a specified period to the initial population (defined as base year population), or the relative increase to the initial population, expressed as a percentage, is called as the rate of growth of population during the period.* Thus, if we denote the population of an area in the initial period as $\mathbf{P_0}$ and the population of the same area at time 't' as $\mathbf{P_t}$ and the rate of growth of population during the period 0 to 't' as $\mathbf{R_t}$, we have

$$R_t = \frac{(P_t - P_o)}{P_o} \times 100$$

or $$R_t = \{(P_t / P_0) \text{ x } 100\} - 100$$

Growth rate of India's population, estimated as above, came down from a high of 23.85% during the decade 1981-91 to 21.34% during the decade 1991-2001. Note that the two growth rates viz. 23.85% and 21.34% are the growth rates over the corresponding 10 year periods. In practice, it is common to come across the growth rates expressed as average annual growth rate (AAGR). The AAGR for the first period 1981-91 is 2.4% and for the second period 1991-01 is 2.1%, obtained by simply dividing the decadal growth rates by 10.

Check Your Progress 1

1. Are the following statements "true" or "false"?

   a) India is the most populous country in the world.

   b) Hilly areas tend to be densely populated.

2. List the factors that affect the size of the population of an area over time.

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3. The population of a country was 340 million in 1961 and 425 million in 1971. What is the rate of growth of population over the period 1961-71? What is the AAGR?

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7.4 VITAL RATES

We noted earlier that births, deaths and migration are the three events that determine the growth of population. A number of other factors influence these events. One set of such factors are: age at death or longevity, prevalence of diseases, health care facilities available, levels of health and nutrition and other factors. The second set of factors are those that influence the number of children born to women during the reproductive period of their life (that is, fertility), like for example their age at marriage. The third set of issues relate to the 'pull' and 'push' factors that lead to immigration and emigration respectively. We now define some important vital rates (or statistics) relating to births (i.e.fertility) and deaths. Most of these vital rates are defined as *rates per thousand of population per annum* because the rates are too small to be expressed as percentages.

7. 4.1 Fertility Rates

Crude Birth Rate: *The Crude Birth Rate (CBR) in any year (and area) is defined as the number of live births in that year (and in that area) per thousand population.* Thus,

$$\begin{array}{c}\text{Crude}\\ \text{Birth Rate}\\ \text{(CBR)}\end{array} = \frac{\text{Number of live births in the year in the area}}{\text{Mid - year Population of the area}} \times 1000 \quad \text{... (7.1)}$$

Trends in CBR in India in the last century show that the CBR has come down from 49.2 during the decade 1901-11 to 39.90 during 1941-51, 25.8 in 1991-2001 and 23.5 in 2006. The main reasons for this decrease are the promotion of family planning programmes by government and

increasing awareness among the people of the benefits of adopting a small family norm. As a result, the average annual rate of *gross* additions to population has come down from 49.2 per thousand or 4.92% during the period 1901-11 to 25.80 per thousand or 2.58% in 2001.

Although CBR has come down further to 23.5 in 2006, it is still high and varies widely across states. It varies from 13.1 in Manipur to 30.1 in Uttar Pradesh. The central belt consisting the five states of Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar and Orissa, where CBR is high even in 2006, calls for concerted efforts to bring down the CBR as this is bound to have a substantial impact on the national birth rate.

Why is the CBR still high? Let us list the major factors responsible for this:

i) The infant mortality rate (see below) is high in India and parents, therefore, tend to have more children in the hope that at least some of them will survive;

ii) There is a deep-rooted, traditional preference for sons in India, who, people believe, will provide security to parents in old age. This leads Indian parents to wish for a male child even if they already have one or two female children;

iii) Children are often considered economic assets, especially in agricultural and business families, where they can help the families by working in farms and small businesses and reduce labour costs and generate additional income;

iv) Lack of awareness among many parents about available modern methods of birth control and termination of pregnancies;

v) A mindset that considers methods in (iv) above a taboo; and

vi) Age at marriage in India is often low, despite legislation raising it to 18 for girls and 21 for boys, and, therefore, the reproductive period in marriages is still longer than desirable.

General Fertility Rate

The Crude Birth Rate, as the name indicates, is only a rough estimate of fertility. Note that the number of births in a year in the area (i.e. numerator in the formula 7.1) is compared with the entire population of the area, that is, people of all ages and further, both males and females. It would be appropriate to compare the number of births with the population of females of childbearing age group 15 – 49 (or 15-44 depending upon the levels of fertility in the area) to measure fertility. If we replace the denominator in CBR by the mid-year population of females aged 15-49 in the area in the year, we arrive at a more refined measure of fertility, namely, the *General Fertility Rate (GFR)*. It is thus the number of births

per year per thousand women of childbearing age (aged 15-49) and is calculated as:

$$\text{GFR in any year} = \frac{\text{Number of live births in the year in the area}}{\text{Mid - year population of women in age group } 15-49 \text{ in the area}} \times 1000 \quad \ldots \quad (7.2)$$

But fertility levels vary with age too. It would, therefore, be desirable to refine the fertility measure further by assessing fertility levels at different ages or by computing *Age-Specific Fertility Rates (ASFR).* The ASFR for any age group is the number of live births per woman to the mid-year female population of a particular age group. The ASFR is thus given by:

$$\text{F(X to X + n) in any year \& area} = \frac{[\text{Number of live births in the year to females aged (X to X + n) in the area}]}{[\text{Mid - year population of females aged (X to X + n) in the area}]} \quad .(7.3)$$

where, F(X, X + n) is the ASFR for the age group (X to X + n).

For example, F(25 to 29) is the ASFR for the age group (25 - 29) and F(25) is the ASFR for women at age 25. Note that the ASFRs are not expressed as per thousand rates but merely as fractions as it refers to the number of live births per woman in the specific age-group.

Total Fertility Rate

An important measure of fertility is the *Total Fertility Rate (TFR). It is the number of live births per woman completing her reproductive life, where the reproductive life for a woman is taken to be the age group 15-49 or 15-44, depending upon the levels of fertility in an area.*

TFR was estimated to be 5.2 for India in 1971 but is estimated to have come down to 3.6 in 1991 and further to 3.0 in 2002.

Kerala had a TFR of 1.8 in 1991 whereas the TFR for the four states of Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan was at least 4.4 in 1991. TFR in these four states, even in 2002, ranged between 3.8 and 4.4. Such a high value for TFR means that at the current prevalent age-specific fertility rates, a woman in these four states would add, on an average, 3.8 to 4.4 children to the population before she completes her reproductive life. This would have a sizeable impact on the country's population growth in the coming years, as these four states together account for 36% of the total population of the country in 2001.

TFR is thus an important variable for controlling population growth. Although TFR has been brought down to the level of 3 for the country in a span of 30 years, it is still high enough to cause concern. Focused action needs to be taken on reducing fertility, especially in the four states mentioned above. It is for this reason that these four states along

with Orissa (with TFR 2.6 in 2002 and a 4% share of India's 2001 population) have been grouped together for *empowered action designed to reduce fertility rates in these states (called EAG – Empowered Action Group - states).* One of the important targets set for the Eleventh Five Year Plan (April, 2007 to March, 2012) is to bring down the value of TFR for the country to 2.1 by the end of the Eleventh Plan period. It is interesting to know at this juncture that China has fared better in its efforts to bring down its TFR to 1.85 in 1995, due to the one child per family policy adopted by China since 1979.

7.5.2 Mortality Rates

The *Crude Death Rate (CDR)* or the *Crude Mortality Rate (CMR)* in any year in an area is defined as the number of deaths in the year per thousand population of the area. That is:

$$\begin{array}{l}\text{Crude Mortality Rate}\\ \text{or Crude Death Rate}\\ \text{in any year and area}\end{array} = \frac{\text{(Number of deaths during the year in the area)}}{\text{[Mid - year Population of the area]}} \times 1000 \qquad (7.4)$$

The overall death rate reflects the overall health status of the area at any point of time. It also gives the rate at which the population of an area gets reduced in a year. While CBR gives the *gross* natural additions to population per annum per thousand population in an area, CDR represents the natural deductions from the population per annum per thousand population of the area.

CDR in India has declined from a high rate of 48.6 per annum per thousand during 1911-21 to 8.5 in 2001 and further to 7.5 in 2006. In other words, the annual rate of natural reduction in population has come down from 4.86% to 0.75% over the period 1911-2006 . The CDR in 2006 varies from 6.7 in Kerala to 9.3 in Orissa. Manipur with a CDR of 4.5 is in an even better situation than Kerala.

Natural Growth Rate of Population

The difference between CBR and CDR represents the natural growth rate of population. The CDR, in India, has declined steadily with its decline being *steeper* than that in CBR. As a result, the rate of natural increase in population has increased over the period 1931-2001 from 1.01% per annum to 1.73% per annum. Natural growth rate per annum in 2006 varied between 0.8% in Kerala and 2.2% in Bihar. As mentioned earlier, the states at the top end of the BR and TFR range, namely, the EAG states, need to be given special attention.

Age-Specific Death Rates (ASDR)

Death occurs at all ages and the risk of mortality varies with age. It would therefore be necessary to analyse death rates for populations at

different ages or age groups by calculating *Age-Specific Death rates (ASDR)* defined as follows:

$$\text{D(X to X+n) in any year \& area} = \frac{[\text{Number of deaths in the year in an area in the age group (X to X + n)}]}{[\text{Mid - year Population of the area in age group (X to X + n)}]} \times 1000 \quad ..(7.5)$$

where D(X to X+n) is the ASDR for the age group (X to X + n). When n = 0, this reduces to D(X), the ASDR at age X. For example, D(20 to 24) is the ASDR for the age group 20 – 24 and D(20) is the ASDR at age 20.

Infant Mortality Rate

Children face a greater risk of mortality (i.e. deaths) than adults, especially during the first year of their life. The health status of infants, that is those who are less than 12 months old, is an important indicator of the levels of health care and medical facilities available in an area and needs to be monitored. The *Infant Mortality Rate (IMR)* is defined *as the number of infants dying under one year of age in a year in an area per thousand live births of the same year and area.* That is,

$$\text{IMR in any year \& area} = \frac{(\text{Number of infants dying in the year in the area before their first birthday})}{(\text{Total no. of live births in the year in the area})} \times 1000 \quad (7.6)$$

IMR for India was estimated as 129 in 1971. It has declined to 57 (62 in rural areas and 39 in urban areas) in 2006. It varies widely across states. At the lower end are Manipur (11), Kerala (15) and Goa (15) and at the upper end are Madhya Pradesh (74), Orissa (73) and Uttar Pradesh (71). The wide variation in levels of health care across states would be clear from these figures.

Expectation of Life

Expectation of life at birth (e^0_0) is the average number of years a new-born child is expected to live under current mortality conditions. Expectation of life can be estimated at any age. For example, *expectation of life at age five is the average number of years a child aged 5 today is expected to live*. Thus *expectation of life at age 't' is the average number of years a person aged 't' years today is expected to live.*

Expectation of life at birth for India has increased from 41.3 years in the period 1951-61 to 55.5 years in 1981-85 and further to 60.7 years in 1992-96. It varied (in 1992-96) from 55.2 years in Madhya Pradesh to 59.5 years in Rajasthan among the EAG states. It was the highest in Kerala (73.1) and 63.7 in Tamil Nadu.

7.5 DEMOGRAPHIC TRANSITION

The demographic experience of the countries that are currently called 'developed' countries show that countries pass through *three stages of demographic transition:*

First State : high birth rates and high death rates;

Second Stage : high birth rates and low death rates; and

Third Stage : low birth rates and low death rates.

*In the first stage of demographic transition***,** which usually coincides with a low level of development, the birth rate as well as the death rate is very high. The rate of growth of population (birth rate – death rate) is, therefore, very low. The rate of growth of population in India for example was low up to 1921, although the birth rate and the death rate were quite high. *India can thus be considered to have been in the first stage of demographic transition up to 1921***.**

As a country develops, the standard of living, the nutritional and health status of people, housing and sanitation will all improve and death rates register a decline. The experience of developing countries shows that the major cause for such a decline in death rates is not so much due to industrialisation as to advances made in medicine. The birth rate is however not influenced as quickly by these developments as the death rate as it depends on values, culture, tradition and awareness of people and on the advantages of a small family. It, therefore, continues to remain high and, even if there is a decline, it is much less than the rate of decline in the death rate. The difference between the birth rate and the death rate thus increases and the rate of growth of population is high in this second stage of demographic transition. This is also the phase of *population explosion*. In India, the death rate declined sharply from 48.6 per thousand of population during 1911-21 to 8.5 during 1991-2001 and to 7.5 in 2006. The birth rate on the other hand stayed at levels above 40 during most of the period 1921-71 and above 30 during the period 1971-91. Even thereafter, it has been above 20. As a result, population has registered an accelerating rate of growth till 1971. Although the *rate* of growth of population has come down somewhat after 1971, it still continues to be high. India's population almost doubled between 1951 and 1981 and nearly trebled between 1951 and 2001. *India is still in the second stage of demographic transition.* Pakistan and Bangladesh are also in this stage of demographic transition.

Low birth rates and death rates are the characteristic features of the *third stage of demographic transition.* As a country's economy develops, there is a rise in the standards of living, improvement in female literacy, rise in age at marriage, there is a wider awareness and desire among people regarding the adoption of small family norms, etc. These lead to a reduction in the birth rate. With death rates already low, the rate of

growth of population declines to lower levels than before. Most of the currently developed countries like the USA and Japan are in the third stage of demographic transition. *Some states in India, like Kerala and Tamil Nadu, can be said to have reached the third stage of demographic transition.*

Check Your Progress 2

1. Why is the mid-year population used in the denominator of the formula for computing CBR and CDR?

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2. Why is TFR considered a better measure of fertility than CBR?

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3. It is said that in our efforts to bring down fertility we should focus especially on the five EAG states: UP, Bihar, MP, Rajasthan and Orissa. Why?

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7.6 URBANISATION

Urbanisation is a process that influences the rural-urban distribution of population in a country. People live in cities, towns and villages. Individuals and families migrate from one place to another, especially from villages to towns and cities for various reasons.

Urban population increases by:

1. natural increase of the urban population;

2. migration from rural areas; and

3. transformation of rural areas into urban areas through

    a) upgrading of places into new towns through notifications;

b) establishment of new industrial townships; and

c) growth of urban agglomerations.

The share of urban population, in India, has increased from about 11% in 1911 to about 28% in 2001. In other words, the rate of urbanisation has increased over the years and the urban population has grown faster than both the rural and total populations. Roughly three out of ten Indians live in an urban area.

The rate of urbanisation has, however, been uneven across the states. The Union Territory of Delhi is the most urbanised with as much as 93.18% of its population living in urban areas. Goa is the most urbanised among the states with almost one half of its population living in urban areas. The least urbanised state is Himachal Pradesh (9.3%) and the least urbanised Union Territory is Dadra & Nagar Haveli (22.89%).

Urbanisation is considered beneficial because of better opportunity for earning higher incomes, better infrastructure and better awareness and response of people to social issues in general. Urbanisation thereby contributes to modernisation and social change. The birth rate, the death rate, IMR and fertility rates are lower in urban areas than in rural areas.

However, urbanisation is not altogether a blessing. Shortage of land, the growing gap between the demand and supply of basic facilities and services (e.g. housing, water supply, sanitary services, electricity, roads, public transport, etc.) and finally, massive environmental pollution in cities, adversely affect the quality of urban life. The total slum population in cities, especially in mega and metro cities, have been increasing. As per the 2001 census, India had 42.6 million slum population accounting for about 15% of the country's total urban population. However, it is also a fact that the slum population in cities and towns provide several essential services to the urban populace although the levels of their access to basic services are very poor.

The basic factors responsible for rural-urban migration are rural poverty and the declining levels of livelihood opportunities in villages. The latter, in particular, is due to the falling public investment in agriculture. Policies designed to provide rural areas with housing, water supply & sanitation, electricity, health and medicare services at levels comparable to urban areas, better road connectivity, etc. should be initiated so that 'pull' factors of urban areas and 'push' factors of rural areas are both weakened. The National Rural Employment Guarantee Act (NREGA, 2005) gives a legal guarantee to provide 100 days of employment in a year to one member of every rural family. Likewise, Sarva Siksha Abhiyan (SSA) is an educational programme aimed at ensuring access to education to all children in the school going age-group (i.e. 6-14 years). The emphasis in the Tenth and the Eleventh Five Year Plans are on rejuvenation of the agricultural sector. These are some recent steps of the government to reduce rural-urban migration.

7.7 SEX RATIO

Population is made up of males and females of different ages. The structure of the population in terms of gender and age-structure have implications for efforts to be made by government and society in areas of education, health services, housing, employment generation, public services like transport, electricity, sanitation, etc. These also influence the present and future rates of growth of population as also the pace of economic development.

The gender composition of the population is measured by the *sex ratio, defined as the number of females per thousand males.* It has been observed that females outnumber males in developed countries. India's sex ratio, however, shows a preponderance of males. However, the sex ratio has declined from 972 in 1901 to 933 in 2001. It also varies widely across states; it varies from 1058 in Kerala to 861 in Haryana and among Union Territories, from 1001 in Puducherry (Pondicherry) to 710 in Daman & Diu. The declining trend in the sex ratio in India has been due to a number of factors like:

a) progressive undercount of women in successive censuses;

b) the low status of women in society;

c) discrimination against women in almost all spheres of life including a minimum level of nutrition, access to health, education and other services and amenities;

d) female illiteracy;

e) neglect of the female child and girls; and

f) the deep rooted preference for sons to daughters leading to heinous practices like female infanticide and female foeticide.

Efforts to promote gender equality through emphasis on education of girls, empowerment of women, legislation to prevent domestic violence against women, ban on the use of scans and other techniques to determine the sex of the foetus, etc. have been mounted to tackle these issues in the recent years.

7.8 POPULATION PYRAMID

The detailed picture of the age-sex structure of the population is called the age pyramid or the population pyramid. The population pyramid consists of horizontal bars representing age groups in ascending order arranged one upon another like a pyramid. The length of the horizontal

bar of an age group measured from the central axis represents the number of males/females in the age group or the percentage of males/females in the age group to total male/female population. *Absolute pyramids* show the differences in the overall size of the total population in the respective age-sex group. *Percentage pyramids*, on the other hand, depict the *relative* differences in the population size in each age-sex group.

Chart 1: Age Pyramid – India : 2001

(Ref: Table 1)

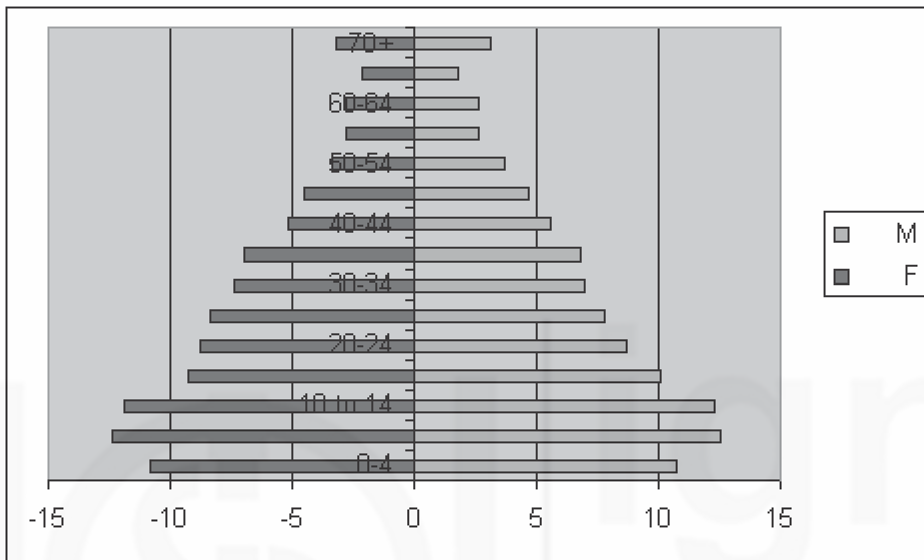

Chart 2: Age Pyramid – Kerala : 2001

(Ref: Table 1)

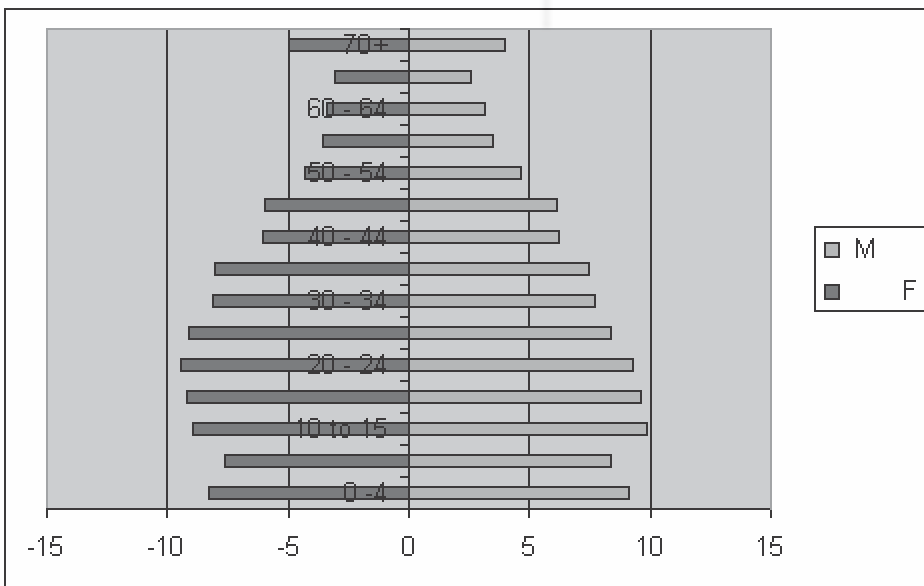

Table 1 Age Structure of Population – India: 2001

(percentages)

Age Group	India			Kerala		
	P	**M**	**F**	**P**	**M**	**F**
(1)	(2)	(3)	(4)	(5)	(6)	(7)
0-4	10.74	10.73	-10.74	8.68	9.11	-8.28
5–9	12.47	12.54	-12.40	7.99	8.37	-7.62
10–14	12.14	12.33	-11.93	9.38	9.85	-8.94
15–19	9.74	10.14	- 9.32	9.37	9.60	-9.16
20–24	8.73	8.71	-8.75	9.37	9.31	-9.43
25–29	8.11	7.81	-8.43	8.75	8.38	-9.10
30–34	7.22	7.02	-7.43	7.90	7.67	-8.13
35–39	6.86	6.77	-6.96	7.75	7.47	-8.01
40–44	5.42	5.62	-5.21	6.13	6.21	-6.05
45–49	4.61	4.67	-4.54	6.05	6.15	-5.95
50–54	3.56	3.73	-3.37	4.52	4.68	-4.35
55–59	2.69	2.55	-2.83	3.55	3.50	-3.59
60 –64	2.67	2.55	-2.81	3.24	3.11	-3.37
65–69	1.92	1.78	-2.08	2.83	2.58	-3.07
70–74	1.43	1.42	1.45	1.93	1.77	2.08
75-79	0.64	0.61	0.66	1.26	1.12	1.38
80+	0.78	0.74	0.83	1.22	1.02	1.41
*A.N.S.	0.27	0.28	0.25	0.08	0.09	0.07
All ages	100.00	100.00	100.00	100.00	100.00	100.00
Median age in years	22.81			27.98		
DR I**	0.76			0.58		
DR II@	0.68			0.50		

* *Age Not Stated (A.N.S)*

** *Dependency Ratio I = (population aged 0-14 and 60+) / (population aged 15-59). A.N.S. is included in the age group 60+ in this calculation.*

@ *Dependency Ratio II = (population aged 0-14 and 65+) / (population aged 15-64). A.N.S. is included in the age group 64+ in this calculation.*

Source: Based on C-Series Tables, Census 2001 – Office of the Registrar General, India.

Data on age structure (say) by five-year age groups and by sex are useful in many ways.

i) Children, i.e. those aged 0 – 14 years, consist of two groups. The first consists of those in the age group 0 – 4, or those nurtured at home and the second, aged 5 – 14, or the school going group. The size of the population in the age group 5 – 14 gives us an idea of the scale of the primary and secondary school facilities to be created and the resources required for the task.

ii) The population in the age group of 15-19 or 15-24 is relevant to estimate the likely size of the higher education facilities required. The size of the female population aged 15-44 or 15-49, is relevant to estimate the fertility levels of women in the reproductive age-group.

iii) The size of the age group 15-59 (or 15-64) indicates the work potential of the economy.

iv) The age group 60 and above (or 65+) provides the size of the task for ensuring the geriatric care for our senior citizens.

Age distribution by five-year age groups can also be used to derive the ten-year age group distribution. The latter enables us to trace the movement of the population in each ten-year age group through successive censuses. For example, survivors from the population in the age group 0–9 in one census will make up the age group 10–19 in the next census, provided the migration in the population during the intervening period of the two censuses is negligible.

7.9 DEPENDENCY RATIO

Children and elders, that is, those in the age groups of 0–14 and 60+ are expected to be taken care of by the working age population 15-59. The age structure of the population by age groups 0–14, 15–59 and 60+ enables us to look at the population in terms of the size of the working age population *relative to* the size of those dependent on the earnings of the working age population. Some use the age groups 15-64 and 65+ instead of 15-59 and 60+.

The ratio of dependents (population in the age groups 0–14 and 60 +) to the working age population (age group 15–59) is called the dependency ratio (DR). This indicates the burden per member of the working age group population. A favourable dependency ratio tends to boost savings. This is of course possible *only if the working age population is productively employed.*

The Dependency Ratio for India has come down from 0.92 to 0.76 between 1971 and 2001. Kerala is much better off in this respect with a DR of 0.58 in 2001. This is because the proportion of children in the country's population has come down over the period 1971-2001 and the proportion of children in Kerala's population is smaller than the proportion at the national level.

7.10 POPULATION AGEING

Data on age structure of the population over the years help us to study, among other things, *'population ageing'*. *Population ageing occurs when the median age or the mean age of the population rises.* The median age of the population is that age which divides the population in to two halves so that those in the top half are of median age or older and the age of those in the bottom half is less than the median age.

The median or mean age of the population rises when the proportion of children, that is, those in the age group 0–14 falls and expectation of life or the longevity of the population rises. This is the result of falling fertility and death rates over a period of time.

The median age of the Indian population has risen from 19.60 years to 22.81 years between 1971 and 2001. *The population of India has thus aged between 1971 and 2001.* This is because CDR registered a sharp decline, expectation of life at birth rose steadily and TFR fell from 5.2 to 3.1 during the period 1971 to 2001. We can also compare the *ageing* of population across states to understand their relative status of development from their health point of view. The population of Kerala is *aged* compared to the country's population, owing to Kerala's consistently low TFR and CDR compared to the national rates. Expectation of life at birth in Kerala has also been higher than in the rest of the country. According to some estimates, the median age of the world has increased from 29.0 in 1937 to 37.3 in 2000 and is expected to rise to 45.5 in the year 2050. The corresponding figures for the more developed regions of the world are 23.9, 26.8 and 37.8. The median age of the population of China is estimated to have risen from 23.7 in 1950 to 28.3 in 1995.

Check Your Progress 3

1. State three undesirable consequences of urbanisation.

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2. List three reasons for the declining sex ratio in India.

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3. What is the economic significance of the following?

   i) ratio of non working population to working population;

   ii) population size in the age group 6-14;

   iii) population size in the age group 15-59;

   iv) population size of females in the age group 15-49.

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7.11 DEMOGRAPHIC WINDOW OR DIVIDEND

Demographic Window is defined as that period of time in a nation's demographic evolution when the proportion of children and the youth (those aged less than 15 years) falls below 30% and the proportion of people aged 65 years or more is still below 15%. This would imply that the proportion of the working age population (taken as the age group 15-64) would be at least 55%. Thus the working age population would be the predominant part of the population and the dependency ratio (DR) will be utmost 0.82 (i.e. 45 divided by 55). Alternatively, if the shares of the dependent age groups are 27% and 13% respectively, the DR would come down to 0.67.

Societies that have entered the *Demographic Window* have smaller DRs. Such favourable DRs tend to boost savings and investments in human capital, that is, investments required to enhance capabilities and skills and thereby productivity of human resources through education, training, nutrition and health care. A rising share of the working age population in a population constitutes the *demographic dividend* (DD) – indicating a potential that can enhance the rate of growth of the economy.

But this demographic dividend or demographic potential will remain only a potential advantage if the working age population is not fully and productively utilised. This is because low workforce participation rates, especially among women, or rampant unemployment or low of levels of

skills in the workforce may limit the positive impact of such a favourable age structure on economic growth. Note that it is not so much the proportion of the dependents to the working population that is important *but the rising share of the working age population in the total population and the capacity of the economy to productively utilise this potential that are important.*

Typically, this *window of opportunity,* or the availability of the *demographic dividend*, lasts for 30 to 40 years, depending upon the country. The timing and duration of this period is closely associated with those of the decline in fertility levels because of the linkage between fertility levels and the age structure of the population. As birth rates fall, the age pyramid first shrinks, with the shares of age groups below 15 years falling and the age pyramid acquiring a "bulge" in the middle – corresponding to the working age groups. After a few decades, however, the low fertility causes the population to grow older (i.e. the bulge shifts near the top of the age pyramid) and the growing population of elderly people raises the dependency ratio again. Countries that have entered the Demographic Window, therefore, have the demographic potential for high economic growth, provided of course the working age population is skilled and is fully and productively utilised by the economy. Economic policies designed to tap this potential, therefore, assume importance.

Has India reached the demographic window? No, it had not reached till 2001. The proportion of those aged less than 15 years was still above 30% although the proportion of those aged 65 and above was below 15%. *However, it would enter this stage soon and hence steps should be taken urgently to derive the fullest benefit from it.* The share of the working age population is rising (almost 60% now). However, it was not being fully and productively utilised by the economy as about 7.32% of the labour force was unemployed on an average day in the year 2000. Further, roughly one in eight of the youth *labour force* (i.e. those 'working' and those 'not working but available and willing to work'), aged 15-29, was unemployed on an average day. The proportion of unemployed educated youth labour force was still higher (15%). The unemployment rate among the technically educated youth was even higher – 24% in 2000. Although the Indian economy registered annual growth rates of around 8% during 2003-08, a growing shortage of skills have emerged, alongside unemployment and underemployment. Urgent steps are, therefore, required to:

i) generate employment opportunities on a scale sufficient to eradicate unemployment and underemployment;

ii) extend the reach of the educational and training system to enable larger sections of the population than now to benefit from it and thereby participate in the development process; and

iii) reform the educational and training system to make it relevant to the emerging needs of the economy.

Only then can we reap the benefits of Demographic Dividend.

7.12 NATIONAL POPULATION POLICY (NPP) - 2000

The need for concerted action to reduce TFR and CBR as early as possible to bring down population growth was emphasised earlier. The NPP 2000 was announced on February 15, 2000 with this aim. A National Population Commission has also been set up under the Chairmanship of the Prime Minister to monitor the implementation of NPP 2000.

The ***immediate objective of NPP 2000*** is to meet the 'unmet' needs for contraception, healthcare infrastructure and health personnel and to provide integrated service delivery for basic reproductive and child health care. The ***midterm objectives*** are to reduce *TFR to replacement levels* (i.e. 2.1) by 2010 through vigorous implementation of inter-sectoral operational strategies. The ***long term objective*** is stabilisation of population by the year 2045 at a level consistent with the requirements of sustainable economic growth, social development and environmental protection. The policy has outlined a number of promotional and motivational measures. The more important among these are:

a) reward panchayats and zila parishads for promoting the small family norm;

b) strict enforcement of the Child Marriage Restraint Act, 1976 and the Pre-Natal Diagnostics Techniques Act, 1994;

c) provide funds and soft loans for establishing ambulance services in rural areas;

d) strengthen the scheme for abortion facilities by the establishment of facilities under trained medical personnel;

e) establish vocational training schemes for girls leading to their self employment; and

f) promote setting up of revolving funds for boosting creation of income generating avenues through the activities of village level self help groups (SHGs).

The National Rural Health Mission launched some time back is a step in the direction envisaged in NPP 2000. The TFR, in 2002, for the country as a whole was 3.0. The medium term target set for TFR for 2010 in NPP 2000 has already been shifted to 2012 in the Eleventh Five

Year Plan. Urgent attention also needs to be given to exploit the potential of the demographic dividend that is at our doorstep.

Check Your progress 4

1. Three countries have the following characteristics:

Characteristic	Country A	Country B	Country C
Proportion of population in age group 15-64 to total population	58%	49%	60%
Proportion of population in age group 0-14 to total population	28%	35%	26
Incidence of unemployment in the age group 15-64	20%	15%	3%

i) Examine whether these three countries have reached the Demographic Window or not and indicate the reasons for your conclusions.

ii) Which of these countries can derive the benefits of the resultant demographic dividend and why?

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2. Look at the list of the more important promotional and motivational measures advocated in the NPP 2000 given in Secton 7.12. Why do you think that the measure (b) is important?

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7.13 LET US SUM UP

The unit introduced many concepts like birth rate, death rate, fertility rate, mortality rate, demographic transition, urbanisation, population pyramid, dependency ratio, demographic dividend, etc. Besides indicating their usefulness as crucial developmental parameters, the trends in them

for India were presented to show the extent of development achieved during the last six decades of planning since independence and the challenges that lie ahead. The salient features of the National Population Policy – 2000 were presented towards the end to reveal the commitment of the government in this regard.

7.14 KEY WORDS

Population density : population *per* square kilometre.

Crude Birth Rate : number of live births in a year in an area *per* thousand of population of the area.

Crude Death Rate : number of deaths in a year in an area *per* thousand of population of the area.

Infant Mortality Rate : number of infants dying before their first birthday in an area *per* thousand live births.

Replacement level TFR : The TFR level at which a woman has an average of one daughter during her reproductive life (to replace herself in the population). This TFR level will then have to be 2.1 to take into account (i) mortality and (ii) the excess of boy births over girl births.

7.15 SOME USEFUL BOOKS/REFERENCES

Cassen, R.H. (1978): India : *Population, Economy, Society,* Chapter 4, The Macmillan Co. of India Ltd., Delhi.

Dutt, R. and KPM Sundharam 2001): *Indian Economy* (Chapter 4), S.Chand & Co., New Delhi.

Dhingra I.C. (2009): *The Indian Economy : Environment and Policy* (Chapter 5), Sultan Chand & Sons, New Delhi.

Government of India (2000): *National Population Policy*, Ministry of Health & Family Welfare, New Delhi.

———————————— (2008): *Eleventh Five Year Plan (2007 – 12)*, Planning Commission, New Delhi.

Information on Census and vital statistics can be accessed at http://www.censusindia.net

7.16 ANSWERS/HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. (a) false (b) false.

2. See para 1 of Section 7.3.

3. Growth rate 25%; AAGR 2.5%.

Check Your Progress 2

1. See para following formula 7.1.

2. In measuring fertility, CBR relates the total number of births to the entire population consisting of males and females of all age groups. TFR takes note of age specific variations in fertility. It also relates the number of births to the female population in the reproductive age group 15-49.

3. See paragraph on TFR in Section 7.4.1.

Check Your Progress 3

1. See the penultimate para of Section 7.6.

2. See para 2 of Section 7.7

3. See Sections 7.8 and 7.9.

Check Your Progress 4

1. Take Country A. The proportion of children is < 30% and the proportion of 65+ is (100 – 28 – 58) = 14%. A is therefore at DW. But with 20% unemployment it will not be able to benefit from the DD. Try out the others. B has not reached the DW. C has reached and can benefit from it.

2. See Sub-section 7.4.1, especially the portion on trends in CBR and Section 7.7.

UNIT 8 NATIONAL STATISTICAL SYSTEM

Structure

8.0 Objectives

8.1 Introduction

8.2 The National Statistical System

8.2.1 Collection of Data on Selected Aspects of the Economy

- Population and Vital Statistics
- Crop Area and Production
- Industrial Production
- Prices

8.3 National Statistical Commission (NSC)

8.4 Functions of Important Statistical Agencies in India

8.5 International Perspective of Statistical Data

8.6 Let Us Sum Up

8.7 Key Words

8.8 References

8.9 Answers/Hints to CYP Exercises

8.0 OBJECTIVES

After going through this unit, you should be in a position to

- explain the importance of 'statistical data' as an input for developmental planning;
- describe the National Statistical System in India that has evolved over time;
- specify the data collected on select aspects of the economy like population and vital statistics, agricultural and industrial statistics and prices;
- state the functions of important statistical agencies in India; and
- provide an international prespective of statistical data.

8.1 INTRODUCTION

So far we have been discussing the different types of resources required for development. While discussing these resources, you would have

realised the need for *quantification, measurement and comparison over time and space* to have a meaningful understanding of the resource endowment of the country. Without appropriate statistical data on variables relevant to the development process, people responsible for decisions would have to work on the basis of *guesses* and *impressions*, leading to failures of policies and shortfalls in the achievement of developmental objectives. *Statistical data* thus constitute an essential *resource* input for economic development. Let us, therefore, have a look at the present statistical system in India and also make an assessment of its adequacy in terms of our requirements.

8.2 THE NATIONAL STATISTICAL SYSTEM

The Statistical System of independent India has been shaped essentially by the federal structure of the Indian constitution. The constitution divides the administrative functions between the government of India and the state governments by classifying subjects into three categories – *the Union, the states and the Concurrent Lists*. Subjects in the Union list are assigned to individual union ministries/departments. Likewise, those in the states list are allotted to individual departments of state governments, while the subjects in the concurrent list are covered by both the central and the state governments. The collection of statistics relating to any subject is generally the responsibility of the department concerned. Several union/state government entities, therefore, have full-fledged statistical divisions or cells as part of their administrative set up. In such a set up, statistical data emanates by and large from the states to the union government except in the case of national surveys. The Indian statistical system is thus a system that is built upwards: from the village to the block, from the blocks to the district and from the districts to the state government department concerned and from it to the union ministry/department concerned. It is thus a collection of state level systems forming a national statistical system.

In an effort to build up and strengthen the national statistical system the necessary institutional structures were created in the early 1950s. These comprise institutions like the Central Statistical Organisation (CSO), the National Sample Survey Organisation (NSSO), State Directorates of Economics and Statistics (SDES), etc. These institutions, together with the Registrar General's office responsible for the conduct of decennial censuses which was in existence even before the independence, constitute the important organs of the national statistical system in India.

8.2.1 Collection of Data on Selected Aspects of the Economy

The Indian statistical system collects an enormous amount of data on a wide variety of aspects of the economy. We will confine our focus here on data relating to (i) population and vital statistics, (ii) crop production, (iii) production of industrial goods and (iv) prices.

I Population and Vital Statistics

Statistics on (i) population and its various characteristics and (ii) vital events – births and deaths – are important for analysing different aspects of population. *The Registrar General of India and Census Commissioner (RGI & CC)* is the authority concerned with the collection, processing and analysis of data on both these aspects. RGI & CC conducts ***Population Census*** every ten years. *A census is the complete enumeration of all members of a universe or population.* The history of population census in India goes back to 1872 when the results of censuses conducted in different parts of the country around that time were aggregated. The first complete population census was conducted *simultaneously* throughout the country in 1881. Thereafter, the population censuses (or simply the census) have been conducted at decennial intervals. The scope of the census has expanded over the years, taking note of data needs of development planning. The latest census relates to 2001 and the next is due in 2011. The reference date for the census is usually the 1st of March. The census collects a vast amount of data on the social, economic, demographic, cultural and geographic aspects of the population, the households and the basic facilities to which these households have access.

Vital statistics flow from the ***vital registration system*** in which the local authority records the births and deaths that occur in the community. However, as all births and deaths do not get reported, the coverage of the vital registration system remains incomplete. In order to overcome this shortcoming, a scheme known as the ***Sample Registration System (SRS)*** **–** was launched in 1970 to provide statistically valid estimates of births and deaths in the country. The SRS surveys a sample of the population on a continuous basis generating data helpful in forecasting the size, distribution and growth patterns of the population. The enactment of the *Compulsory Registration of Births and Deaths Act, 1969,* is a major step towards ensuring complete coverage of the registration of vital events. The reporting habit is improving particularly because the production of birth and death certificates is now compulsory for a number of purposes like addition of names in the ration card, school admission, employment, inheritance and settlement of property, etc. The SRS provides data at national and state levels and for regions within states. Another emerging source of vital statistics is the database generated by the *National Family Health Surveys* (NFHSs). With three such surveys conducted so far – relating to the years 1992-93, 1998-99 and 2005-06, the NFHSs provide data up to the state level.

II Crop Production

Significance of Data on Crop Production

Reliable and timely data on crop production have manifold significance. Important among these are:

i) They are of importance to planners and policy makers to bring about efficient agricultural development and take decisions on procurement, storage, public distribution, imports and exports and related matters.

ii) Such data would be needed at fairly disaggregated levels, down to village *panchayat* levels, in the context of decentralised planning.

iii) Government needs to make forecasts of production, as production data take time to materialise. Also, in order to take decisions well in advance about pricing of agricultural commodities, distribution, imports - where necessary - and exports - where possible, such forecasts would be needed.

India has a well established, decentralised system for the collection, compilation and dissemination of data on crop production and related matters. It consists of: (i) Directorate of Economics and Statistics in the Ministry of Agriculture (DESMOA), (ii) the State Agricultural Statistics Authorities (SASAs), and (iii) the Village Revenue Agency. Most of the country has cadastral (see Key Words) survey maps, frequently updated land records and the institution of a permanent village reporting agency.

How is production measured? Estimates of *crop production are obtained as a product of (i)* ***crop area and*** *(ii)* ***yield rate*** for each crop being estimated independently.

Estimates of Crop Area

Crop and land use statistics are reported from 93% of the country's geographical area (the rest being made up mainly of hill tracts of North Eastern states and areas under illegal occupation by Pakistan and China with no statistics being available for this area). The reporting area is grouped into three categories:

i) The first has 17 states and 4 union territories where cadastral surveys have been carried out and area and land use statistics form part of the land records maintained by the revenue agency. This accounts for 86% of the reporting area.

ii) The second consists of seven states where no village level revenue agency exists and crop and land use statistics are collected by sample surveys. This accounts for 9% of the reporting area.

iii) The third consists of 3 states and 3 union territories which also have no reporting system. This accounts for the remaining 5% of the reporting area.

The *Patwari*, who is the grass roots level functionary at the village level, does a complete enumeration of all fields (with a survey number given for each) in each village in category I area during each cropping season, collecting data on land use, irrigation and crop area. The village crop

statements (VCS) are then prepared and sent to the states and from there on to DESMOA. This process is limited to a 20% random sample of villages in category II area while in category III areas, it is based on the personal assessment of village *chowkidars.*

Estimates of Yield Rates

These are based on a system of crop cutting experiments and general crop estimation surveys (GCESs). For this, 'random samples' of (i) villages, (ii) fields growing the specified crop from each selected village and (iii) a random plot of size 5 x 5 meters from each sampled field are selected in successive stages. The crop cutting experiment in each selected plot gives the weight of produce and these weights form the basis of the estimates of the yield rates for different crops.

As GCESs and estimates of crop production take time, DESMOA makes advance estimates of crop area and crop production for principal food and non-food crops (food grains, sugarcane, fibres, etc.) that together account for 87% of the country's agricultural output.

Estimates of annual production of principal crops, gross area under different crops and yield per hectare of these crops are published in the annual publication 'agricultural statistics at a glance' (ASG) of DESMOA. This can also be accessed at the DESMOA website www.dacnet.nic.in

III Industrial Production

For purposes of data collection, manufacturing and repairing units in the country are grouped as (i) registered units and (ii) unregistered units. *Registered units* are units registered under an Act of parliament or state legislature (e.g. Factories Act, 1948). The rest are treated as *unregistered units*.

a) Registered Sector – the Annual Survey of Industries (ASI)

Data on production and other related aspects in registered manufacturing and repairing units are collected through the annual survey of industries (ASI) by the CSO. ASI are conducted under the provisions of the collection of statistics Act, 1953. All registered manufacturing and repairing units in the 'frame' are grouped into two basic categories - the census sector and the sample sector. The units in the former are surveyed on a complete enumeration basis while those in the latter are surveyed on a sample basis.

The ASI collects data on fixed assets, working capital and loans, employment, inputs, output, products and by-products manufactured, expenses and receipts, month-wise details of man-days worked, absenteeism and labour turnover for regular workers, etc. The reference period for the survey is the financial year immediately preceding the year of the survey. The collection of data from the units is based on records.

ii) Unregistered Sector

Data in respect of unregistered manufacturing units or enterprises are collected through periodic sample surveys (by CSO/NSSO) specifically designed to collect detailed data relating to employment, fixed assets, working capital, input, output, gross value added, etc. These are the follow-up enterprise surveys (FuS) conducted as a follow-up of the economic censuses (ECs) conducted by CSO. Data from a random sample of enterprises are collected from the premises of enterprises by interviewing respondents (as most of these units do not maintain any books of account) or from the owner of the enterprise (or any other respondent) at his/her household.

iii) Small Scale Industrial (SSI) Units

The SSI units are a part of the unregistered sector in the sense that these units do not come under the statutory coverage of any Act. However, the SSI units are registered on a voluntary basis with the directorates of industries of the state governments and union territory administrations. So far, three censuses of SSI units, one each in 1973-74, 1990-91 and 2002 with reference years 1972, 1987-88 and 2001-02 respectively, have been conducted. The reports of the censuses are separately published by the office of the Deputy Commissioner SSI (DCSSI). These censuses publish data for the SSIs more or less on the same set of variables as in the ASI reports. The periodicity of publication is, however, sporadic for the SSI censuses, unlike the annual feature for the ASI reports.

iv) Index of Industrial Production (IIP)

Estimates of the growth rates of industrial production based on the index of industrial production (IIP) are extensively used for policy-making at various levels in the government and also for decision-making in the banking and corporate sectors. The importance of IIP also arises as it is the only indicator generated *on a monthly basis* and disseminated on a wide scale. The indices are compiled and published at two levels: (i) for the all India level by CSO and (ii) for the state level by the SDESs.

IV) Prices

Like in the case of index of industrial production, data on prices are also compiled and published as price indices. These are direct indicators of the purchasing power of money in various types of transactions involving goods and services. As such, they are also used as *deflators* for converting current value figures to a constant base. The price indices are important tools in the design and conduct of the monetary and fiscal policy of the government. These are also of great utility in taking economic decisions in the private sector.

Price data are regularly collected by central and state government

departments and agencies. For compilation and publication, three agencies - the labour bureau (LB) in the ministry of labour, the office of the economic adviser (OAE) in ministry of industry and the CSO in MOSPI are responsible. Two type of indices on prices viz. (a) the consumer price index (CPI) numbers and (b) the wholesale price index (WPI) numbers are regularly published. The former, the CPIs, are themselves of four types. These are:

i) Consumer Price Index Numbers (CPIs)

As price changes affect different sections of the population differently, four consumer price indices (CPI) are in use at the national level - CPI (IW) for industrial workers, CPI (AL) for agricultural labourers, CPI (RL) for rural labourers and CPI (UNME) for urban non-manual employees. The Labour Bureau (LB), Simla (H.P.), is responsible for the publication of first three and the CSO for the fourth.

a) CPI for Industrial Workers CPI (IW) (Base 2001)

The series of CPI (IW) covers industrial workers defined as manual workers irrespective of their income employed in factories, mines, plantation, railways, public motor transport undertakings, electricity generation and distribution establishments, ports and docks. It measures the temporal changes in the retail prices of a fixed basket of goods and services consumed by an average working class family and is thus an important indicator of the retail price situation in the country. It is mainly used for the determination of the dearness allowance (DA) paid to central/state government employees and workers in industrial sectors for revision of wages fixed under the Minimum Wages Act, 1948.

The ***three important processes in the construction of the index*** are the centre-specific weighting diagram, data on retail price and data on house rent. The weighting diagram consists of a basket of items which are determined by a working class family Income and Expenditure Survey conducted in selected centres across the country. Retail prices are collected on weekly, monthly and half yearly basis from selected markets and shops and house rent data through a six-monthly house rent survey. The all-India index is thus a weighted average of such centre-specific indices, the weights being the shares of individual centres in the estimated aggregate consumer expenditure. These are published in the Indian Labour Journal of the Labour Bureau and also posted on the Ministry of Labour website. These are also published in the Monthly Abstract of Statistics brought out by the CSO.

b) CPI for Agricultural Labourers and Rural Labourers, CPI (AL/ RL)

A person is treated as an *agricultural labourer* if he or she follows one or more of the agricultural occupations in the capacity of a labourer on hire. Such a person may be paid in cash or kind or partly in cash and

partly in kind. A rural labourer is defined as one who does manual work in rural areas in agricultural or non-agricultural occupations in return for wages in cash or kind.

The source of weights for the CPI (AL) and CPI (RL) is based on the consumption expenditure data collected in the Consumer Expenditure Surveys by NSSO. Monthly price data collected from 600 villages spread over 20 states are used in the compilation of these indices. The sample of 600 villages is staggered over four weeks of a month with one-fourth of the sample covered every week. Prices are collected on a fixed price collection day. Like in the case of CPI (IW), the two indices of CPI (AL/RL) are also published in the Indian Labour Journal and the Monthly Abstract of Statistics besides being posted on their website.

c) CPI for Urban Non-Manual Employees, CPI (UNME)

An *urban non-manual employee* is defined as one who derives 50 percent or more of his or her income from gainful employment in non-manual work in the urban non-agricultural sector. The data for the construction of this index is drawn from the retail prices for selected items collected on a monthly basis from many centres across the country. The index is released for publication by the CSO with a time lag of about two weeks in the Monthly Abstract of Statistics of CSO. It is also published in the RBI-Bulletin published by the Reserve Bank of India.

ii) Wholesale Price Index

a) National WPI

The Wholesale Price Index (WPI) is a measure of the rise (or fall) in the prices of inputs and costs of production. The WPI series (with base year 1993-94) is compiled by the Office of Economic Adviser (OEA), Ministry of Industry, on a weekly basis, based on the price quotations collected for selected items and commodities. The basket of items is updated in order to keep it representative of the commodities included.

WPI are also published in the Monthly Abstract of Statistics, Bulletin of RBI and Handbook of Industrial Policy & Statistics published by the Ministry of Industry.

In addition to the four selected aspects (viz. population and vital statistics, crop area and production, industrial production and prices) discussed above, there are a variety of other aspects on which the Indian statistical system generates and publish data. While these are kept outside the purview of the present unit/section, data on employment in particular happens to be an important aspect for students of Economics to know about. The readers are referred to Unit 25 on Labour and Employment of this course for an account on this important aspect from the conceptual and measurement perspective. The publication of data on employment

is made by many organisations like the Census, NSSO, DGE&T (Directorate of Employment & Training, MoL, GoI), CSO, LB, etc.

b) State Level WPIs

Besides the national level WPIs, different states and union territories collect price data and compile CPIs/WPIs for different groups of commodities like agricultural commodities and manufactured items. These indices are published in State Statistical Abstracts.

Check Your Progress 1

1. Which is the organisation responsible for generating data on population in India? What is the system by which data on vital statistics collected in India?

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2. How are estimates of agricultural yields obtained in India?

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3. What do you understand by ‘unregistered sector’? By which survey, data on ‘unregistered manufacturing sector’ is collected in India?

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4. Which price index is used for making adjustment in the wages of industrial workers? Which agency is responsible for the compilation of this index?

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8.3 NATIONAL STATISTICAL COMMISSION

The publication of data on the selected aspects of the economy discussed above show that data generation takes place in several ways, namely, through censuses, (random) sample surveys, by periodic statutory returns to specified authorities and as a by-product of administration. Notwithstanding these efforts which has contributed to the establishment of one of the best statistical systems in the world, there are not only many gaps in data collected but data requirement on many new and emerging areas are experienced by planners and others. In realisation of this, the government set up a ***National Statistical Commission (NSC)*** in January 2000 under the *Chairmanship of Dr. C. Rangarajan.* The commission was required to examine critically the deficiencies of the present statistical system in terms of timeliness, reliability and adequacy and recommend measures to remedy the situation.

The **NSC,** in its report submitted in 2001, observed that the Indian statistical system needed to improve its credibility and timeliness for which it suggested a five-fold approach as follows: (i) **reform** the administrative structure of the Indian statistical system, (ii) **improve** the system of collection of data, (iii) **explore** alternative techniques where necessary, (iv) **identify** new data needed and (v) **evolve** appropriate methodologies for generating new data on (iv) above. Some of the important specific recommendations of the commission are:

(a) A *permanent and statutory apex body called the National Commission on Statistics (NCS)* [independent of the government in respect of policy-making, coordination and maintaining quality standards of Core Statistics] should be set up with the necessary legislation to accord the NCS a statutory status.

(b) The permanent NCS should determine areas of official statistics considered *core, or critical, to the functioning of the economy*. The core statistics will have the following ***characteristics***:

i) *cover sectors of national importance* like agriculture, industry, labour and employment and finance including socioeconomic sector and demography ;

ii) *mandatory* for governments at all levels to collect and disseminate;

iii) *conform* to prescribed definitions, concepts and standards laid down by the NCS;

iv) *updated* periodically with determined periodicity; and

v) *available* at both aggregate and disaggregate levels.

c) An administrative machinery within the government to be set up to implement and sustain the policies evolved by the proposed NCS. The existing Statistics Wing of MOSPI should be restructured into a full-

fledged department of the ministry to be known as *the National Statistical Organisation (NSO).* The head of the NSO will be *the National Statistician*. The NSO will consist of three offices and one wing namely, *the Central Statistical Office, the National Sample Survey Office, the Data Storage and Dissemination Office and the Consultancy Wing*.

(d) There is at present no *institutional mechanism* through which MOSPI can *effectively* coordinate with different central ministries/ departments in matters of statistics. To remedy this situation, the heads of statistical divisions in central ministries/departments should be designated as *Statistical Advisers* and assigned dual responsibilities – (a) assisting the ministry/department concerned in matters of statistics and (b) coordinating with the National Statistician in respect of the maintenance of quality standards as laid down by the NCS.

(e) New statistical units should be set up in certain central ministries/ departments (e.g. Department of Women and Child Development, Ministry of Environment and Forests, and the Insurance Regulatory and Development Authority). Existing units in certain others [e.g. The CBHI, which is now a part of the Directorate General of Health Services (DGHS), should be upgraded as the Directorate of Health Statistics (DHS)] should be strengthened.

(f) The SDES must be made responsible for technical coordination with all state government departments in respect of the content, methodology and dissemination of statistics.

(g) The SDES, with their enhanced role, should hold wider technical discussion to help the state governments take a holistic view of the state's statistical system increasing its utility to the state governments.

(h) The Indian statistical system lacks legal backing as the Collection of Statistics Act, 1953 is weak. A strong Act that is in accordance with the federal structure of the country should be enacted taking into account the informants' rights to privacy.

(i) The role of Information Technology should be fully harnessed for processing, transmission and dissemination of data. Strong communication links should be established between the NSO and all other related statistical offices both at the centre and states through one or more Internet Service Providers or through a virtual private network.

(j) A minimum list of variables and indicators on which data to be collected at the village level should be identified and a system for their compilation and aggregation established to facilitate local level development efforts. The variables and indicators required for aggregation at the district, state and national levels should also be identified with the community block as the first level of aggregation.

(k) Steps should be taken to fill important gaps in the availability of statistical data, especially in newly emerging areas of governance. Two examples which may be cited are: (i) work on a regular basis for the identification and listing of new activities that emerge in the services sector; and (ii) development of a suitable methodology to estimate the contribution of emerging areas like software exports, e-commerce, entertainment sector, etc. in respect of variables like employment, gross value added, etc.

8.3.1 Action on the NSC's Recommendations

The central and state governments have taken steps to implement the recommendations of the NSC. To illustrate, the following two are mentioned in this regard.

1. **A National Commission on Statistics (NCS)** has been set up in 2006 with composition and functions suggested by the NSC. The commission has initiated examination of specific data areas for improvements in their quality and scope like price indices, definitions and concepts of employment, a minimum set of data needed for local level planning, etc. It has also taken up the question of empowering the state directorates of economics and statistics (SDES).

2. The ministries have also taken action on the recommendations of the commission. For instance, in respect of NSC's recommendation to improve the estimates in core sectors by improved methodology and at higher levels of disaggregation, estimates of agricultural crop area forecasts and final area estimates have been widened to arrive at crop yield rates at the gram panchayat level. Likewise, efforts have been directed at generating a new 'service price index' for many important service sectors like roads, railways, air transport, insurance, banking, trade services, business services, telecommunications and ports.

8.4 FUNCTIONS OF IMPORTANT STATISTICAL AGENCIES IN INDIA

The functions of the office of the Registrar General of India (RGI) responsible for conducting the decennial population censuses in the country was outlined in section 8.2.1 (I) above. We shall here know about the important functions of two other major statistical agencies in the country viz. the CSO and the NSSO.

Central Statistical Organisation (CSO)

Set up in 1951, broadly, the important functions performed by CSO are the following:

i) coordination of the statistical activities in the country, laying down and maintaining norms and standards, providing liaison with central, state and international statistical agencies;

ii) dissemination of information on the structure and activities of the official statistical system to the public, especially data users;

iii) shouldering the responsibility for preparation of national accounts, promotion of regional accounts at state and district levels, generation of industrial statistics, conduct of economic censuses (ECs), follow-up surveys (FuSs) of ECs, family income and expenditure surveys, development of statistics on prices, human development, energy and the environment, dissemination of statistics on socio-economic aspects of life, etc.; and

iv) organisation of annual 'conference of central and state statistical organisations' (COCSSO) to deliberate matters relating to the development of statistical data on aspects of socio-economic life of the country focussing in particular on the technical and developmental issues.

The most important publication of the CSO is the National Accounts Statistics (NAS). Also called as the white paper, it is an annual publication which presents the estimates of National Income for the country. The publication provides estimates of NI and capital formation at sectoral level; for the 1-digit and the 2-digit disaggregated NIC (National Industrial Classification) levels. The annual economic growth rates, for the economy as a whole and at sectoral level, are released by CSO based on their compilation for the NAS. [It may be mentioned in passing that there is a full BDP level economics course offered by IGNOU on National Income Statistics (EEC 10)]. Besides the NAS, the other important publications of CSO are the Statistical Abstract (an annual publication) and the Monthly Abstract of Statistics. Since 1980, CSO is also conducting the Economic Censuses, whose reports have become an important data source on the unregistered small enterprises in the country. You can get more information on the CSO divisions and functions by visiting the web site of MOSPI (Ministry of Statistics and Programme Implementation).

National Sample Survey Organisation (NSSO)

The NSSO was established in 1950 to conduct national surveys to assist the planning exercises on a scientifically designed sample basis in the country. The main functions of NSSO are:

a) design and conduct of socio-economic surveys;

b) undertaking research on survey techniques and methodology;

c) organisation of field work for ASI and FuSs of EC;

d) conducting the sample checks on area estimation and crop estimation surveys;

e) developing urban sampling frames; and

f) collection of price data and analysis.

The surveys of NSSO are conducted as rounds which refer to the period during which a survey is held (usually from July to June of 12 months duration). While there are a number of subjects on which NSSO has conducted surveys and published reports, the most important of the NSSO surveys is on Employment and Unemployment. Called employment-unemployment surveys (EUS) or labour force surveys, these surveys are held every 5-years, and are also therefore called as quinquennial surveys. Another important subject which is covered in a quinquennial manner is the subject of consumer expenditure which is held simultaneously with the EUSs. The latest EUS relates to the 65th round (see Units 3 and 25 for details). The results of the consumer expenditure are used to arrive at estimates of people below the poverty line. The publications of NSSO include a journal called Sarvekshana and many reports which are released as numbered reports. The NSSO also conducts quinquennial surveys focused on individual unorganised sectors (e.g. manufacturing, trade & services, hotels & restaurants, transportation, etc.). Called as unorganised sector surveys, these surveys are conducted as follow-up surveys based on the frame generated by the Economic Censuses conducted by the CSO and hence their reports are also known as the Follow-up Survey (FuS; same as follow-up enterprise surveys) reports.

8.5 INTERNATIONAL PERSPECTIVE OF STATISTICAL DATA

It is useful and instructive to judge the Indian situation in an international setting. Publications of the *United Nations* and its agencies as also agencies like the *International Monetary Fund (IMF)* and the *World Bank* provide data on different facets of the economies of their member countries. These international publications also provide information regarding comparability of country-wise data. The IMF has recently formulated a '*Special Data Dissemination Standards' (SDDS)* covering the Real Sector (i.e. national accounts, production index, price indices, etc.), Fiscal Sector, Financial Sector, External Sector, etc. for different countries to facilitate transparency in the compilation and dissemination of data on important aspects of the economy of individual countries to enable cross-country comparison of such data. Many countries including India provide to *IMF a National Summary Data Page* in respect of each of the areas and sub-areas listed in SDDS as per a *Dissemination Format* prescribed. In addition, individual country agencies disseminate an advance data release calendar, giving notice of the precise dates of release of data, three months ahead of the date of release. This notice is also posted on the website of the IMF's Data Dissemination Bulletin Board. Indian statistical agencies like CSO, RGI & CC, and RBI furnish the data required by SDDS and also disseminate an advance release calendar for such data. Such information, as provided by any country covered by SDDS, including India, can be accessed on the internet with the help of the Google search engine using the search parameter Special Data Dissemination Standards IMF.

Check Your Progress 2

1. What are the characteristics of 'core statistics' identified by the NSC (2001)?

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2. Which is the statistical agency vested with the responsibility of compiling the National Accounts in India? Mention the two important surveys for which this agency is also responsible?

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3. What is meant by 'Special Data Dissemination Standards' (SDDS)? How is cross-country comparison of data facilitated by SSDS?

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8.6 LET US SUM UP

The importance of 'statistical data' for policy planning and development cannot be overemphasised. The statistical system in India has evolved rapidly over the years, with institutional arrangements for standard setting and coordination being set up in the early 1950s. The system generates a large amount of data on a wide variety of aspects of the economy. However, the system has, over the years, developed weaknesses in terms of quality dimensions like reliability of data and timeliness, besides failing to provide data on newly emerging activities. To rectify the weaknesses, a National Statistical Commission (NSC) was set up in the year 2000. The NSC examined the entire statistical system and made a number of recommendations to reform the system. Many steps have since been taken to move in the directions suggested by NSC. The unit has provided an overview of the national statistical system obtaining in India focusing in particular on some selected aspects of the economy and major statistical agencies in the country.

8.7 KEY WORDS

Cadastral : Derived from the French word 'cadastre', the term cadastral refers to a registry of properties. A cadastral survey is thus a complete enumeration of all the survey numbers of the village.

Frame : A list of all population units. One of the basic needs for drawing a sample for a 'sample survey'.

Random Sample : Refers to selection of samples in such a way that each unit has a pre-defined probability of selection. The CSO/NSSO surveys are all based on scientifically drawn random samples from which estimates of population characteristics (e.g. employment, number of persons below poverty level, etc.) are derived following well defined procedures [you can study more on this in the course EEC 14, an elective course on 'statistics' at the graduate (BDP) level].

Deflators : Are index numbers indicating change in price levels. Are useful in converting current value figures to constant value figures which are necessary for making temporal comparisons.

8.8 REFERENCES

Planning Commission, Government of India (2008): The Eleventh Five Year Plan (2007-12), New Delhi.

Ministry of Statistics & Programme Implementation, Government of India (2001): Report of the National Commission on Statistics.

8.9 ANSWERS/HINTS TO CYP EXERCIES

Check Your Progress 1

1. See Section 8.2.1 (I) and answer.
2. See Section 8.2.1 (II) and answer.
3. See Section 8.2.1 III (ii) & (iii) and answer.
4. See Section 8.2.1 (IV) (a) and answer.

Check Your Progress 2

1. See Section 8.3 and answer.
2. See Section 8.4 and answer.
3. See Section 8.5 and answer.

UNIT 9 MONETARY POLICY

Structure

9.0 Objectives

9.1 Introduction

9.2 Indian Financial System

9.3 Monetary Policy in India

9.4 Tools of Monetary Policy

9.5 Foreign Exchange Management Act

9.6 Mutual Funds

9.7 Venture Capital

9.8 Evaluation of the Monetary Policy in India

9.9 Emerging New Challenges Before the Monetary Authority

9.9.1 Changing Global Economic Environment

9.9.2 Multiplicity of Goals

9.9.3 Challenges Originating from Other Sectors

9.9.4 Inelasticity of Domestic Supply

9.10 Let Us Sum Up

9.11 Key Words

9.12 Suggested Books for Further Reading

9.13 Answers/Hints to CYP Exercises

9.0 OBJECTIVES

After going through this unit you will be able to

- outline the features of the Indian financial system;
- elaborate the major dimensions of the monetary policy pursued in India;
- discuss the different tools employed by the central bank to achieve its goals of monetary policy in the country;
- distinguish between the FERA/FEMA Acts;
- outline the importance of new financial instruments like Mutual Funds and Venture Capital; and
- discuss the limitations of monetary policy pursued in India in terms of an evaluation of the same.

9.0 INTRODUCTION

The objective of monetary policy is to achieve a desired expansion of the economy by facilitating the availability of money supply needed for the process. This needs to be done in such a way that it imposes no undue inflationary pressures on the economy. The two objectives of ensuring the required money supply for economic development and checking inflation are, to an extent, mutually conflicting in their nature. In view of this, it is important to examine the effectiveness of tools that are employed to control inflation. Institutionally, the role of formulating and implementing the different policy measures needed in this direction is discharged by the central bank of the country which in case of India is the Reserve Bank of India (RBI). The unit deals with the different dimensions of India's monetary policy. It begins by providing an account of the main features of the Indian financial system. It then elaborates on the two major objectives behind the implementation of monetary policy in the country. The major instruments or tools used in achieving the objectives of controlling inflation are discussed next. The provisions of the Foreign Exchange Regulatory/Management Acts and some new financial market's developments in the form of Mutual Funds and Venture Capital are subsequently discussed. An evaluation of the monetary policy pursued in India is finally provided to equip the learners with its strengths and limitations.

9.2 FEATURES OF INDIAN FINANCIAL SYSTEM

The Indian financial system comprise of a wide array of institutions broadly classifiable into: (i) credit institutions, (ii) investment institutions, (iii) savings institutions, (iv) merchant banking institutions, and (v) support service institutions. We will mainly focus here on the first i.e. the credit institutions as they are not only more spread out in terms of their reach but also concerns the lives of almost all sections of the society. The credit institutions comprise of two major segments viz. ***commercial banks*** and ***specialised financial institutions***. Both these segments have their participants in each of the three sectors viz. the public sector, the private sector and the co-operative sector. Commercial banks are engaged in the crucial function of mobilising savings and extending credit to economically viable enterprises. The specialised financial institutions, on the other hand, are development banks set up for the promotion of specific sectors of the economy like agriculture, industry, trade, housing, tourism, etc. The structure of financial institutions is well diversified and the diversification trend is gaining further momentum with the institutions entering new fields like leasing, venture capital financing, technology development, etc.

Besides the above range of institutions which come within the purview of the regulatory framework of the government or the Reserve Bank of

India (RBI), there is also a huge unregulated segment. This mainly comprises of private money lenders like: indigenous bankers, semi-cooperative institutions, traders and commission agents, etc. As per one estimate, the unregulated segment in India caters to the needs of nearly 40 percent of the credit needs of the farm and the non-farm enterprises including households. The main reason for the popularity of such institutions is the low transaction costs for both the borrowers and the lenders. The transaction cost is low for the lenders as the creditworthiness of borrowers is judged mainly on the basis of familiarity and personal knowledge. It is also low for the borrowers because the lenders do not insist on securities as in the case of commercial banks. Thus, although the interest rates are higher than in the formal financial sector institutions, the low transaction costs partly compensate for the high interest rate.

A question is to what *extent* and with what *efficiency* the financial system is serving the needs of the country. To the extent that informal lending practices hold such a large share, with its exploitative ill-effects for the large illiterate poor borrowers in rural areas, there is a need for reforms in the banking operations to implement innovative institutionalised credit practices. There are examples of banking practices in other countries where the bank officials go out to seek potential borrowers to facilitate the financing of viable economic enterprises. Such officials are suitably rewarded for their initiatives. The contact between the official of the bank and the borrower is maintained in a continuous manner aimed at ensuring the proper utilisation of the credit provided and the successful running of the enterprise financed. Such proactive practices are yet to make inroads in the commercial banks in India. In other words, the financial system has not been able to improve its efficiency by reducing the transaction costs of the borrowers nor has it been able to progressively ensure the investment and productive efficiency of the enterprises it finances, particularly in the 'micro enterprises' sector. A second dimension is to see the extent of reach of the banking system into the household savings mobilisation. Data on this aspect reveal that the gross savings of the household sector mobilised by the banking sector in India has risen marginally from 10.0 percent of GDP in 1965-66 to 17.9 percent in 2007-08. A third dimension is in respect of 'financial technology' which is underdeveloped in India as compared to many advanced countries of the world. Improvements in this area would enhance the ability of the borrowing units and the financial sector units to better withstand the possibility of output volatility through upswings and recessions. With increased integration into the globalised trading and financial systems, India's financial system needs to be strengthened to enable it to withstand asset price shocks. Policies should be geared to take quick remedial measures.

Unlike the credit institutions, the presence of other four type of financial institutions (viz. investment, savings, merchant banking, and support services institutions) is generally restricted to the two sectors viz. public and private sectors. Investment banking has become prominent more

recently with organisations like LIC, GIC, UTI, etc. from the public sector also entering into this sector. Post offices have gained in acceptance as saving institutions with attractive schemes. Merchant banking institutions are specialised bank departments or subsidiaries. Private sector banking received a boost with the introduction of New Economic Policy. The private sector banks have their presence largely in the urban areas confined mainly to the metropolitan cities. In terms of major indicators like business per employee, profit per employee, establishment expenses, etc. private sector banks have much better performance indicators. For instance, in terms of profit per employee, in 2005-06, the figures were Rs. 2 lakhs for the SBI group of banks, Rs. 0.78 lakhs for the other nationalised banks, and Rs. 9.23 lakhs for the private sector banks. However, two major criticisms against the private sector banks are that they ignore the rural areas and promote high-street banking which cater to the upper sections of the society. The overall share in total deposits is 75 percent for public sector banks and 20 percent for private sector banks.

The basic elements of a suggested strategy for restructuring of the financial system to improve its efficiency are the following:

- formulation of a sound criteria for appraisal, selection and monitoring of enterprises and projects that seek financial assistance from the system;
- effective legal and regulatory framework to ensure sound and healthy functioning of the financial system;
- a policy framework that ensures operational autonomy to the constituent units of the financial system; and
- generation of competitive impulses in the financial system.

Check Your Progress 1

1. What are the major types of institutions governing the Indian financial system? What proportion of total credit, the unregulated segment of financial operations is estimated to cater and why?

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2. What are the basic elements of a strategy suggested to improve the financial system in India?

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9.3 MONETARY POLICY IN INDIA

The objective of monetary policy of India has been one of controlled monetary expansion. This approach has aimed at ensuring the required money supply for all legitimate economic activities while at the same time ensuring that it is not available so freely to create inflationary pressure. It is argued that in a developing economy, money supply must be expanded sufficiently to match the growth of real national income. While it is difficult to say the exact relationship that the rate of increase in money supply bears on the growth in national income, it is generally agreed that increase in money supply has to be slightly higher than the projected rate of growth of real national income. This is because the income elasticity of demand for money, for India, is found to be 1.4 i.e. any change in income generates a 1.4-fold change in the demand for money. A second factor viz. the price elasticity of demand for money also influences the desired change in the money supply for a country. The value of price elasticity of demand for money (which measures the extent to which the demand for money changes in response to a given change in prices) is estimated as close to 1 for India i.e. any change in prices is accompanied by an exactly equal change in the demand for money.

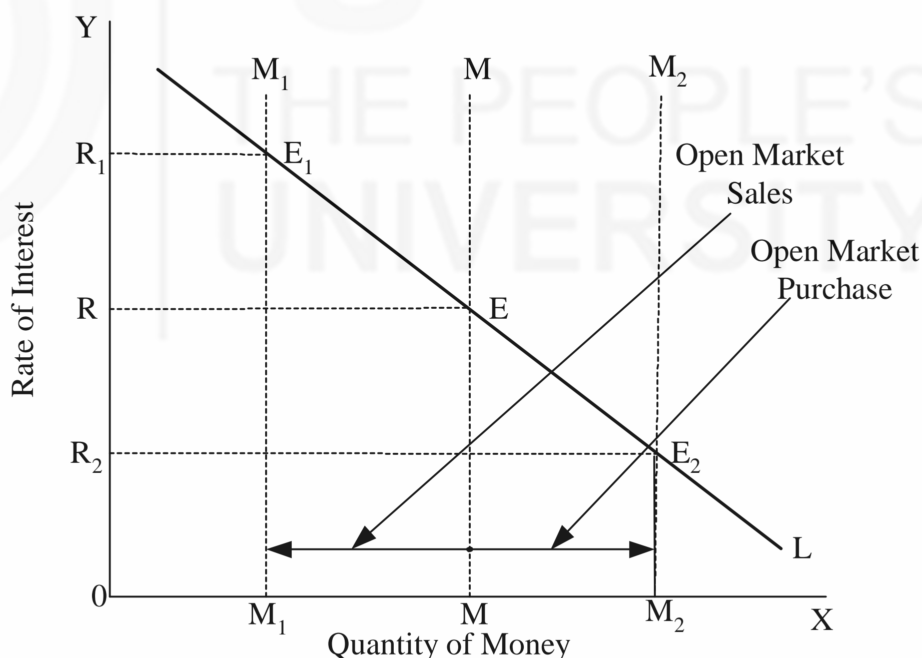
While ensuring the required money supply for meeting the growth stimulus in the economy, a distinction needs to be made between primary credit needs and secondary credit needs. All growth anticipated or growth promotive need for investment, such as the credit needs for promotion of legitimate economic activities, come under primary credit. A second most popular need for credit arises when in the annual budgets of central and state governments, free sanctions in the name of subsidies and loan waivers are announced. The money required for meeting such budgetary announcements also needs to be met by the monetary authority in the country. There is also the huge financial need by way of 'budgetary deficit' which refers to the gap between the revenue income and revenue (i.e. government) expenditure. The financial or the credit need of such economic and non-economic types is what may be termed as secondary credit. Many types of expenditure are thus not only non-productive (some of them like loan waivers are clearly negative expenditure) but are also unrelated to the growth process in the economy. The objective of controlling the supply of money, to an extent, aims at restraining such secondary expansion of credit. Imposing a check on the secondary expansion of credit poses a constraint because the private sector credit needs are not wasteful as most of it is needed for the legitimate requirements of production and trade. Further, even in case of private sector credit needs ensuring efficient spending for the actual purpose to which the credit was meant requires effective monitoring. The fulfilment of the objective of controlling secondary credit needs therefore — **one,** a careful choice of instruments of monetary policy designed to regulate the flow of credit, and, **two,** an effective credit planning and implementation system. We therefore now turn our attention to the tools of monetary policy.

9.4 TOOLS OF MONETARY POLICY

The essence of monetary policy being either to increase or decrease the supply of money circulating in the economy, it is immediately clear that the impact of any tool or instrument used should alter the '*monetary base*' in the economy in the desired direction. Thus, if the government wants to reduce the money supply, it can do so by issuing **bonds**. With the money in circulation used up to purchase the bonds, the monetary base would shrink. Again, at a time when the objective is to increase the money supply, the government can propose to take back the bonds by which the monetary base is expanded with the supply of money induced into the market while purchasing back the bonds from the public. The example used to illustrate the achieving of a change in the monetary base i.e. disburse/collect bonds falls under what is more generally called as '***open market operations***'. Such open market operations, as defined by the RBI, more generally refer to 'the purchase and sale by the central bank of a variety of assets such as foreign exchange, gold, government securities and company shares'.

Characteristically, the open market operations are anti-inflationary. This can be graphically illustrated (Figure 9.1) by the influence that a change

Figure 9.1: Interest Rate Determination



in the monetary base makes on the rate of interest prevailing in the economy. Consider the situation where the market is in equilibrium at the rate of interest OR corresponding to the level (or quantity) of money supply OM. If the central bank makes open market sale of securities, the supply of money in the market shrinks to the level OM_1. Consequently, the demand for credit would increase, resulting in an increase in the rate of interest to the level of OR_1. Conversely, if the central bank purchases securities, the money supply would increase to

the level OM_2. The rate of interest too, with the increase in money supply causing a reduction in the demand for credit, would fall to the level OR_2. The change in the supply of money associated with or brought about by a change in the rate of interest, vis-a-vis the open market operations, would be effective when the government policy permits the prevailing of 'market related or determined rates of interest'. Alternatively, in a situation where the monetary authority is able to mandate specific interest rates (on loans, savings/fixed deposits, etc.), a raise in the interest rates would result in a contraction of money supply as higher interest rates encourage savings and discourage borrowing.

Apart from the open market operations, there are other instruments (or tools) which the central monetary authority can employ to influence the desired change in the money supply. One of the most important among these is the '*bank rate*' (BR) policy. The bank rate refers to the 'standard rate' at which the central bank (RBI) buys or rediscounts bills of exchange or other commercial papers. More generally, bank rate is taken as the rate at which the RBI extends advances to the commercial banks. In some countries (e.g. U. K.) the bank rate has been substituted by minimum lending rate (MLR). By increasing the bank rate (or the nominal interest rate) a contraction in the monetary supply can be achieved.

Another prominent instrument used is the specification on the level of ***'variable reserve requirement'*** (VRR). More particularly, VRR is used to control credit. By changing the ratio of reserves, the RBI influences the volume of credit that banks can advance. There are two components of VRR viz. the ***cash reserve ratio*** (CRR) and the ***statutory liquidity ratio*** (SLR). CRR refers to the portion of total deposits of a commercial bank which it has to keep with the RBI as cash reserves. The SLR, on the other hand, refers to that portion of total deposits which a commercial bank has to keep with itself in the form of cash reserves. Increasing or decreasing the SLR, like the CRR, either decreases or increases the availability of funds with the banks to advance credit thereby complementing the objective of the central bank to influence the volume of money supply in the economy.

Still another instrument which has acquired significance in the recent times is what has come to be known as the '***liquidity adjustment facility***' (LAF). The LAF is an indirect instrument. It operates through overnight ***fixed repo*** and ***reverse repo*** rates. Repo rate is the rate at which banks borrow short-term loans from RBI. Reverse repo rate is the rate at which banks park their short-term surplus funds with the RBI. Since October 2005, repo rate has been changed frequently, along with changes in the reverse repo rate. Frequent changes in the repo rate indicate that the global factors are being accorded greater weight in the determination of monetary policy contours than ever before. This is in sync with the authorities' efforts to push for further opening up of the economy with the proposed introduction of capital account convertibility (see Unit 21).

Apart from the four tools mentioned above viz. open market operations, bank rate, CRR and the SLR, there are other instruments like Refinance Policy, Selective Credit Control and Moral Suasion. The ***refinance policy*** refers to the system of refinance provided by the RBI to the commercial banks for certain credits extended by them (e.g. concessionary agricultural and rural credit). As an instrument of credit control its effectiveness depends upon commercial bank's liquidity position. With time, the dependence of commercial banks on the RBI having reduced greatly, the effectiveness of this policy as an instrument for credit control has also reduced. ***Selective credit controls*** (SCCs) are designed to curb excess of advancing in select areas/cases without affecting other types of credit. For instance, (i) ceiling on the amounts of credit for certain purposes and to any one borrower, (ii) discriminatory rates of interest charged on certain types of advances, (iii) prohibiting banks from entering into any particular transaction, (iv) giving directions on the purposes for which advances may not be made by the banks, (v) laying down maximum amount up to which guarantees may be given by a commercial bank, etc. Practices followed under *moral suasion* includes periodic urging by the RBI to the commercial banks to exercise control over credit in general and certain advances in particular. This method has been found quite useful with the RBI having successfully built up good informal relations with the banks.

Market Stabilisation Scheme (MSS)

The MSS was launched by the RBI in April 2004. There was a certain background due to which the MSS was introduced. While intervening in the foreign exchange market, the RBI had been releasing rupees for buying dollars. The rupees so released added to liquidity in the system raising inflationary pressures. To mop up this excess liquidity, the RBI used its huge stock of government securities. But over a period of time, this stock of securities held with RBI came down substantially. It was in this context that the MSS was launched as an additional channel to reduce liquidity. Under the MSS, the government issues T-Bills (treasury bills) in addition to its normal borrowing requirements. The amounts raised under the MSS will be held in a separately identifiable cash account entitled Market Stabilisation Scheme Account.

The MSS is thus basically a monetary management tool. The MSS will curb short-term volatility in the forex market. It is also expected to fine tune the structural balance in the money market and enable the RBI to maintain a grip over short-term interest rate.

9.5 FOREIGN EXCHANGE MANAGEMENT ACT (FEMA)

Foreign exchange is linked with country's trade policy. The focus of India's trade policy followed since the 1980s show that it first followed a policy of import liberalisation and subsequently (in the 1990s) shifted

to a policy of export orientation. Prior to the 1980s, the then prevailing Foreign Exchange Regulation Act (FERA, 1973), focused on conservation of foreign exchange. The FERA had strict provisions to deal with contravention of its stipulations. This led to harassment of bonafide companies and individuals earning unpopularity. With the process of liberalisation begun in 1991, foreign investment in various sectors were permitted. This resulted in increased flow of foreign exchange leading to rising foreign exchange reserves. With a view to managing the increased flows and reserves, FERA was repealed and in its place, the Foreign Exchange Management Act (1999) was made effective from 1st June, 2000. The approach of FEMA thus fundamentally differed from that of FERA principally in two respects viz. (i) from conservation to management, and (ii) from control to facilitation. In light of this, while offences under FERA were treated as criminal, those under FEMA are treated as civil.

Provisions of FEMA provides for free transaction on current account subject to the guidelines by the RBI. Enforcement of FEMA is entrusted to a separate directorate which undertakes investigations on contraventions of the Act. Provisions of FEMA are grouped under four heads. Important provisions under each of the four heads, having a bearing on promoting economic development through foreign investment with enabling provisions to ensure the curtailing of inflationary trends from such transactions, are outlined below.

I Regulation for Current Account Transaction

- Any person can sell or draw foreign exchange to or from an authorised dealer (if such sale or withdrawal is a current account transaction) except for certain prohibited transactions like remittance of lottery winnings, remittance of interest income on funds held in Non-Resident Special Rupee (NRSR) account scheme, etc. Besides these cases, there are certain other transactions, for which specific RBI approval will be required. For instance, Reserve Bank approval is required for importers availing of Supplier's Credit beyond 180 days and Buyer's Credit irrespective of the period of credit. Authorised dealers are permitted remittance of surplus freight/passage collections by shipping/airline companies or their agents, multimodal transport operators, etc. after verification of documentary evidence in support of the remittance.

II Regulations Relating to Capital Account Transactions

- Foreign nationals are not allowed to invest in any company or partnership firm or proprietary concern which is engaged in the business of Chit Fund or in Agricultural or Plantation activities or in Real Estate business (other than development of townships, construction of residential/commercial premises, roads or bridges) or construction of farm houses or trading in Transferable Development Rights (TDRs). Listing of permissible classes of Capital account

transactions for a person resident in India and also by a person resident outside India has been provided in the regulations.

- Detailed rules and regulations are provided on borrowing and lending in Foreign Currency as well as Indian Rupee by a person resident in India from/to a person resident outside India either on non-repatriation or repatriation basis.

- Authorised dealers are now permitted to grant rupee loans to NRIs against security of shares or immovable property in India, subject to certain terms and conditions. Authorised dealers or housing finance institutions approved by National Housing Bank can also grant rupee loans to NRIs for acquisition of residential accommodations subject to certain terms and conditions.

- General permission has been granted to Indian company (including Non-Banking Finance Company) registered with Reserve Bank to accept deposits from NRIs on repatriation basis subject to the terms and conditions specified in the schedule. Indian proprietorship concern/firm or a company (including Non-Banking Finance Company) registered with Reserve Bank can also accept deposits from NRIs on non-repatriation basis subject to the terms and conditions specified in the schedule.

III Regulations relating to export of goods and services

- Export proceeds are required to be realised within a period of 6 months from the date of shipment. In the case of exports to a warehouse established abroad with the approval of Reserve Bank, the proceeds have to be realised within 15 months from the date of shipment. An enabling provision has been made in this regulation to delegate powers to authorised dealers to allow extension of time. Export of goods on elongated credit terms beyond six months requires prior approval of Reserve Bank.

IV Other Regulations

- A person resident in India to whom any foreign exchange is due or has accrued is obligated to take reasonable steps to realise and repatriate to India such foreign exchange unless an exemption has been provided in the Act or regulations made under the general or special permission of Reserve Bank.

- Any foreign exchange due or accrued as remuneration for services rendered or in settlement of any lawful obligation or an income on assets held outside India or as inheritance, settlement or gift to a person resident in India should be sold to an authorised person within a period of seven days of its receipt and in all other cases within 90 days of its receipt.

- Any person who has drawn exchange for any purpose but has not utilised it for the same or any other purpose permissible under the provisions of the Act should surrender such foreign exchange or unutilised foreign exchange to an authorised person within a period of 60 days from the date of acquisition. Where, however, exchange was drawn for travel abroad, the unutilised exchange in excess of the limit up to which foreign exchange is permitted to be retained, should be surrendered to an authorised person within 90 days from the date of return of the traveller to India if unspent exchange is in the form of foreign currency notes and within 180 days if it is in the form of travellers cheques.

- The Reserve Bank has specified the limit for possession and retention of foreign currency by a person resident in India. There is no restriction on possession of foreign coins by any person. Any person resident in India is permitted to retain in aggregate foreign currency not exceeding US$ 2000 or its equivalent in the form of currency notes/bank notes or travellers cheques acquired by him from approved sources.

- The Reserve Bank has granted general permission to any person to receive any payment: (a) made in rupees by order or on behalf of a person resident outside India during his stay in India by converting the foreign exchange into rupees by sale to an authorised person; (b) made by means of a cheque drawn on a bank outside India or a bank draft or travellers cheques issued outside India or made in foreign currency notes directly, provided the cheques, drafts or foreign currency is sold to an authorised person within seven days of its receipt; (c) by means of a postal order or postal money order issued by a post office outside India.

- Reserve bank has also granted general permission to a person resident in India to make payment in rupees: (a) for extending hospitality to a person resident outside India; (b) to a person resident outside India for purchase of gold or silver imported by such person in accordance with the provisions of any order issued by Central Government under the Foreign Trade (Development and Regulation) Act, 1992 or under any law or rules or regulations in force.

Check Your Progress 2

1. Distinguish between primary credit and secondary credit ?

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2. Mention the different tools that are employed to achieve the objectives of monetary policy in India. Which one of them is characterised as anti-inflationary and why?

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3. How are selective credit controls (SCCs) designed to curb excess of advancing in select areas/cases?

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4. In what respects the two Acts, FERA & FEMA, basically differ ? What are the three principal heads under which provisions of FEMA are listed ?

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9.6 MUTUAL FUNDS

A mutual fund is an investment financial institution which collects and invests the money collected by the public through open offers of public deposits. The investment is made in a wide array of assets in the market. The fund is managed by professionals due to which the returns on investments are usually much higher than those on the bank deposits. It thus gives an alternative to small investors who can make a choice or distribute their investment between bank deposits and market investment. The liquidity in mutual funds is, however, less than the bank deposits as there is usually a lock-in period within which the investor cannot sell and encash the investment made in the fund. The experience of mutual funds in India is four decades old of which for the first two decades the Unit Trust of India was the leading pioneer in this field. During the last two decades, however, there is a multiplicity of companies which have entered the mutual fund market. The average return on investment in MFs has been in the range of 15 to 25 percent which is higher than the domestic inflation rate and the risk-less return offered by the banks combined. In the light of this, it is no surprise that presently nearly *25 percent of household savings in India are cornered by the mutual*

funds (MFs). This is higher than the corresponding shares in the developed markets of western countries viz. 11 and 16 percents in UK and USA respectively.

Rationale for Mutual Funds: The rationale for the mutual funds can be stated both from the individual investor's as also from the capital market's side. In case of individual investor there is higher return by way of dividends and capital appreciation. Risk of loss is reduced as the funds are managed by well informed professional managers. It is also reduced due to diversification of portfolio in terms of companies and industries. Further, since the returns are automatically invested, the scope for capital appreciation is enhanced. As the savings and investments of a large number of investors are pooled the advantage of economies of scale accrue. The individual investor is spared of the ordeal of having to self-decide and then go through the process of investment. Thus, from the individual investor's angle mutual funds are very much advantageous.

From the point of view of capital market, if the foreign investors are also investing, due to increased volume of trading operation the liquidity for the domestic market players is enhanced. Such competition with a market regulator surely, and to an extent even otherwise, would automatically demand a higher investor discipline by way of increased disclosure, improved information flow, etc. In other words, problems of information asymmetry is reduced. This also contributes to improvement in economic fundamentals. Stability in returns on investment over long term, which is the hallmark of mutual funds, has the potential to counter the imbalance due to speculative tendencies witnessed commonly in active capital market. The benefits for both the individual and the capital market are thus significant.

Strengthening the Mutual Funds: Some suggestions that have been made by researchers to strengthen the mutual funds market are: (i) improve the transparency by specifying the ratio of fund deployment between different market instruments; (ii) make explicit, on the basis of professional judgement or assessment, the likely period of highest yield to distinguish between short term gain and long term gain; (iii) disclose the gain or loss due to inter-scheme transfer of investments by the fund managers in order that the investors are better informed; and (iv) put in place a separate comprehensive legislation, on the lines of UTI, to overcome the various shortcomings stated above.

9.7 VENTURE CAPITAL

Venture capital (VC) is a type of private equity capital provided to high-potential growth companies in the interest of generating a return at a later time point. Venture capital investments are generally made in exchange for shares in the invested company. Typically, such investments come from institutional investors. There are also dedicated investment

firms which pool together such capital to invest in enterprises that are normally risky for standard capital markets or bank loans. Such an investment firm (or sometimes a person) is called a Venture Capitalist. The pooled investment is known as a 'venture capital fund' (VCF).

Venture capital has been used as a tool for economic development even in many developing countries with not so well developed financial markets. In such countries, venture capital is known to play a role in facilitating access to finance for small and medium enterprises (SMEs) which in most cases would not qualify for receiving bank loans.

In India, the union budget for 1999-2000 stressed the difficulty to access credit from the capital market for technology demonstration/development particularly for the SMEs. Stressing the need for higher investment in venture capital activity, it suggested the need to create a suitable environment for allowing the VCF to play a major role in providing capital for the SMEs. Taking the cue from this, the Security Exchange Board of India (SEBI) initiated a process of interaction with industry participants to identify the issues and areas for the development of VCF industry in India. Towards this end, SEBI appointed a committee on Venture Capital in July 1999. Examining the impediments to the growth of VCF, the committee suggested several measures to facilitate the growth of venture capital activity in India. The thrust of the committee's recommendations was to facilitate through an enabling regulatory, legal, tax and institutional environment the creation of a pool of 'risk capital' to finance idea-based entrepreneurship. Among its other specific recommendations the following are note worthy: (i) the existing provisions of the IT Act should be reframed to provide automatic income-tax exemption to VCFs registered with SEBI; (ii) mutual funds, banks and insurance companies should be permitted to invest in SEBI-registered VCFs; and (iii) the investment criteria should be redefined to permit investment by VCFs primarily in the equity or equity related instruments which should be convertible into equity by way of subscription to initial public offers (IPOs).

Regulation by RBI for venture capital funds are that a SEBI registered VCF investor can invest in Indian venture capital undertakings according to the rules and regulations issued by RBI from time to time.

9.8 EVALUATION OF THE MONETARY POLICY IN INDIA

Monetary policy has an advantage (compared with the fiscal policy) in terms of the shorter time lag between its perceived 'action needed' and 'action taken' time points. Reduction in the different rates/ratios (BR/CRR/SLR/RR) are made applicable with immediate effect. Such changes are also made any time of the year. But these advantages are not realised optimally as evidenced by the 'inflationary rise in prices' which

have frequently taken place. Main reasons for the instruments of monetary policy to be ineffective are the following.

Higher Proportion of Non-Banking Credit: A substantial proportion of credit extended is by the non banking institutions (NBIs). This segment is not affected by the changes in the bank rate and ratios. The linkages between the banks and the NBIs are not well developed. Further, the banks have largely tapped non-deposit resources by way of call money market and participation certificates. The call money rates are generally beyond the purview of the RBI.

Limitations of Monetary Instruments: The frequent changes in the rates of monetary policy instruments are resented on the ground that they create an environment of uncertainty for productive investment. Further, with the greater integration of the Indian financial sector with the global financial system, RBI's monetary management has to take due note of global trends. It has also come to be realised that change of interest rates to curtail credit (i.e. increasing the interest rates) favour the unproductive sectors relatively more, hurting the interests of equity and growth. The effectiveness of the monetary policy instruments is thus clearly constrained in the changing environment prevailing in the globalised context.

Influence of New Financial Institutions: Institutions like mutual funds, venture capital companies and the public offers floated in the open market (to raise capital) have an abundant influence in effecting the overall liquidity in the economy. Recall that the mutual funds account for nearly 25 percent of the total household savings in the economy. Thus, the new financial institutions together account for a significant proportion of overall liquidity besides leading to a high degree of disintermediation. The effect of RBI's interventions is insignificant in these segments of the financial system.

High Currency-Deposit Ratio: The banking habit among large proportion of vast rural segments is still weak which has kept the currency-deposit ratio high. Influence of RBI's monetary policy instruments touches only the deposit segment. This contributes to the ineffective monetary regulation in the economy.

Preferential Rediscount Facilities, Selective Application of Credit Constraints and Weak Statistical/Monitoring System: The RBI has still maintained the many preferential rediscount facilities for encouraging the extension of credit by banks to promote certain sectors like agriculture, small industry, export finance, etc. There is also the special consideration that segments like small farmers and artisans in rural areas should be shielded from credit curbs. Further, there is a lack of the required sound statistical and monitoring system to ensure that the preferential segments are duly benefiting by such policies. These preferences and gaps have rendered the task of monetary policy restrictive in their reach and influence.

Rigidity in Policies and Growing Fiscal Needs: Credit policy for a particular year is traditionally based on the developments in the previous year in regard to money supply and price trends. As opposed to this, the need of the hour is a switch over to an assessment of the credit needs of the ensuing year based on the growth in real output envisaged. The increasing monetisation of the budget deficits also conflicts the objectives of fiscal and monetary policies. To overcome this situation, it is necessary that the monetary authority must have a reasonable degree of flexibility for the creation of reserve money. However, there are exogenous factors (e.g. movements in the foreign exchange assets) affecting the determination of the reserve money requirement.

The above factors point out to the need for strengthening the institutional arrangements governing the functioning of the monetary authority. It is in this context that the Sukhmoy Chakravarty Committee pointed out to the need for bridging the mismatch between the responsibilities of the RBI to supervise and control the monetary system on the one hand and the authority needed to do so on the other. That leads us to have a look on the question of RBI autonomy.

9.8.1 RBI Autonomy

An important ingredient for the success of financial liberalisation is the autonomy of the RBI. There are two basic tenets of the concept of autonomy. **One**, the monetary policy is conceived to be an arm of the overall economic policy. The stability and functioning of the banking system which is important for improving its effectiveness in serving the needs of the economy is unarguably an important economic policy objective entrusted to the central bank (i.e. the RBI). **Two**, there has to be a clear distinction between ownership of the central bank by the government and the regulation of the monetary and financial system by the central bank. This distinction is normally blurred and the impression remains that ownership also confers on the government the right to regulate the monetary system.

In the context of the sweeping changes now taking place in the financial landscape as also the global trends, there is a compelling need for giving undisputed authority to the RBI as an independent professional institution to not only watch over the financial integrity and stability of the system but also ensure its orderly development. For instance, the RBI can be given an opportunity to form its views which the bank can put across to the government at an early stage right at the time of formulation of the policy. Also, the inputs need not just be on monetary policy but may be on broader economic and fiscal policy too. With such a role and responsibility vis-à-vis autonomy extended to RBI, it would be more effective in discharging its function in place of its present nature of function focusing more on liquidity management and inflation control.

9.9 EMERGING NEW CHALLENGES BEFORE THE MONETARY AUTHORITY

The conduct of monetary policy is faced with a number of emerging challenges. They can be outlined as below.

9.9.1 Changing Global Economic Environment

Recent developments in the global economy have aggravated the challenges that monetary authorities face. An important challenge faced is brought about by the new environment characterised by increased financial globalisation. This renders economies vulnerable to changes in internal demand, volatility in capital flows and exchange rate shocks. Monetary policy formulation thus becomes much more interdependent than before across economies and has to factor in developments in the global economic situation, the international inflationary situation, interest rates, exchange rate movements and capital flows. As a result, while domestic developments continue to dominate, global factors are also gaining more importance. Massive cross-border capital flows, globalisation of financial markets and advances in information technology have combined to significantly alter the choice of instruments of monetary policy, operational settings and transmission mechanisms.

9.9.2 Multiplicity of goals

There is also a multiplicity of goals in the rapidly integrating economies like: (i) a fixed exchange rate; (ii) free capital movement; and (iii) an independent monetary policy. This has been identified as an 'impossible trinity'. Management of this trinity necessarily implies constant trade-offs on the domestic circumstances, global circumstances and expectations. It calls for greater coordination among the policy circles. There is considerable fuzziness in reading underlying macro-economic and financial developments, obscured signals from price behaviour and the required clarity in the monetary authority's observance of the performance of the real economy. Consequently, dealing with the impossible trinity has become more complex than before.

9.9.3 Challenges originating from other sectors

Monetary policy has also to contend with the following challenges originating from other sectors.

a) Fiscal imbalances remain large by international standards which needs to be managed in a non-disruptive manner;

b) The enduring strength of foreign exchange inflows complicates the conduct of monetary policy. In the event of demand pressure building up, increases in interest rates may be advocated to preserve and sustain growth in a non-inflationary manner. High interest rates,

however, increases the possibility of further capital inflows and potentially reduce the efficiency of the monetary policy;

c) In India, levels of livelihood of a large section of the population are inadequate to withstand sharp financial fluctuations which impacts real activity. As such, monetary policy has to take into account the effect of these segments of the economy from volatility in financial markets, often related to shifts in capital flows.

9.9.4 Inelasticity of domestic supply

Limitations of the elasticity of aggregate supply domestically, impose an additional burden on monetary policy particularly in the short term. While open trade has expanded the supply potential of several economies, it does not seem to have had any significant short term salutary effect on supply elasticities. Persisting supply shocks to prices of commodities and services are sensitive to inflation and can exert a lasting effect on inflation expectations. The burden and the dilemmas in the event of structural supply problem are thus greater due to its persistent effects on inflation. Managing such structural problems while keeping inflation low and stable without disturbing the growth momentum is an important challenge to monetary policy in the period ahead.

Check Your Progress 3

1. What are the two major dimensions from which the rationale for mutual funds are pointed out ? What suggestions have been made to strengthen the mutual funds in India?

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2. Distinguish between Venture Capital (VC) and Venture Capital Fund (VCF). Which segment of economic enterprise is basically supposed to benefit from the VCs in the developing countries?

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3. What were the specific recommendations of the committee set up in 1999 to promote the growth of the VCFs in India ?

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4. What are the main reasons identified for the ineffectiveness of the monetary policy instruments in India ? Mention the one single but major deficiency pointed out by the Sukhmoy Chakravarty Committee as needing to be removed to improve the effectiveness of monetary policy instruments in India ?

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9.10 LET US SUM UP

Beginning with an outline of the Indian financial system, the unit has explained the objectives of monetary policy and the instruments/tools used in meeting out these objectives. Some new institutions like mutual funds and venture capital funds which have come to occupy a prominent place in the financial system of the country are then outlined. A distinction between the foreign exchange regulation Act (FERA, 1973) and the foreign exchange management Act (FEMA, 2000) is then presented. The specific provisions of the latter instituted to liberate and promote the budgetary needs of achieving the high growth objectives are also spelt out in detail. The limitations of the monetary policy instruments and the underlying factors that continue to prevail rendering the policy instruments ineffective are finally outlined.

The tools/instruments applied to achieve the objectives of monetary policy are expected to yield results in quantitative as well as qualitative terms. Quantitatively, it should be such as to aid the process of economic development without hindering the process by a short fall of money required. Qualitatively, it should not result in undue inflationary pressure which is possible if the utilisation of money earmarked for a purpose is used efficiently for it. Ensuring this, however, requires a strong data base and monitoring mechanism besides the appropriate standards of autonomy for the implementing body. The authority vested with the responsibility of implementing the monetary policy objectives should, therefore, be ideally empowered to monitor the utilisation of funds made available for different purposes. This is possible with the establishment of institutional mechanisms on which there is scope for improvement in the Indian context.

9.11 KEY WORDS

Financial technology : Is defined as a mechanism consisting of a spectrum of financial assets with wide-

ranging variety of liquidity, risk, maturity, yield, etc.

Investment banks/ institutions : Are institutions which 'underwrite' (i.e. guarantee) the sale of stock and bond issues, trade for their own accounts, make markets, and advice corporations on capital market activities such as mergers and acquisitions.

Merchant banks : Traditionally, merchant banks were engaged in trade financing. In the modern day context, these banks refer to banks which provide capital to firms in the form of shares rather than loans.

Retail banking : The term includes financial services like: payments, savings products, credits and insurances for individuals or small and medium sized enterprises. Retail banks differ from commercial banks in terms of their broadly decentralised distribution network, providing local and regional outreach by their socially responsible approach to business and society.

Savings institutions : Activities of retail banking which includes offering savings products and savings schemes operated under the national postal systems.

Current account and capital account : The two terms are used in the context of balance of payment (BoP). BoP is a statistical statement that summarises transactions between residents and non-residents during a period. The BoP comprises of three heads viz. *current account,* the *capital account, and* the *financial account*. Together, these accounts balance in the sense that the sum of the entries is conceptually **zero**. In particular, the 'current account' transaction refers to the 'goods and services' account. The 'capital account' refers to the transfer of capital goods (e.g. machinery transferred to or from abroad). The *financial account* records transactions that involve financial assets and liabilities that take place between residents and non-residents.

Call money market : Market in which brokers and dealers borrow money to satisfy their credit needs, either

to finance their own inventory of securities or to cover their customers' margin accounts.

9.12 SUGGESTED BOOKS FOR FURTHER READING

L M Bhole (2006): *Financial Institutions and Markets*, Tata McGraw-Hill Publishing Company Limited, New Delhi.

I C Dhingra (2009): *The Indian Economy – Environment and Policy*, Sultan Chand & Sons, New Delhi (Twenty Third Revised Edition).

Ruddar Datt, K.P.M. Sundharam (2006): *Indian Economy*, Sultan Chand & Sons, NewDelhi (Fifty-fourth Edition).

S.K. Misra, V.K. Puri (2006): *Indian Economy*, Himalaya Publishing House, Delhi, (24th Revised and Updated Edition)

9.13 ANSWERS/HINTS TO CYP EXERCISES

Check Your Progress 1

1. See Section 9.2 and answer.

2. See Section 9.2 and answer.

Check Your Progress 2

1. See Section 9.3 and answer.

2. See Section 9.4 and answer.

3. See Section 9.4 and answer.

4. See Section 9.5 and answer.

Check Your Progress 3

1. See Section 9.6 and answer.

2. See Section 9.7 and answer.

3. See Section 9.7 and answer.

4. See Section 9.8 and answer.

UNIT 10 FISCAL FEDERALISM

Structure

10.0 Objectives

10.1 Introduction

10.2 Devolution of Functions

- 10.2.1 Allocation Function
- 10.2.2 Distribution Function
- 10.2.3 Stabilisation Function

10.3 Distribution of Revenue Powers

10.4 Fiscal Imbalance

- 10.4.1 Vertical Fiscal Imbalance
- 10.4.2 Horizontal Fiscal Imbalance

10.5 Methods of Fiscal Adjustment

- 10.5.1 Divisible Pool Method
- 10.5.2 Supplementary Levies
- 10.5.3 Federal Grants

10.6 Fiscal Federalism in India

- 10.6.1 Division of Functions
- 10.6.2 Revenue Powers of the Centre
- 10.6.3 Revenue Powers of the State
- 10.6.4 Division of Borrowing Powers
- 10.6.5 Fiscal Imbalances in India

10.7 Finance Commission

10.8 Finance Commission Vs Planning Commission

10.9 Fiscal Transfer by the Finance Commission

10.10 Resource Transfer by Planning Commission

- 10.10.1 Plan Assistance-State Plan Schemes
- 10.10.2 Gadgil Formula
- 10.10.3 Centrally Sponsored Schemes

10.11 Let Us Sum Up

10.12 Key Words

10.13 Some Useful Books

10.14 Answers/Hints to Check Your Progress

10.0 OBJECTIVES

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

- explain the concept of fiscal federalism;
- discuss the different revenue sharing arrangements between the Central and State Governments;
- state the types of fiscal imbalances and describe the different fiscal adjustment methods; and
- explain the role played by the Finance Commission and the Planning Commission in allocating resources to establish fiscal balance.

10.1 INTRODUCTION

Fiscal functions are carried out by the different tiers of a government in a country. The number of tiers of government involved in the fiscal functions differ from one country to another depending upon the federal structure of the government. For instance, the USA, India and Australia have a three-tier federal structure, while Holland and Switzerland have a two-tier federal structure. Each of these different tiers of government must, therefore, have a clearly demarcated functional devolution and fiscal powers based on sound principles. ***The theory and practice of the devolution of powers and functions among the different tiers of government involved in the fiscal operations is what is called as 'fiscal federalism'.*** In other words, fiscal federalism provides a framework for the devolution of functions between the national and the sub-national governments along with a framework for sharing the revenue collected among the different tiers of governments. In this context, the present unit, inter-alia, discusses: (i) the principles on which the devolution of functions and revenue sharing is based; (ii) the types of fiscal imbalance that arises in the process and methods by which fiscal adjustment are sought to be established; and (iii) the institutional arrangements that exist in India to recommend the norms for effecting fiscal transfers and allocate the budgetary resources among the states in the federal system.

10.2 DEVOLUTION OF FUNCTIONS

10.2.1 Allocation Function

The task of ensuring the welfare of its people requires a government to devise a system by which the allocation of public goods and services are efficiently made. An important question, in this context, is which tier of government should provide which type of services. A widely followed principle, in this respect, is that of '***benefit incidence***'. Benefit incidence is a method of computing the distribution of public expenditure across different demographic groups, such as women and men. The procedure

involves allocating per unit public subsidies (for example, expenditure per student for the education sector) according to individual utilisation rates of public services. Further, according to the benefit incidence principle, if there is a function whose benefit is nation wide, such a function is to be entrusted to the national government, while if the benefit of a function is regional or sub-regional in character, such a function should be entrusted to the State or local governments. Thus, services like defence, scientific exploration, etc. whose benefit incidence reaches the whole nation, should be provided by the Central government. On the other hand, public goods like law and order, supply of water, electricity, sanitation, etc. whose benefit incidence is spatially limited to the State and local areas, should be provided by the State and local level governments.

It is, however, to be noted that many public goods and services are required at each level of government. Therefore, these should be provided not only by the Central government, but also by the State and local governments.

10.2.2 Distribution Function

Distribution of services, and therefore the resources to be raised by levying taxes for providing the services to the people, is another important fiscal function. The function of distribution is assigned to the Central government. An important question in this context arises as to whether the distribution function can be effectively carried out by the sub-Central (State and local level) tiers in a government. If this function is to be carried out by the sub-Central governments, it may lead to distortions in the mobility of labour leading to increase in inequality. For instance, suppose there are two regions A and B. Region A has a higher concentration of poor people who favour a high degree of redistribution of factors of production. On the other hand, region B has a relatively larger proportion of rich people who favour low or no redistribution. In such a situation, all high-income people residing in region A and opposing distribution, would like to shift to region B. As a result, the degree of equalisation would become less (i.e. inequality would increase in region A) as larger number of poor people would reside in region A.

Another reason for the distribution process by the State and local level governments becoming a failure is that these tiers may choose to implement the distribution process for reasons of politico-administrative factors. However, this does not mean that the sub-Central governments cannot altogether render the distribution function. It also does not mean that the Central government is always more capable and effective in discharging the distribution function. It only means that the Central government may have a greater reach and act in the national interest than the sub-Central governments in many cases.

10.2.3 Stabilisation Function

In a federal country, macro economic issues like unemployment, inflation, money supply, etc. are to be dealt by different levels of government. The process of aiding macro economic adjustment is known as '***stabilisation***'. Stabilisation function cannot, however, be entirely entrusted to sub-central governments as they do not have adequate instruments to deal with such macro-economic issues without giving scope for economic distortion. Moreover, in most of the federations, it is the exclusive prerogative of the Central governments to deal with the 'external sector'. In view of this, in almost all the federations the Central government performs the function of stabilisation by using the tools of monetary and fiscal policies. Thus, while the Central government has an absolute advantage in rendering the redistribution and stabilisation functions, lower layers of government can render the function of delivery of goods and services more effectively. In the light of this, while functional responsibilities have been distributed between different layers of government (in several federations including India) on the basis of the principle of benefit incidence, functions like defence, space exploration, navigation, railways, etc. have been entrusted to the Central government. Likewise, functions like law and order, water supply, education, health, sanitation, agriculture, etc. are entrusted to the lower tiers of governments.

Once the functional division takes place, each tier of government need financial resources to discharge their respective functions. So what is equally important is the distribution of revenue or tax powers.

10.3 DISTRIBUTION OF REVENUE POWERS

Generally, powers for levying taxes (i.e. revenue powers) with a narrow base are given to the State or local governments while those with a broad or national base are retained by the Central government. For instance, in India, sales tax, State excise, motor vehicle tax, property tax, profession tax, etc. are given to the sub-Central government, whereas taxes with broader base like income tax, corporation tax, customs duties, wealth tax, etc. are entrusted to the Central government. Such a distribution is, however, made not arbitrarily but is guided by economic and scientific principles.

The division of revenue powers are generally made on the basis of the three important principles: (i) ***efficiency***, (ii) ***suitability***, and (iii) ***adequacy***. The fiscal resources provided through revenue powers to each tier of government should correspond to the requirements that arise due to the functional responsibilities entrusted to each government. The sub-principles, within the broad ones stated above, which are also considered for the division of revenue powers between the Centre and the States, are often referred to as the 'Principles of Federal Finance' [or Adarkar's Principles]. These include the need for: (i) independence

and responsibility, (ii) adequacy and elasticity, (iii) equity and uniformity, (iv) accountability and productivity; and (v) ease of integration and coordination. In most of the federations including India, even though the above principles are followed, situations of fiscal imbalance arises quite often. We, therefore, now turn to know about the types of fiscal imbalance and methods of its adjustment.

10.4 FISCAL IMBALANCE

When the revenue powers are divided between two or more tiers of government in a federation, in general, the Central government is entrusted with more financial resources. This is because due to its functional responsibilities like defence, space research, etc. there is always a greater demand for its expenditure requirement vis-à-vis its revenue resources. This is to say that some of its functions are required to be discharged more in the national interest than the interest of a regional dimension which warrants greater revenue powers for it. The fiscal imbalance among the States would arise because of inadequate revenue resources in comparison to their respective expenditure commitments. Such non–correspondence between the revenue resources and expenditure requirements among the states in a federation is known as Fiscal Imbalance. The fiscal imbalance may be classified into two types: (i) Vertical Fiscal Imbalance, and (2) Horizontal Fiscal Imbalance.

10.4.1 Vertical Fiscal Imbalance

The fiscal imbalance due to the difference between the revenue resources and expenditure commitments of the Central government, and those of the State governments *put together* is called as the Vertical Fiscal Imbalance. It is natural that the federal governments of any country have vertical fiscal imbalance irrespective of their development status.

10.4.2 Horizontal Fiscal Imbalance

Horizontal fiscal imbalance arises due to the non-correspondence between the revenue generating potential/efficiency of the different state governments within the federal structure vis-à-vis their respective expenditure commitments. This type of fiscal imbalance arises due to the differences in the endowment (or availability) of the natural resources, even if the revenue powers and expenditure responsibilities are uniform. Thus, horizontal fiscal imbalance also exists in federations across the countries irrespective of their state of development. As fiscal imbalance of both the types exist in all the federations of the world, a uniform system of fiscal adjustment has been developed to reduce the fiscal imbalances. We will study more about this in the subsequent section of the unit. But before that, we will attempt to answer the following questions.

Check Your Progress – 1

1. What are the three type of functions on which the devolution of functional responsibilities are determined in a federal government system? Briefly explain writing a line on each one of them.

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2. What are the broad and specific principles on which the 'distribution of revenue powers' are determined?

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3. Briefly outline (in 50 words) the concept of vertical fiscal imbalance.

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4. What is horizontal fiscal imbalance? Briefly explain in about 50 words.

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10.5 METHODS OF FISCAL ADJUSTMENT

In order to reduce the fiscal imbalances of both vertical and horizontal types, fiscal adjustment is made through fiscal transfers, from the Central government to State and local governments. Fiscal transfers are also used as instruments to reduce regional inequalities of income and wealth in the federation. The important types of fiscal transfers or methods of fiscal adjustment are briefly explained below.

10.5.1 Divisible Pool Method

As per this method, either a fixed percentage of net revenue from all the taxes or identified select taxes is pooled for the purpose of distribution across the federating states on the basis of a criterion. In view of this, this method of fiscal transfer is also known as ***distributive pool or shared tax revenue method***. Certain issues like: (i) which taxes are to be shared, (ii) what percentage of each of the pooled taxes should be shared, and (iii) how to distribute the pooled revenue across the competing states, etc. are decided separately. As said above, there is a uniform practice in all the countries with regard to these issues. In some countries these are mentioned either in the Constitution of the country, while in others, these are decided by independent agencies. They may also be decided by mutual agreements like the five-yearly agreements in Canada. If the shareable taxes, percentage of share and the criteria for inter se distribution are written in the Constitution, it leads to fiscal rigidity. So, in several federations, including India, these are decided by an independent agency. The agency in India which discharges this function is known as the Finance Commission about which we will study later. The most important advantages of the divisible pool method are the following:

i) It keeps the supremacy of the Central Government while upholding the fiscal autonomy of the States;

ii) Simple to administer, it enables the distribution of the financial resources equitably and efficiently among the States; and

iii) It expands the resources of the States as the revenues from the shareable taxes expand.

However, logical and rational distribution of percentage of shareable taxes and the criteria of distribution are often difficult to arrive at. Any arbitrariness will lessen the importance of this fiscal device.

10.5.2 Supplementary Levies

This is a levy imposed by a tier of government over and above the basic rate of tax of the same tier or that of the other tier. The financial resources thus mobilised will be used either for a specific or general purpose of the State. This device is also simple, administratively efficient and carries all the advantages of the divisible pool method.

10.5.3 Federal Grants

An important fiscal adjustment method is the grant-in-aid. As these are mostly provided by the federal government to the States to reduce both the vertical and horizontal fiscal imbalances, these are also known as 'federal grants'. Federal grants are broadly categorised as (i) conditional grants and (ii) unconditional grants. Conditional grants are further divided into conditional matching grants and conditional non- matching grants.

Conditional grants

If the 'grantor' insists on any conditions while providing the grant to the 'grantee', either with reference to its eligibility or in its use, the grant is known as a 'conditional grant'. For instance, the grantor could insist upon the grantee to contribute a lump sum or a fixed percentage of the total grant amount. Such a grant is known as *conditional matching grant*. If the grant is made with conditions for its use but without any contribution, it is known as *conditional non-matching grant*.

Unconditional grants

If the grantor provides grants to the grantee without stipulating any conditions, either with reference to its eligibility or its use, the grant is known as unconditional grant. These are also known as ***general purpose grants***. These grants are as good as revenue from tax and non-tax sources to the States. The States always favour this type of grant to conditional grants as they enjoy more fiscal autonomy though this type of grant, although fiscal irresponsibility is not ruled out. These grants are provided in several federations like USA, Australia, Canada, etc. including India.

In almost all federations, fiscal transfers from the Central government to the State or local governments are made in the form of shared tax revenue or grants or both. In India also, powers of revenue collection and functions have been distributed between the Centre and the States right from the adoption of the Constitution. Fiscal adjustments have been made in the form of shared tax revenue, and grants and loans have been transferred from the Centre to States and Union Territories. The two agencies responsible for fiscal transfers from Centre to States are the Union Finance Commission and the Planning Commission. Before we proceed to read about these organisations, let us first know about the fiscal management system as it obtains specifically in India. But first we will answer the following questions.

Check Your Progress – 2

1. Briefly outline the Divisible Pool Method of fiscal transfer.

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2. Distinguish between the methods of conditional and unconditional grants of fiscal transfer.

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10.6 FISCAL FEDERALISM IN INIDA

The various aspects relating to fiscal federalism in India are discussed under four heads viz. (i) division of functions, (ii) revenue powers of the centre, (iii) revenue powers of the states, and (iv) division of borrowing powers.

10.6.1 Division of Functions

The fiscal powers and functional responsibilities in India have been divided between the Central and State governments following the principles of federal finance. The division of functions is specified in the Seventh Schedule of the Constitution in three lists viz. the Union List, the State List and the Concurrent List. The Union List contains 97 subjects of national importance, such as defence, railways, national highways, navigation, atomic energy, and posts and telegraphs. Sixty six items of State and local interest, such as law and order, public health, agriculture, irrigation, power, rural and community development, etc. have been entrusted to the State governments. Forty seven items, such as industrial and commercial monopolies, economic and social planning, labour welfare and justice, etc. have been enumerated in the Concurrent List. The concurrent list is one in which both the Centre and the States can make legislation. However, in case of a conflict or tie, federal laws prevail.

10.6.2 Revenue Powers of the Centre

The Central government has been given powers in respect of taxes on income other than agricultural income, customs duties, excise duties on tobacco and other goods manufactured or produced in India, corporation tax, taxes on capital values, estate duty in respect of property other than agricultural land, terminal taxes on goods or railway passengers carried by railway, sea or air, taxes other than stamp duties on transactions in stock exchanges and futures markets, stamp duty in respect of land, etc.;

taxes on sale or purchase of news papers and on advertisements published therein; and sale, purchase and consignment of goods involving inter-State trade or commerce. In fact, the Central government does not get revenue from all the above taxes. These revenues can be divided into four categories on the basis of levy, administration and the accrual of revenue as follows.

i) Taxes that are levied, collected and retained by the Central government: e.g. Corporation Tax, Customs Duties;

ii) Taxes that are levied and collected by the Centre but shared with the states: e.g. the net proceeds from Income Tax under Article 270 and the net proceeds from Union Excise Duties under Article 272, respectively;

iii) Taxes that are levied and collected by the Centre but whose net proceeds are assigned to the States: e.g. all the eight items under Article 269 of the Constitution such as Estate Duty, Taxes on Railway Passenger Fares and Freights and Consignment Tax, etc.; and

iv) Taxes levied by the Centre but collected and appropriated by States, such as excise duties on medicinal and toilet preparations, etc.

10.6.3 Revenue Powers of the State

The State governments have been given exclusive tax powers in respect of land revenue; taxes on agricultural income; duties in respect of succession to agricultural land; estate duty in respect of agricultural land; taxes on land and buildings; excise duties on goods containing alcoholic liquors for human consumption; opium, Indian hemp and other narcotic drugs; taxes on the entry of goods into local areas; taxes on the sale or purchase of goods other than newspapers; taxes on vehicles, tolls; taxes on professions, trades, callings and employment; capitation taxes, taxes on luxuries including taxes on entertainment, amusements, betting and gambling; and rates of stamp duty in respect of documents other than those specified in the Union List.

10.6.4 Division of Borrowing Powers

The borrowing powers have also been clearly mentioned in the Constitution. Under Article 292, the Central government is empowered to borrow funds from within and outside the country as per the limits imposed by the Parliament. According to Article 293(3), the States can borrow funds within the Country. Article 293(2) empowers the Centre to provide loans to any State subject to conditions laid down by Parliament. A State, in practice, cannot raise any loan without the prior permission of the Centre or if there is any outstanding loan from the Centre to the State or an outstanding loan for which the Centre has given a guarantee.

10.6.5 Fiscal Imbalances in India

The Constitutional fiscal arrangement shows that fiscal imbalances were deemed inevitable as most of the powers for elastic taxes are given to the Central government. Further, as said before, the division of powers and functions itself leads to vertical federal fiscal imbalance while the differences in the endowment position of natural resources across States cause horizontal federal fiscal imbalance. Visualising the fiscal imbalances, the Constitutional makers provided a mechanism of fiscal adjustment by way of fiscal transfers from the Central to the State Governments. This provision in the constitution was made under Article 280 by way of setting up of a Finance Commission for every five years or earlier, if the President of India feels it necessary. Let us now know more about the Indian Finance Commission.

10.7 FINANCE COMMISSION

The Finance Commission, to be constituted every five years, consists of a Chairman and four other members to be appointed by the President of India for a term. The Constitution has not mentioned the qualifications of either the Chairman or its members; they are to be determined by the Parliament. The Parliament can also lay down the manner in which they shall be selected. That is the reason why the Chairmen of the Finance Commissions have been reputed politicians, former justices, economists, technocrats and reputed public personalities (Table 10.1).

Table 10.1: Chairmen of the Successive Finance Commissions

Finance Commissions	Chairman	Year of Appointment
I	Shri K.C. Neogi	1951
II	Shri K. Santhanam	1956
III	Dr.A.K. Chanda	1960
IV	Shri P.V. Rajamannar	1964
V	Shri Mahavir Tyagi	1968
VI	Shri K.Brahmananda Reddy	1972
VII	Shri J.M. Shelath	1977
VIII	Shri Y.B. Chavan	1982
IX	Shri N.K.P. Salve	1987
X	Shri K.C. Panth	1992
XI	Dr. A.M. Khusro	1998
XII	Dr.C. Rangarajan	2004
XIII	Dr. Vijay Khelkar	2007

10.7.1 Functions of the Finance Commission

Article 280(3) speaks about the functions of the Finance Commission. The Article states that it shall be the duty of the Commission to make the recommendations to the President as to:

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 and the allocation among the states of the respective shares of such proceeds;

ii) to determine the quantum of grants-in-aid to be given by the Centre to States [Article 275(1)] and to evolve the principles to govern the eligibility of the state for such grant-in-aid;

iii) Any other matter referred to the Commission by the President of India in the interest of sound finance. Several issues like debt relief, financing of calamity relief of states, additional excise duties, etc. have been referred to the Commission invoking this clause.

The Commission shall determine its procedure and shall exercise such powers in the performance of its functions, as the Parliament may, confer on it by law. The President shall place the Report of the Commission together with an Explanatory Memorandum before each house of Parliament. In practice, the recommendations of the Finance Commission are accepted by the Government of India for the distribution of shared tax revenue, as well as for grant-in-aid.

10.8 FINANCE COMMISSION VS PLANNING COMMISSION

Though the Constitutional makers envisaged channelling of fiscal transfers by the Finance Commission only, the Government of India created a parallel commission, the Planning Commission, within just 50 days from the adoption of the Constitution (in March,1950). The Planning Commission, originally meant for formulating and evaluating Five Year Plans, started channelling fiscal resources for Plan purposes. The contrast between Finance Commission and Planning commission is given in Table 10.2.

Several eminent scholars, academics and administrators are of the opinion that there exists duality and overlapping of functions between the Finance Commission and Planning Commission. The Planning Commission, which is a non-statutory body and an arm of the Central government makes fiscal transfers in the form of Plan loans and Plan grants to states. Referring to this issue, P.V. Rajamannar, Chairman of the IV Finance Commission had observed that ‘there is no provision in the Constitution for constituting a body like the Planning Commission’. Right from the first Finance Commission onwards, the Finance Commissions confined themselves to the non-plan revenue account only, while the entire plan needs have come within the purview of the Planning Commission. In the beginning of the plan period, the fiscal resources transferred by the Finance Commission were relatively larger than that of the Planning Commission.

Table 10.2: Finance and Planning Commissions

	Finance Commission	Planning Commission
1.	It is temporary and appointed for every five years or even less.	It is a permanent body.
2.	Chairman is appointed for a term.	Prime Minister is the chairman.
3.	Makes devolution and grants-in-aid for non-plan purposes.	Provides resources for Plan purposes only.
4.	A non-political semi–judicious and independent agency.	A political body and an arm of the government.
5.	Provides non-plan or statutory grants under Article 275(1).	Provides plan or non- statutory grants under Article 282.

But slowly the Planning Commission has overtaken and overridden the Finance Commission. In other words, the Planning Commission has emerged as an important authority determining the scope and pattern of central assistance to States. Referring to this, the Third Finance Commission observed that: 'a general weakness of federal-state financial relations, more particularly in the field of devolution, is that the federal assistance tends to be discretionary in character, not necessarily on principles of uniform application. To safeguard the position of the States, our Constitution provides for the assessment of the needs of the states as well as the measure of assistance to be afforded and the form in which this should be given, be determined by an independent Commission……. But this role and function of the Finance Commission, as provided in the Constitution can no longer be realised fully due to the emergence of the Planning Commission as an apparatus for national planning'. Successive Finance Commissions also observed the overlapping roles of the two Commissions as both the agencies make separate assessments of the needs of the states. To rectify the situation, several States as well as economists have suggested either to widen the role of the Finance Commission (from the existing Non-Plan Revenue Account to both Revenue and Capital Accounts of the budgets of the state governments) or to transform the Planning Commission itself into Financial Commission. However, some of the Finance Commissions did not agree with the view of making the Finance Commission a permanent body. For instance, the Eighth Finance Commission opined that there is no such need and instead suggested to establish a secretariat on a permanent basis in the Ministry of Finance to extend assistance to the Finance Commissions. Notwithstanding the controversy regarding the relative roles of the two agencies, the gross transfers channelled through both these agencies (in absolute terms) have increased overtime. However, although the total quantum of fiscal transfers have been increasing, as a percentage of total receipts of the central government, the proportion has declined over the different plan periods. For instance, the resources transferred from the Centre to States as a proportion of

total expenditure of the States during 1951-52 to 1955-56 was as high as 42.7 per cent. But this percentage declined to around 30 per cent around 1970s (e.g. 1970-71: 31.5%). While it remained around the 30 percent share till the 1990s, it declined to below 30 percent level in the post-2000 years (e.g. 2000-01: 26.1%; 2004-05: 27.5%) . The trend indicates that the fiscal dependence of the states on the centre has been declining in relative terms although the total (gross) transfers have increased. It also might be indicative of the fact that the fiscal profligacy of the states have been improving.

The most important objective of fiscal transfers, however, is not only to reduce vertical and horizontal fiscal imbalance, but also to achieve horizontal equalisation across states. This depends largely on the criteria of inter se distribution of fiscal transfers (both by the Finance Commission and Planning Commission). So in what follows an account of the criteria of fiscal transfer followed by successive Finance Commissions and the Planning Commission is provided.

10.9 FISCAL TRANSFERS BY THE FINANCE COMMISSION

One of the first terms of reference of a Finance Commission is to recommend a percentage share of the shareable taxes and the principles or criteria of its distribution among the States. The two type of taxes, whose net proceeds are to be divided between the Union and the States according to Article 270 and 272 of the Constitution are, the Income tax (IT) and the Union Excise Duties (UEDs).

Trends in Percentage Share: With regard to Income Tax, by the time the First Finance Commission was appointed, 50 per cent of the net revenue had been assigned to the States. The First Finance Commission increased the States' share to 55 per cent and over the period the share reached 85 per cent. Sharing of Union Excise Duty revenue is possible only through an Act of Parliament. The First Finance Commission recommended that 40 per cent of the net proceeds of the duties on tobacco, matches and vegetable products be given to the States. Successive Finance Commissions not only increased the coverage of shareable excise duty items but also increased the states' share.

Criteria of distribution: The other important aspect is the criteria adopted by the successive Finance Commissions for the inter-state distribution of the revenue from Income Tax (IT) and Union Excise Duties (UEDs). For a long period, the 'population' factor was used for the distribution of the net revenue from Income Tax while a criteria of 'backwardness' was adopted for the distribution of net revenue from Union Excise Duties. The two different criteria adopted for the distribution of these two sources of revenue have been subjected to a lot of criticism. The main argument was that while the objective of transferring revenues to states by the Centre through shared tax revenue

is the same, there is no rationale for adopting two different criteria in case of IT and UEDs.

Alternative Scheme of Devolution: The Tenth Finance Commission made a significant departure from the then existing criteria by recommending 29 per cent of gross tax revenue of all taxes of the Central Government instead of a share from the two taxes of Income Tax and Union Excise Duties. This recommendation of devolution, known as ***Global sharing*** (meaning sharing of all taxes), was accepted by the Government of India in 2000 with a modification. The modification relates to the word 'net revenue' instead of 'gross revenue' as recommended by the 10th Finance Commission. The XI Finance Commission increased this share to 29.5 per cent while the XII Finance Commission further raised it to 30.5 per cent.

Grants-in-Aid: Article 275(1) deals with grants-in-aid. According to this Article, grant-in-aid are to be given to the States in need of assistance and the amount of grant-in-aid and the principles for judging the eligibility of states for these grants-in-aid are to be determined by the Finance Commission. These grants recommended by the Finance Commission are generally known as 'statutory grants' or 'non-plan grants'. Though the First Finance Commission stated a number of principles like (i) budgetary needs, (ii) tax effort, (iii) economy in expenditure, (iv) standards of special services, and (v) broad purposes of national importance, almost all the successive Finance Commissions followed a single criterion of 'budgetary needs' of the States. The grants given on the basis of budgetary needs are known as ***revenue-gap grants*** (or deficit grants). Besides the revenue-gap grants, several Finance Commissions have given grants for upgradation of essential social and administrative services. For instance, the 12th Finance Commission recommended grants for health and education, maintenance of roads and bridges, buildings, forests, heritage compensation, State specific needs, and calamity relief besides the traditional revenue gap grants. It was opined by several academics that the objective of horizontal equalisation could not be achieved by the award of grants-in-aid mainly because the Commissions did not take into account the net fiscal needs, but took into account only the budgetary needs.

Other Important Recommendations: Besides shared tax revenue and grants-in-aid, the successive Finance Commissions have been recommending various fiscal matters like calamity relief, debt relief and grants to local governments, etc. We will now take a brief look at each of these below.

Assistance for Calamity Relief: When States experience natural calamities they need to undertake relief operations incurring huge expenditure. The successive Finance Commissions have been extending financial assistance in the form of loans and grants. For instance, the Ninth Finance Commission adopted an innovative scheme in which a

Calamity Relief Fund (CRF) was to be established in each state to which Centre and States are to contribute in the ratio of 75:25. The Eleventh Finance Commission suggested establishment of a National Calamity Contingency Fund (NCCF) with a corpus of Rs. 500 Crores. A special levy had to be imposed and credited to this Fund whenever a national calamity of rare severity occurred. The NCCF continues under the Twelfth Finance Commission recommendations also.

Debt Relief: States have been reeling under debt burden for several decades during the plan period. Several Finance Commissions recommended debt relief in various forms like rescheduling, moratorium, etc. The Tenth Finance Commission recommended a scheme of debt relief linking it to fiscal performance in terms of reduction of revenue expenditure. The Eleventh and Twelfth Finance Commissions continued the debt relief scheme with some modifications, the main theme being reduction of revenue expenditure by the States.

Assistance to Local Bodies: The 73rd and 74th Constitution Amendment Acts envisage the Panchayats and Municipal bodies as institutions of self-government. Considering the need to transfer some resources to enable them to function more effectively, the Tenth Finance Commission, for the first time, recommended an amount of Rs. 1000 Crores, and Rs. 4000 Crores to Panchayats and municipalities, respectively. This grant amount was increased to Rs. 2000 Crores to Panchayats and Rs.5000 Crores to Municipal bodies by the Twelfth Finance Commission. These grants have contributed to improving the financial position of the local governments in India.

Ceiling on Aggregate Resources: For the first time, the Eleventh Finance Commission felt the need to put a cap on the total resources transferred to the states from the Centre on the ground that such a measure would help in encouraging the States to augment their own revenues. Suggesting that all transfers must be taken in their totality, it suggested a ceiling of 37.5 per cent on total resource transfer from the Centre to the States. The Twelfth Finance Commission slightly enhanced the ceiling to 38 per cent. The States were, however, critical of such a ceiling on the ground that it would inject fiscal inflexibility into the State finances.

Equalisation: It is important to know about the impact of Finance Commission transfers on equalisation. Equalisation here refers to both (i) vertical equalisation and (ii) horizontal equalisation. There are indications that the implementation of the Alternative Scheme of Resource Transfer, as recommended first by the X Finance Commission, and subsequently also by the XI and the XII Finance Commissions, has reduced the vertical fiscal imbalance considerably. However, the expected reduction in regard to horizontal fiscal equalisation has not been achieved. This is attributed to the undue weightage given to

population factor and considering the 'budgetary needs' instead of the 'net fiscal needs' of States for transferring the shared tax revenue and the grants-in-aid to the states.

10.10 RESOURCE TRANSFER BY PLANNING COMMISSION

The Planning Commission has been transferring both plan grants and plan loans according a new dimension to the Indian fiscal federalism. The Planning Commission has been allocating grants and loans for: (i) state plan schemes, (ii) centrally sponsored schemes and (iii) central sector schemes. It transfers resources through itself as well as through different ministries or Departments. The loans and grants recommended through different ministries/grants are known as '***discretionary transfers***'. These transfers, also known as non-statutory transfers, have increased substantially over and above the Finance Commission transfers over the years. Thus, the Central government through the Planning Commission, has been influencing the development process at the state level.

10.10.1 Plan Assistance-State Plan Schemes

The Planning Commission has been providing budgetary resources to bridge the gap between the State-generated resources and the approved Plan outlay since the advent of Five Year Plans. There were no objective criteria to distribute the Plan assistance for State Plan Schemes until 1969. The Planning Commission used to approve the state Plan Schemes providing scheme-wise pre-determined loans and grants to states. This type of plan assistance provided by the Planning Commission was referred to as '***Schematic Pattern of Assistance***'. This pattern of assistance carried lot of arbitrariness failing to achieve the 'equalisation' objective. Consequent upon the demand by several States in the National Development Council in 1968, the Central Government constituted a committee under the chairmanship of D.R. Gadgil, the then Deputy Chairman of the Planning Commission, to evolve a objective criteria to distribute plan assistance among the states and Union Territories.

10.10.2 Gadgil Formula

The Gadgil Formula (Table 10.3) was adopted for the distribution of plan assistance for State Plan Schemes since the Fourth Five Year Plan (1969-70). The same formula was adopted for the Fifth, the Sixth and the Seventh Five Year Plans with minor modifications. A new formula was adopted since the Eighth Five Year Plan (known as the Mukherjee Formula: Table 10.3). The uniform application of the objective criteria for the distribution of plan assistance injected an element of equalisation in fiscal transfers in India.

Table 10.3: Objective Criteria for Determining Distribution of Plan Assistance

Gadgil Formula		Mukherjee Formula	
Criteria	**Weight (%)**	**Criteria**	**Weight (%)**
Population (1971)	60	Population	55
Per Capita Income	10	Per Capita Income	25
Tax Effort	10		
Continuing Commitments on Major & Medium Integerated Multi-purpose Projects (IMP)	10	Special Development Problems	15
Special Problems	10	Progress in Fiscal Management	5
IV, V, VI, & VII Five Year Plan and 1990-91 Annual Plans.		VIII, IX, X, & XI Five Year Plans.	

The Gadgil Formula was modified by withdrawing the 10% weightage given to the on- going schemes (i.e. continuing commitments) and adding it to the per capita income. This was further revised in October 1990 as 55 per cent for population, 25 per cent for per capita Income, 5 per cent for fiscal management and 15 per cent for special development problems. According to the Gadgil Formula the total plan assistance provided to a Non-Special Category State should be uniform in the loan-grant ratio of 70:30. Such a ratio, in the assistance amount provided to the special category states, was to be 90:10. Fiscal transfers through the Planning Commission since the adoption of the Gadgil Formula have become more equalising compared to the previous periods.

10.10.3 Centrally Sponsored Schemes

Besides the central assistance for State Plan Schemes, the central government has been providing loans and grants to Plan schemes known as 'Centrally Sponsored Schemes' and 'Central Sector Schemes'. These schemes are sponsored by the Central Ministries and hence the expenditure on these schemes is a part of the Central Plan for which provision is made in the Central Government Budget. The schemes are, however, implemented by the States because they are in the sectors of State competency. Programmes such as Drought Prone Area Programme, Small Farmers Development Agency, etc. are in this category. Over decades, the number of such schemes has increased to more than 200. The States have been demanding that these schemes should be limited to a small number and to most needed areas, and the resources thus saved should be placed in the general pool of central assistance for states. The increasing number of centrally sponsored schemes and Central Sector

Schemes have become one of the irritants in Centre–State fiscal relations in India.

The resources transferred through the Planning Commission for State Plan Schemes, for Central Sector Schemes and Centrally Sponsored Schemes have been increasing substantially over the plan periods. But the States prefer more resources transferred through the Finance Commission than through the Planning Commission as the former is more objective and equalising. It might, therefore, be preferable to channelise more resources, both for plan and non-plan purpose, through the statutory body – The Finance Commission – with the task of plan formulation and evaluation being left to the Planning Commission to focus upon.

Check Your Progress – 3

1. State the similarities and the distinguishing features between the Finance Commission and the Planning Commission.

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2. Write a note on the Alternative Scheme of Devolution of central taxes.

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3. What are the major components considered for assigning weights for determining the distribution of Plan assistance by the Planning Commission?

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10.11 LET US SUM UP

Devolution of powers and functions between the Central and sub-Central governments is inevitable in almost all the countries. The devolution, even when made on the basis of economic and scientific principles, lead to vertical and horizontal federal fiscal imbalances. Fiscal adjustment, to be achieved through shared tax revenue, grants and loans become necessary in all such cases for optimal realisation of developmental objectives through planning.

Visualising the need for federal fiscal transfers to reduce vertical and horizontal fiscal imbalances in India, the constitution-makers made provision for transferring resources from the Centre to the States. For this, they made provision for the setting up of a Finance Commission to make recommendations. Besides the Finance Commission, the Planning Commission, a non-statutory body, was also set up to allocate resources to the States. The resources determined and transferred through these Commissions have substantially contributed to reducing the vertical fiscal imbalance. However, horizontal equalisation has not been achieved to the extent desired. One reason for this is said to be the undue weightage given to the population factor. This has been rectified, in the transfer of resources by the Planning Commission, by giving prominence to other factors like per capita income, progress in fiscal management, special development problems, etc.

10.12 KEY WORDS

Fiscal Imbalance : Non-correspondence between revenue and expenditure of a government or across governments.

Vertical Fiscal Imbalance : Non-correspondence between revenue and expenditure commitments of the central government vis-à-vis the non-correspondence between revenue and expenditure commitments of the federating units put together.

Horizontal Fiscal Imbalance : Non-correspondence between revenue and expenditure commitments across state governments in a federation. This type of fiscal imbalance arises due to the differences in the endowment of natural resources, given the uniform revenue powers and expenditure responsibilities.

Divisible Pool : Also Known as Distributive Pool, it refers to a fixed percentage of net revenue from select identified taxes (or all taxes) pooled

for the purpose of distribution across the federating states on the basis of a criterion.

Grantor : A level of government providing grants to other level(s) of government.

Grantee : A level of government receiving grants from other level(s) of government.

Finance Commission : A statutory, independent, semi judicious non-political body to be set up by President of India for every five Years (or earlier) under Article 280 of the Constitution.

Planning Commission : A non-statutory agency constituted by the Central Government. Initially, set up to formulate and evaluate Five Year Plans, the commission has been transferring financial resources besides undertaking evaluation of progress in the implementation of projects/ schemes.

Gadgil Formula : A Formula named after D.R.Gadgil, the then Deputy Chairman of the Planning Commission. Central assistance for state Plan Schemes has been distributed among states since 1969-70 on the basis of this formula. Slight modifications were made subsequently.

Global Sharing : The Tenth Finance Commission in its 'Alternative Scheme' proposed a percentage share of gross revenue from all central government taxes instead of a share from Income Tax and Union Excise Duties alone. The Government accepted this recommendation and implemented by making an Amendment in the Constitution.

Calamity Relief Fund : It is a fund recommended by the Ninth Finance Commission with regard to financing of relief expenditure of states that arise due to natural calamities. The Fund will be at the disposal of the state governments. It is contributed by both the Centre and States in the ratio of 75:25. The fund is being continued since then till today.

10.13 SOME USEFUL BOOKS

Bhargava, R.N.: *The Theory and Working of Union Finance in India*, Chaitanya Publication House, Allahabad.

Lakdawala, D.T.: *Union-State Financial Relations*, Bombay, Lalwani Publications, 1977.

Thimmaiah, G: *Federal Fiscal Systems of Australia and India*, Associated Publications, New Delhi, 1976.

Sudarsana Rao, R: *Grants-in-Aid and Economic Development in India,* Chug Publications, 1986.

Singh, S.K.: *Public Finance in Theory and Practice*, S. Chand & Co.

Reports of Finance Commission, Govt. of India, New Delhi.

10.14 ANSWERS/HINTS TO CHECK YOUR PROGRESS

Check Your Progress – 1

1. See Section10.2 and answer.
2. See Section 10.3 and answer.
3. See Section10.4.1 and answer.
4. See Section10.4.2 and answer.

Check Your Progress – 2

1. See Section 10.5.1 and answer.
2. See Section 10.5.2 and answer.

Check Your Progress – 3

1. See Section10.8 and answer.
2. See Section10.9 and answer.
3. See Section10.10.2 and answer.

UNIT 11 TAXATION AND EXPENDITURE IN INDIA

Structure

11.0 Objectives

11.1 Introduction

11.2 Role of Fiscal System in Economic Development

- 11.2.1 Objectives of Budgetary Policy
- 11.2.2 Limitations of Budgetary Policy

11.3 Union Finances

- 11.3.1 Components of Union Budget
- 11.3.2 Concept of Deficit
- 11.3.3 Trends in Union Budget

11.4 State Finances

- 11.4.1 Results of Reform Measures

11.5 Local Finance

- 11.5.1 State of Finances

11.6 India's Tax Structure

- 11.6.1 Main Aspects of India's Tax Structure
- 11.6.2 Evaluation of the Tax System

11.7 Growth of Public Expenditure in India

- 11.7.1 Size of Public Expenditure
- 11.7.2 Classification of Public Expenditure
- 11.7.3 Causes of Growth in Public Expenditure
- 11.7.4 Need to Cut Public Expenditure

11.8 Public Debt in India

- 11.8.1 Growth of Public Debt
- 11.8.2 Problems of Public Debt
- 11.8.3 Evaluation of Debt Policy

11.9 Let Us Sum Up

11.10 Key Words

11.11 Some Useful Books

11.12 Answers or Hints to Check Your Progress Exercises

11.0 OBJECTIVES

After reading this unit, you will be able to:

- explain the role of fiscal system in the process of economic development vis-a-vis the objectives and limitations of budgetary policy;
- identify the different concepts of budgetary deficit and its importance;
- discuss the trends in union revenue and expenditure over the period of 1950s to 2008;
- explain the situation in regard to state and local finances;
- bring out the basic features of Indian tax structure making an evaluation of the same;
- outline the causes for rapid growth in public expenditure in India; and
- discuss the problems associated with public debt and the related policy framework.

11.1 INTRODUCTION

As reviewed in the preceding unit (unit-10), in the federal system of finance that obtains in India, three tiers of government operate with independent areas of responsibility and sources of revenue. These three tiers are (i) the Union government, (ii) the State government, and (iii) the Local government. In this unit, we first review the state of finances of each of these tiers of government. We then analyse the trends in their aggregate tax revenue and expenditure patterns. We finally make an evaluation of the trends of public debt and discuss the associated policy issues.

11.2 ROLE OF FISCAL SYSTEM IN ECONOMIC DEVELOPMENT

The essence of a fiscal system is contained in the management of finances of the State. This includes: (i) assessment of the requirements of the State's finances, (ii) modalities of raising revenue and (iii) supervision & control over the allocation of revenue and its efficient expenditure to realise the objectives of the State. Two major features of the fiscal system are therefore of: (a) raising revenue, and (b) incurring of expenditure by the government. The statements relating to these two are integrated in a document popularly known as the **budget**. A budget (whether of union or state or any other tier of government), shows the relationship between the estimated financial receipt (and actual receipt

for the previous year) and its disbursement (and actual expenditure for the previous year). The relationship is shown separately for the various departments/programmes/schemes of a government. A budget is therefore regarded as an important instrument of economic planning and policy.

11.2.1 Objectives of Budgetary Policy

In a developing economy, the budgetary policy (i.e. fiscal policy) has to perform an important role. Broadly, they are expected to achieve the following objectives:

i) promote the growth of the economy by making productive investment both in the public and the private sectors;

ii) mobilise maximum resources for investment keeping in view of the returns on those investments so as to ensure the growth of marginal and average rates of savings in the economy;

iii) promote a measure of economic stability needed to realise the maximum growth of the economy; and

iv) redistribute the national output to ensure balanced regional development.

11.2.1 Limitations of Budgetary Policy

A number of factors can be identified which limit the effectiveness of realising the budgetary policy objectives in a developing economy. Among these, the more important are:

a) the rigidity and narrowness of the base of the tax structure posing difficulties for the establishment of a well-knit and integrated tax policy framework;

b) the lack of a sound and reliable data base on income, expenditure, savings, investment, employment, etc. making it difficult for public authorities to formulate a rational and effective budgetary policy; and

c) a lack of administrative machinery required to collect the revenue and ensure its effective spending.

11.3 UNION FINANCES

In making an analysis of the finances of the Government, the annual budgets provide the required basis. In this section, we take a brief look at: (i) the components; (ii) the concepts of deficit in budgets; and (iii) the trends in the Union Budgets of India.

11.3.1 Components of Union Budget

The budget of the Central or Union Government is divided into two parts: (i) revenue budget (or account), and (ii) capital budget (account).

Revenue budget covers those items which are of a recurring nature.

Capital budget covers those items which are concerned with acquiring and disposal of capital assets. Each account has a receipts side and an expenditure side. **Receipts in** the revenue budget consist of those items that carry no repayment liability (e.g. tax revenue, revenue surpluses etc.). Receipts in the capital budget consist largely of internal and external borrowings net of repayment; they also include recovery of loans and advances and some other receipts such as by sale of assets.

On the expenditure side, revenue expenditure is divided into two categories: development expenditure (or plan expenditure) and non-development expenditure (or non-plan expenditure). Development expenditure consists of expenditure on social and community services such as education and health, and on economic services, such as agriculture, industry, power, transportation and communication. Non-development expenditure consists of expenditure on administration and defence, and also payment of interest on public debt. Broadly speaking, revenue expenditure is expenditure on maintenance of existing levels of services. Capital expenditure, on the other hand, is concerned with acquiring of capital assets i.e. for the expansion of the level of services. Ideal fiscal management requires that revenue surplus should be available to finance capital expenditure.

11.3.2 Concept of Deficit

There are three type of deficits in any budget viz. (i) Revenue deficit, (ii) Budgetary deficit, and (iii) Fiscal deficit.

Revenue deficit is the difference between the revenue receipts and the revenue expenditure.

Budgetary deficit is = (Revenue receipts + Capital receipts) - (Non-Plan expenditure + Plan expenditure).

Fiscal deficit = (Revenue receipts + Non-debt capital receipts) - Total expenditure (i.e. total of plan and non-plan expenditure). It indicates the total borrowing requirements of Government from other sources to meet the total estimated expenditures of the government.

Fiscal deficit is further split (or decomposed) into primary deficit and interest payments by Government. Primary deficit is also further split into revenue deficit and capital deficit. Primary deficit on revenue account would therefore equal revenue deficit less interest payments. Primary deficit on capital account would correspondingly equal capital expenditure less loan repayments.

These relationships can be brought out clearly with the help of the following data (Table 11.1) relating to the union budget for 2006-07 and 2008-09.

Table 11.1: Union Budget Data- 2006-07 & 2008-09

(Rs. Crores)

	2006-07	2008-09
1. Revenue Receipts	434,387	602,935
2. Tax Revenue	351,182	507,150
3. Non tax Revenue	83,205	95,785
4. Capital Receipts (5+6+7)	149,000	147,949
5. Recovery of Loans	5,893	4,497
6. Other Receipts	534	10,165
7. Borrowing & Other Liabilities	142,573	133,287
8. Total Receipts (1+4)	583,387	750,884
9. Non-Plan Expenditure	414,527	507,498
10. On Revenue Account of which	373,991	448,352
11. Interest Payments	150,272	190,807
12. On Capital Account	41,336	59,146
13. Plan Expenditure (14+15)	169,860	243,386
14. On Revenue Account	142,418	209,767
15. On Capital Account	27,442	33,619
16. Total Expenditure (9+13)	584,387	750,884
17. Revenue Expenditure (10+14)	516,409	658,119
18. Capital Expenditure (12+15)	68,778	92,765
19. Revenue Deficit (17-1)	82,022	55,184
20. Fiscal Deficit {16– (1+5+6)}	143,573	133,287
21. Primary Deficit (20-11)	-6,699	-57,520

Conventionally, government deficits have been measured in terms of budgetary deficits. But in recent times, the focus has shifted to fiscal deficits. The shift of focus to the fiscal deficit internationally is mainly due to the shift in emphasis on macroeconomic principles of fiscal management.

11.3.3 Trends in Union Budget

The trends in Union Budget for the period 1956 to 2008 are presented in Table 11.2. Measures of revenue and fiscal deficit expressed as

Table 11.2 : Overall Budgetary Position

(Rs. Crores)

	Deficit (-) or Surplus (+) under Revenue Account	Deficit (-) or Surplus (+) under Capital Account	Total Budgetary Deficit
II Plan (1956-61)	+220	-1,156	-936
III Plan (1961-66)	+1,018	-1,791	-773
Annual Plans (1966-69)	+413	-1,177	-764
IV Plan (1969-94)	+411	-2,433	-2022
V Plan (1974-79)	+2,672	-6,328	-3656
VI Plan (1980-85)	-9,158	-1,629	-10,787
VII Plan (1985-90)	-46,905	+9,557	-37,348
VIII Plan (1992-97)	-1,45,875	+1,07,680	-38,195
IX Plan (1997-02)	-3,87,704	+3,87,704	-
X Plan (2002-07)	-4,79,354	+4,79,354	-
2007-08	-63,488	+63,488	-
2008-09	-55,184	+55,184	-

Source: Union Budgets

percentage of GDP at current market prices for the period 1991-2008 are presented in Table 11.3. The broad trends flowing from the data therein are as follows:

1. Till the end of the 1970s (or the end of V plan period), the Union Government used to have larger surpluses under the revenue account (Table 11.1). In other words, the centre was reasonably successful in keeping the revenue expenditure under check, record a surplus in revenue account and use that surplus to support capital budget. The reversal of the trend since the early 1980s suggests that the centre has been unable to control the steep increase in conventional expenditure or a diversion of funds (i.e. non-developmental expenditure), which could have financed the creation of tangible assets via developmental expenditure.

2. Well till mid-1990s, the Government used to have a deficit on the capital account. But, since the mid-1980s, surpluses have appeared on the capital account (Table 11.2). The share of capital expenditure in the total expenditure has, however, declined from 37 percent during 1980-85 to 12.35 percent in 2008-09. This is due to declining revenue surpluses which has consistently decreased right through the VI Plan Period (1980-85 : Rs.- 9158 crores) to the X Plan Period (2202-07 : Rs. - 4,79,354 crores).

3. Revenue deficit as a proportion of fiscal deficit stood at 41.7% in 1990-91 (Table 11.3). It rose to 79.7 percent in 2003-04. Subsequently, this proportion came down to 62.4 percent in 2004-05 and continued to decline to reach the level of 44.3 percent in 2008-09. Thus, the fiscal deficits which were driven by large revenue deficits is showing an improvement with the continued decline of revenue deficit as a proportion of GDP since 2003-04.

Table 11.3: Measures of Deficit of the Central Government

(as percentage of GDP at current market prices)

Year	Revenue Deficit	Gross Fiscal Deficit	Cot. 2 as a% of Col.3
1	2	3	4
1990-91	3.47	8.33	41.7
1991-92	2.64	5.89	44.8
1992-93	2.63	5.69	46.2
1993-94	3.81	7.01	54.4
1994-95	3.07	5.71	53.8
1995-96	2.52	5.10	49.4
1996-97	2.40	4.90	49.0
1997-98	3.04	5.82	52.2
1998-99	3.82	6.47	59.0
1999-2000	3.46	5.36	64.6
2000-01	4.05	5.65	71.7
2001-02	4.40	6.19	71.1
2002-03	4.40	5.91	74.5
2003-04	3.57	4.48	79.7
2004-05	2.49	3.99	62.4
2005-06	2.58	4.09	63.1
2006-07	1.94	3.50	55.4
2007-08	1.52	3.30	46.1
2008-09	1.35	3.05	44.3

Source: Union Budgets

The above trends indicate a violation of the principles of sound public finance that ‘consumption must be financed by current income’. Consumption financed through borrowing, while only postponing the inevitable adjustment, makes such consumption unsustainable in the long term.

Risks of High Fiscal Deficit: There are several risks with high fiscal deficits. These are:

a) Fiscal deficits, spilled over, could lead to macroeconomic instability particularly if the government resorts to deficit financing (i.e. borrowing beyond a limit and printing of new currency);

b) High fiscal deficits imperil national saving rates, thereby reducing overall aggregate investment. This further jeopardises the sustainability of high growth. Low levels of public investment renders poor physical infrastructure incompatible with large increases in national domestic product. Thus, without an increase in the scale and rate of growth of infrastructure investment, economic growth rates remain moderate as has been the experience with India;

c) The continuing large fiscal deficits, even if they do not spill over, lead to macro-economic instability in the short run requiring higher taxes to cover the burden of internal debt. High tax rates will place the country at a significant disadvantage relative to other fast-growing countries by reducing the competitive strength of the domestic producers;

d) Larger fiscal deficits have adverse effects on balance of payment (BoP) too. Aggregate excess demand representing a shortage of domestic supplies spills over as current account deficit (CAD). External loans raised to finance the CAD, ultimately leads to a BoP crisis; and

e) With large fiscal deficits, even an independent monetary management cannot sustain a low interest rate regime. This, therefore, impinges on a necessary condition for macroeconomic stability that 'real interest rate must be lower than the GDP growth rate'.

There is therefore an international consensus that the fiscal adjustment is the first and foremost task. How to achieve this is an aspect covered in the next unit (Unit 12) under the theme of 'fiscal reforms'.

Check Your Progress 1

1. Outline in brief the objectives of budgetary policy in a developing economy like India.

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2. What are the major components of Union Budget In India?

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3. Differentiate between different measures of deficit.

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4. Explain in brief the principal budgetary trends in India.

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11.4 STATE FINANCES

Like in the Union budgets, there has been a growing volume of revenue deficits in the State finances too. In response, the union and the state governments have together formulated a strategy to address the fiscal problems confronting the states. This strategy has taken the form of a package of ***'advance financial assistance'*** which is provided by the centre along with an appropriate time-bound programme of a ***'medium-term fiscal reform'*** to be undertaken by the concerned state. The time-bound programmes comprise specific measures aimed at promoting the following:

i) Reduction in non-plan revenue expenditure through appropriate measures by downsizing the staff strength of the government wherever possible;

ii) Introduce Pricing/subsidy reforms to reduce the fiscal burden of the state on the one hand and improving the allocative efficiency on the other;

iii) Introduce institutional reforms to improve the efficiency in the delivery of public services;

iv) Reduction in the role of Government from non-essential areas through decentralisation, disinvestment and privatisation;

v) An Incentive Fund to be created for incentivising the implementation of fiscal reforms in states;

vi) A model fiscal responsibility legislation at the state level was formulated which has since been implemented by most of the states. The model provides a broad framework leaving it to the discretion of the states to work out the specifics; and

vii) A debt swap scheme was introduced to enable the states to prepay high cost debt by introducing current small savings and open market loan initiatives.

11.4.1 Results of Reform Measures

There has been a dramatic turn-around in the state finances following the implementation of the reforms measure. The gross fiscal deficit of the states has come down from a high of 5.1 percent of GDP in 2003-04 to 2.1 percent in 2008-09. The revenue deficit too has been replaced by revenue surplus amounting to 0.54 percent of GDP in 2008-09, from a deficit of 2.6 percent in 2000-01. This is attributed to the incentive structure provided by the Twelfth Finance Commission as indicated in the time-bound measures above. In addition, there has also been a large inflow of small savings, tax devolution and, finance commission grants.

While the overall economic buoyancy improved due to the central transfers by way of tax sharing, the interest payment obligations declined due to the debt-swap scheme introduced. Most states have now agreed to mirror the centre's fiscal correction plan by putting in place their own fiscal responsibility targets.

11.5 LOCAL FINANCE

Local government bodies in India consist of various tiers of Panchayati Raj Institutions (PRIs) in rural areas and municipal bodies in urban areas. With the enactment of the 73rd and 74th Constitution Amendment Acts, local governments have attained the statutory status of the third tier of the federal structure. Their areas of responsibility have been respectively laid down, for the rural and urban local government, in the Schedules XI and XII of the Constitution.

11.5.1 State of Finances

The important sources of revenue of PRIs are: (i) house tax, professional tax, taxes on property and vehicles, etc.; (ii) fees from remunerative enterprises like markets, slaughter houses, etc.; and (iii) state grants and loans. Overall, PRI's finances have been in poor shape, so much so that they have not been in a position to discharge many of their obligatory functions like provision of safe drinking water, sanitation and conservancy.

The major sources of revenue for urban local bodies are tax-revenue (65%), grants-in-aid (25%), and non-tax revenue. Over the years, the dependence of local bodies on government grants has increased. Local governments are themselves partly responsible for this as they (i) have

failed to administer property tax and octroi levies, (ii) could not maximise revenue from potential sources, and (iii) have failed to raise revenue from user charges.

Check Your Progress 2

1. Enumerate, in brief, the objectives of reforms in state finances.

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2. Mention in brief the results of measures undertaken to bring about reforms in state finances.

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3. Discuss in brief the state of local finance in India.

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11.6 INDIA'S TAX STRUCTURE

The Indian tax structure, like in any other country, has developed in response to many influences - social, political and economic. In analysing the tax structure, it is therefore useful to first of all note the properties of an ideal tax structure, which are as follows:

i) The distribution of tax burden should be ***progressive***.

ii) The tax structure should facilitate the use of fiscal policy for achieving ***stabilisation*** and ***growth*** objectives.

iii) The tax structure should improve ***efficiency of the market*** rather than distort it.

iv) Tax policy should be ***easy to implement administratively*** with a low cost of collection of taxes.

11.6.1 Main Aspects of India's Tax Structure

The principal aspects of India's tax structure can be briefly enumerated as follows:

1. **Increasing importance of tax revenue:** The tax revenue collected both by the Central and state Governments have increased from Rs. 460 crore in 1951-52 to Rs. 10,17,107 crore in 2008-09 registering an average annual growth of 13.9 percent (over the 59 years period). There has thus been a significant increase in tax revenue. However, looked at another way, the tax revenue which formed 88.6 percent of the total revenue receipts in 1951-52 declined to 84.1 percent in 2008-09. Two possible inferences that can be drawn from these figures are:

   a) The Central and State governments have been relying less on tax revenue to finance their expenditure; or

   b) Revenue from non-tax sources has been increasing at a faster rate.

The second of the above two inferences looks more plausible because, as noted above, the amount of taxes collected by the Central and State governments have risen appreciably over the years. Further, as stated below, the tax revenue as a percentage of national income has also been consistently rising.

2. **Tax revenue as a percentage of national income:** The total tax revenue as a percentage of GDP, has increased from 6.7% in 1950-51 to 19.2% in 2008-09. Although this is a good growth, this can be contrasted to the tax GDP ratio of developed countries which ranges between 25 and 45 percent. Again, while it is likely to give the impression that our tax effort is relatively low, it should not be ignored that in a low-income country like India, a tax GDP ratio of about 20 percent imposes quite a heavy burden on the majority of population. To understand this, we need to take a look at the 'structure of taxes' which is outlined below.

3. **Structure of Taxes:** These are classified into two types, viz. (i) direct taxes and (ii) indirect taxes. Direct taxes include taxes on income and property, whereas indirect taxes cover taxes on commodities and services. Important direct taxes are income tax, corporate tax and wealth tax. Important examples of indirect tax are VAT, service tax, excise duties, import duties, etc. Over the years, India's tax structure had come to rely more on indirect taxation. The underlying rationale was that since it is difficult to reach all the individuals, the alternative of pursuing a broad based indirect tax is preferable. However, following measures initiated in the direction of rationalisation and simplification of the tax structure, there has been a decline in the proportion of indirect taxes in the country. The trend has revealed that lower tax rates are compatible with higher tax realisation, given better tax administration and compliance.

4. **Shift in Relative Importance of Taxes:** As a consequence of the fact that indirect taxation had been increasing till the onset of 1990s, there occurred a shift in the relative importance of different taxes. For instance, corporate and income taxes which were the major source of the Union revenue during early 1950s, yielded place to excise duties and customs duties. Similarly, in the State tax structure, sales tax replaced land revenue as the major source of state revenue. The increasing importance of excise revenue and sales tax reflected the favourable changes in the economy following the progress on industrialisation and export promotion fronts. Other contributory factors for the relative shift in tax structure are: (i) the rise in domestic production and prices and (ii) extension of the tax coverage. While these developments took place up to the 1980s, with the onset of the reform in the 1990s, the relative importance of different taxes has been undergoing changes once again. For instance, the significance of personal income tax and corporate tax have been on the rise, whereas that of the customs and excise duties are on the decline.

5. **Progressive Tax Rate Structure:** The tax structure has been designed in such a manner that all *relevant ability indices* are considered. In particular, the direct tax structure has been made progressive by ensuring that as the base grows the yield will also increase. There has, therefore, been a gradual move towards presumptive methods of taxation in which factors like: (i) emergence of a service oriented economy, (ii) proliferation of small businesses, (iii) rapid industrialisation, (iv) increase in the number of taxpayers and, above all, (v) the need to device ways and means which could ensure revenue flows without much strain on the administrative set up are given due recognition. In the field of indirect taxes, on the other hand, duties have been so levied that commodities which are consumed by the relatively well-to-do classes are taxed more.

Taxation has thus been used as one of the main instruments to achieve the different socio-economic objectives of the country.

11.6.2 Evaluation of the Tax System

Evaluation of Indian tax system can be made along the following four criteria which are necessary to sub-serve the objectives of planned economic development: (1) adequacy and productivity, (2) efficiency, (3) equity, and (4) certainty.

1. **Adequacy and productivity:** Contrary to the earlier phase, tax system has exhibited a good deal of buoyancy in recent years. The tax revenue has been continuously increasing along with an increase in national income. However, the increase in tax revenue has not been adequate enough to meet the growing requirements of the developing economy.

2. **Efficiency:** Indian tax system falls short of the criterion of efficiency.

On account of complicated laws and rapid changes in their provisions, the tax system has lost the qualities of simplicity and certainty. As a result, on the one hand, this has led to massive tax evasion and avoidance. This has generated massive black money which, in turn, has given rise to serious distortions in the economic and socio-political set-up. On the other, the taxpayers have to incur high costs in paying up taxes.

3. **Equity:** Our tax system also falls short of the criterion of equity. Although our direct taxes are highly progressive, undue reliance on indirect taxes has more than counter-balanced that effect. Leaving agricultural income out of the tax net has been a source of additional inequity. Likewise, the proliferating unorganised industrial sector is providing complete tax haven.

4. **Certainty:** The scheme of taxes in India has been considerably fluctuating, resulting in frequent tampering with tax exemptions, incentives and concessions leading to uncertainty. Even the goals of taxation have been changing. For instance, at one time the goal was to have a large number of taxes, so as to widen the tax base, whereas currently, the goal is to reduce the multiplicity of taxes and duplicity of the laws. Again, at one stage, indirect taxes on commodity inputs were not only levied more but also extended widely. Presently, however, the goal of indirect taxes is to avoid the cascading effects of taxes. A more fundamental change in the tax perspective is the emphasis in the recent years on thrift, productivity and wealth accumulation as compared to the almost single most important goal of 'avoidance of concentration of income and wealth' pursued in earlier years. Adhocism pervades the sector of corporate taxation also. Although the reasons behind the changes are quite often laudable, the policy of frequent and sudden changes in taxes ought to give way to certainty so as to have stability in the tax administration system.

   In short, many provisions in the tax laws have become redundant and need to be in tandem with the liberalised economic policies. In the current scenario, as suggested by Raja J. Chelliah, India's tax structure should be based on three cardinal principles; the tax system should be simple, moderate and fair. (For tax reforms in India, readers are guided to unit-12 of the course).

Check Your Progress 3

1. Enumerate in brief the salient features of Indian tax structure.

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2. Write a note on the structure of taxes in the Indian taxation system.

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3. Make a critical assessment, in brief, of India's tax structure.

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11.7 GROWTH OF PUBLIC EXPENDITURE IN INDIA

As stated earlier, India has a federal system of finance in which duties and functions of the central and state governments have been clearly distinguished. The constituents of the federal structure have been empowered to incur expenditure on the functions falling under their purview.

An analysis of the growth of public expenditure can be properly done under two headings: (i) size, and (ii) classification.

11.7.1 Size of Public Expenditure

The size of public expenditure in India i.e. the total expenditure of the central and state governments has grown from Rs. 983 crores in 1950-51 to Rs. 14,85,535 crore in 2008-09 or at an average annual growth rate of 13.5%. The growth of public expenditure has been at almost the same pace as that of revenue generation which also had grown at an average annual rate of 13.9% per annum over the period. Of course, all of this increase cannot be regarded as real, as a good part of it would be due to the rise in prices. But even if an adjustment is made for the rise in prices the fact remains that there has been a phenomenal increase in public expenditure. This fact can also be brought out in another way i.e. by relating public expenditure to GDP. Whereas GDP has increased at an annual average rate of about 4.2 percent during this period, the proportion of public expenditure in national income has gone up from 11.1 percent in 1950-51 to 28.0 percent in 2008-09. Compared to an average of 40 percent in public expenditure in industrialised market economies, once again, India's proportion of public expenditure is still low.

Plan Expenditure and Non-Plan Expenditure: The budgeted expenditure in a year is split into two parts, viz. (a) plan expenditure, and (b) non-plan expenditure.

Plan expenditure consists of budgetary provisions for schemes and programmes that have been included in the five-year plans in which the financial allocations between different heads are made on a five-yearly basis. Within the broad parameters of budgetary provision, annual allocations are made for different schemes and programmes.

Non-plan expenditure on the other hand, is a generic term which includes both developmental and non-developmental expenditure. Part of the expenditure is obligatory in nature e.g. interest payments, pensionary charges and statutory transfers to states. Part of the expenditure is on account of certain essential obligations of a state e.g. defence and internal security. Expenditure on maintaining the assets created in previous plans is also treated as non-plan expenditure. Likewise, expenditure on continuing services and activities from levels already reached in a plan period is shifted to non-plan in the next period e.g. expenditure on education and health services, continuing research projects, operating expenses of power stations, etc. Thus, as more plans are completed, a large amount of expenditure on their operation and maintenance of facilities and services created gets added to non-plan expenditure besides the interest on government borrowings to finance the plan. Therefore, as the plan size grows, expenditure under the non-plan category also grows. For instance, the non-plan expenditure of the Central Government amounting to Rs. 76,933 crore in 1990-91, increased to Rs. 5,07,498 crore during 2008-09. However, as a proportion of total expenditure, non-plan expenditure came down to 67.1 percent in 2008-09 from the 73.1 percent in 1990-91.

Non-plan expenditure has been the focus of considerable criticism from many quarters. Though much of the criticism comes from the premise that the non-plan expenditure is maintenance centred and to that extent not adding to further productive asset base, a more detailed study of non-plan expenditure shows that many of its constituent items are vital for the long-term development and social goals of the economy. The non-plan outlay may on analysis be therefore found to be as significant to the achievements of the plan as the plan outlay itself.

11.7.2 Classification of Public Expenditure

Public expenditure both at the centre and states can be classified into two categories, viz. (1) developmental expenditure, and (2) non-developmental expenditure.

Central expenditure: Developmental expenditure of the central government includes expenditure incurred under such heads as social and community services, economic services, grants-in-aid to states and Union Territory governments for developmental expenses. Non-

developmental expenditure of the central government includes expenditure incurred on defence, interest payments, etc.

State expenditure: Developmental expenditure of the state governments also include expenditure incurred on social and community services, and economic services. Non-developmental expenditure includes expenditure incurred under such heads as administrative services, fiscal services, appropriation to reserves, interest payments, pensions, etc.

The proportion of developmental expenditure in total public expenditure has shown a significant increase over the years. In 1950-51, developmental expenditure formed 36 percent of the total expenditure. In 2008-09, this proportion was estimated as 56 percent. This indicates the growing participation of the State in developmental activities of the economy. It should, however, be noted that the developmental schemes figure both under revenue and capital budgets. Although a larger proportion of developmental expenditure comes under capital budget, some parts of revenue budget such as subsidies do not directly pertain to developmental purposes although their indirect effects on development cannot be underrated.

11.7.3 Causes of Growth in Public Expenditure

The continuously rising public expenditure can be explained in terms of the Wagner's Law. According to the Wagner's law (hypothesised and empirically verified about 100 years ago by Adolph Wagner), there exists a causal relationship between government expenditure and economic development. The law specifies that: 'during the course of economic development, government expenditure increases more than proportionately with per capita community output'. In other words, the income elasticity of demand for government expenditure is more than one. The underlying explanation is that the very growth of the economy gives rise to such complexities that the government has to incur increasing expenditure to deal with them. Wagner distinguished three types of activities which cause an increase in government expenditure. These are:

i) Maintenance and enforcement of internal law and order;

ii) Participation in material production; and

iii) Provision of social services.

Each one of the above pushes up the expenditure for different reasons. The **first** one increases expenditure because government has to ensure the maintenance and improvement of the quality of services it provides. The **second** one increases expenditure because government has to create a climate conducive to economic growth by entering into material production which private sector would not undertake on its own. The **third** one pushes up expenditure because government alone has the ability to provide such services satisfactorily.

In addition, more recent research in this area has identified other factors like demographic changes, higher income elasticity of public goods, increasing cost of government production, etc. as responsible for growing public expenditure of the government.

All the above mentioned factors are interrelated suggesting that the sphere of government activity in developing economies like India is rising. The type of the mixed economy that India has adopted has opened up multiple avenues of government action ranging from direct participation in production (as an entrepreneur) to the exercise of regulatory and promotional measures (via taxes and subsidies). The objective of these activities would, therefore, range from the provision of social overhead capital to achieving of social and economic equality in the economy.

11.7.4 Need to Cut Public Expenditure

The ongoing reforms in the Indian economy underscore the need for scaling down the fiscal deficit. Theoretically, fiscal deficit can be reduced either by increasing revenues (i.e. the rate of growth of revenue generated) or by reducing government expenditures. In the present context, most of the reduction has to be achieved though the reduction of expenditure as the 'tax to GDP ratio' has already reached such a high level that it may not be desirable to raise it further.

The progress on this front in India has, however, not been encouraging as revealed by the facts that: (i) the government expenditure as a proportion of GDP has shown little change in the post-reform period, and (ii) the composition of spending is still skewed towards unproductive expenditures. Slow progress on both these fronts has rendered the task of maintaining macroeconomic stability more complicated.

11.8 PUBLIC DEBT IN INDIA

Among the non-tax sources the major source of government revenue is public debt. As per the current budgetary practices, there are three sets of liabilities which constitute central government public debt, viz. (1) internal debt, (2) external debt, and (3) other liabilities. The three sets of liabilities are as follows:

1. **Internal debt:** The internal debt is classified into: (a) market loans, (b) other long and medium term borrowings, and (c) short-term borrowings all of which are shown under the receipts side of the central budget. They include special securities and T-bills issued to RBI, state governments, commercial banks and other financial institutions.

2. **External debt:** Represents loans received from foreign government and bodies.

   Both the internal and external debt are secured under a fund called as the Consolidated Fund of India.

3. **Other Liabilities:** Includes other interest bearing obligations of the government such as: (i) post office savings deposits under small savings schemes, loans raised through post office cash certificates, etc. (ii) provident funds, (iii) interest bearing reserve funds of departments like railways and telecommunications, etc.

The obligations of 'other liabilities' are met by the Public Account, just as the internal and external debts are secured under the Consolidated Fund.

11.8.1 Growth of Public Debt

As a means of financing, the Government of India has made a liberal use of borrowing, both internal and external, as can be seen from Table 11.4. The figures of total indebtedness and its components are of staggering magnitude. But far more important than the magnitudes are the rate at which they are growing (12.5 percent average annual growth for total debt). Public debt as a proportion of national income has increased from 12 percent in 1980-81 to 42 percent in 2008-09.

Table 11.4: Public Debt of the Government of India
(As at the end of the year)

(Rs. in Crores)

Year	Internal Debt	External Debt	Total Public Debt
1950-51	2,022	32	2,054
1960-61	3,978	761	4,739
1980-81	30,864	13,479	44,343
1990-91	2,83,033	31,525	3,14,558
2000-01	8,03,697	65,945	8,69,642
2008-09	19,72,532	11,23,675	20,95,207

11.8.2 Problems of Public Debt

The growing size of public debt in India has given rise to the problem of debt management. The important objectives of debt management in the context of planned development of Indian economy are as follows:

1. Promote savings and provide more funds for investment in the public sector without impinging on the private sector's need for funds; and

2. Ensure large borrowing and other debt requirement without sacrificing the objective of price stability.

The first objective requires a debt policy capable of tapping funds from all possible sources in the economy. Varied instruments of resource mobilisation should be employed to suit the requirements of different types of savers/investors. The policy should be flexible so as to offer

terms, such as the interest rates and maturities, suitable to the conditions prevailing in the money and the capital markets.

The second objective requires that the loan operations of the government should support the objective of maintaining the price stability in the economy. In other words, these operations should have the aim of minimising the incidence of inflation.

11.8.3 Evaluation of Debt Policy

Government of India's debt policy can be evaluated on the basis of the two objectives defined above. The public debt policy has been successful in terms of the first objective as evidenced by the growth of public debt which has contributed to the resource availability of the government to meet its plan and non-plan expenditures. This is all the more creditable in view of the limited sphere of organised money market, an all-round scarcity of funds and competing claims for these funds by both the public and private sectors. It is, therefore, a commendable achievement that along with the dated loans, quite a good contribution has been made by the small savings sector.

In terms of the second objective, the policy has exhibited certain weaknesses. The rate of return on public debt has been quite low. Though this has helped the government in keeping the interest rate in check, it has prevented the expansion of the government securities market. The phenomenon has added to the inflationary pressures in the economy, making the investment in government securities less attractive. For a public debt policy to be anti-inflationary, contribution to the public debt should come from genuine savings adding to the productive capacity of the economy.

Check Your Progress 4

1. Distinguish between plan expenditure and non-plan expenditure.

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2. Distinguish between developmental expenditure and non-developmental expenditure.

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3. Examine in brief the trends in public debt in India.

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11.9 LET US SUM UP

Two major functions of a fiscal system are: (a) raising of revenue, and (b) incurring of expenditure by the government. In a federal system of governance, different governments operate at different levels. India's Constitution provides for (i) a union government, (ii) governments at state level, and (iii) local authorities. The state of finances at different levels of government has been precarious, resulting in fiscal imbalances and other distortions in the economy. Tax revenues have failed to keep pace with the ever-rising expenditure requirements of the government. There is an imperative need to bring speedy reforms in the fiscal administration of the country. This is the theme to which the subsequent unit of the course (unit 12) addresses.

11.10 KEY WORDS

Budget : Shows the relationship between estimated financial receipt and expenditure (i.e. its disbursement)

Revenue Budget : Covers those items which are of a recurring nature

Capital Budget : Covers those items relating to acquiring and disposal of capital assests

Revenue Deficit : Is the difference between the revenue receipts and revenue expenditure

Fiscal Deficit : Indicates the total borrowing requirements of government from other sources to meet the total expenditure requirements of the government

11.11 SOME USEFUL BOOKS

Amresh Bagchi (ed.), *Readings in Public Finance*, Oxford University Press (OUP), New Delhi, 2005.

Kaushik Basu (ed.), *The Oxford Companion to Economics in India*, OUP, New Delhi, 2009.

Ishwar C. Dhingra, *The Indian Economy–Environment and Policy*, Sultan Chand, 2009.

Reserve Bank of India, Annual Report.

Government on India, Union Budgets.

11.12 ANSWERS OR HINTS TO CHECK YOUR PROGESS EXERCISES

Check Your Progress 1

1. See Sub-section 11.2.1 and answer.
2. See Sub-section 11.2.2 and answer.
3. See Sub-section 11.3.2 and answer.
4. See Sub-section 11.3.3 and answer.

Check Your Progress 2

1. See Sub-section 11.4.1 and answer.
2. See Sub-section 11.4.1 and answer.
3. See Sub-section 11.5.1 and answer.

Check Your Progress 3

1. See Sub-section 11.6.1 and answer.
2. See Sub-section 11.6.1 and answer.
3. See Sub-section 11.6.2 and answer.

Check Your Progress 4

1. See Sub-section 11.7.1 and answer.
2. See Sub-section 11.7.2 and answer.
3. See Sub-section 11.8.1 and answer.

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UNIT 12 FISCAL REFORMS

Structure

12.0 Objectives

12.1 Introduction

12.2 Concepts & Definitions

12.3 Fiscal Situation Before Reforms

12.4 Fiscal Deficit and Fiscal Reforms

12.5 Tax Reforms

12.5.1 Chelliah's Tax Reforms Committee, 1991

12.5.2 Shome Committee, 2001

12.5.3 Kelker's Task Force, 2002

12.6 Expenditure Reform

12.6.1 Expenditure Reforms Commission, 2000

12.6.2 Rationalisation of Subsidies

12.6.3 Reform of the Subsidy Regime

12.7 Fiscal Responsibility and Budget Management (FRBM) Act, 2004

12.7.1 Fiscal Reforms at the State Level

12.8 Budget Outlays and Outcomes

12.9 Let Us Sum Up

12.10 Key Words

12.11 Suggested Readings

12.12 Hints/Answers to CYP Questions

12.0 OBJECTIVES

After reading this unit, you will be in a position to

- explain the situation which warranted the implementation of fiscal reform measures in the Indian economy;
- discuss the various initiatives of the government by way of important commissions set up and implementing their recommendations;
- explain the importance of prudent expenditure management in maintaining fiscal balance;
- discuss the provisions of Fiscal Responsibility and Budget Management Act, 2004;

- explain the relevance of matching budgetary outlays with their effective implementation or outcomes; and
- discuss the fiscal reform initiatives of the state governments in India.

12.1 INTRODUCTION

The term 'fiscal' refers to government revenues especially those raised by levying taxes. The term 'reforms' refers to strong rectification measures needed for restoring the balance in any situation which ordinarily does not respond to 'normal measures'. 'Fiscal reforms', thus, refers to the changes in the fiscal sphere brought about by the fiscal policies of the government. The fiscal policy is concerned with the revenue and expenditure policies of the government. The objective of fiscal policy is to use the same as the principal instrument to promote the aggregate demand for goods and services in the economy. The important fiscal instruments are taxes, government expenditure, public debt and subsidies.

You are aware that government expenditure in several sectors of the economy, particularly in the social sectors like education and health, are vital for the development of the economy. Also, in the context of a developing country with significant proportions of the population belonging to the poor and weaker sections, it becomes necessary for the government to subsidise many essential goods and services. In discharging these responsibilities, the government will be effectively aided if the revenues generated by the government are able to establish a healthy balance with its expenditure obligations involved in providing different services. However, when this balance is disturbed, due to what is called as 'fiscal profligacy', the anomalies that sets-in leads to a situation of 'fiscal imbalance'. The present unit deals with the situation faced by the Indian government, in the early 1990s, which warranted the implementation of 'fiscal reforms' in order to restore its fiscal health. In order to appreciate the issues involved, we will begin by familiarising ourselves with the meaning of some important concepts used in this context.

12.2 CONCEPTS AND DEFINITIONS

In the context of fiscal reforms for establishing macro economic stabilisation, controlling *key deficit variables* assumes importance. We will familiarise ourselves with the various deficit indicators and understand their implications.

FISCAL DEFICIT: It is the difference between the total government expenditure and total revenues and non-debt capital receipts. It is a measure of the total resource gap – i.e. the excess of total government expenditure over its revenue receipts and grants. This is thus a measure of the government's indebtedness. This measure of deficit has been adopted by the IMF as the Principal Policy Target, in evaluating the performance of countries seeking assistance.

REVENUE DEFICIT: It is the difference between revenue expenditure and current revenues. Thus, a Revenue Deficit arises, if revenue expenditure exceeds current revenues. It is measured to ascertain whether the recurrent expenditure of the government on account of public consumption and current transfers are fully met out of current revenues.

BUDGET DEFICIT: It is the difference between all receipts and all expenditure (both revenue and capital).

PRIMARY DEFICIT: This is equal to fiscal deficit minus interest payments.

MONETISED DEFICIT: Important from the policy point of view, monetised deficit tells us the increase in Net RBI Credit to the Central Government. The overall budgetary deficit derived in the budget does not accurately reflect the size of the monetised deficit. The monetised deficit indicates the quantum of additional money created as a consequence of credit extended to governments.

We will now proceed to examine the fiscal situation which came to prevail in the Indian economy rendering implementation of reforms imperative.

12.3 FISCAL SITUATION BEFORE REFORMS

The need for tax reform was considered even during the 1950s. From 1950s to 1990s, a number of Committees and Commissions were set up to suggest tax reforms aimed at reducing tax evasion and augment government revenues. However, the implementation of these recommendations was adhoc. Also, until the beginning of 1980s, the overall fiscal situation was under control with low revenue deficits and marginal overall fiscal deficits. But during the 1980s, the fiscal situation steadily deteriorated. In 1984-85, the overall fiscal deficit touched 7.7% of the GDP. It marginally increased to 7.8% in 1989-90 reaching a further high of 8.3% in 1990-91. The rising fiscal deficits and the monetisation (i.e. borrowing from the RBI which leads to creation of more or additional money) of a substantial part of it, led to inflationary pressures and to growing deficit in the current account of the balance of payments. In order to understand how this happened we must first know the relationship between the current account deficit and the balance of payment deficit.

The current account shows the external trade position of a country. It comprises of two sub accounts viz. the exports/imports of goods and the exports/imports of invisibles. The invisibles include: services, remittances and investment income. If imports of goods exceed exports, there will be a trade deficit. The trade deficit can be covered by the service inflows. However, if the service inflows are less than the trade deficit there will be *current account deficit* (in the balance of payments).

Thus, a current account deficit in the balance of payments of a country represents the extent of net liability of the country to the rest of the world. The relationship between the two deficits i.e. the fiscal deficit and the current account balance of payments deficit can be expressed in the form of a economy wide *financial balance identity* as follows.

Current Account Deficit = Income - (Consumption + Investment + Govt. Expenditure)

= Fiscal Deficit + (Private Saving – Investment Gap)

In symbols we can write the above as: $\mathbf{X - M = Y - (C + I + G)}$
$\mathbf{= (T - G) + (S - I)}$

where X stands for exports, M stands for imports, Y stands for National Income, C stands for total consumption, I stands for total investment, G stands for total government expenditure, (T – G) stands for total revenue collected by taxes less total governmental expenditure incurred and S stands for total savings in the economy.

The economic condition in the Indian economy resulting from the growing fiscal deficits on the one hand and the current account deficit in the balance of payments on the other, led to a serious balance of payments crisis towards the end of 1980s. Further, increasing revenue deficits (which had touched 3.5% of GDP by 1990-91) necessitated a substantial amount of borrowing for meeting the revenue expenditure. This resulted in increasing addition to unproductive debt with the interest burden on the general budget beginning to increase significantly. Though the central government tried to raise resources through taxation to meet the situation, it was not enough. The borrowing requirements of the government continued to increase with 25% of the overall fiscal deficit being met through the RBI route.

A serious implication of fiscal deficits was thus the mounting debt burden, particularly the external debt. Interest payments constituted about 24% of the total expenditure of the central government in the early years of 1980s. Total outstanding debt of the central government stood at 59.5% of GDP in 1989-90. The problem of debt burden had thus assumed a critical proportion by the end of 1980s. The fiscal situation prevalent at the beginning of 1990s, was thus characterised by sustained high fiscal deficits and mounting debt accumulation giving rise to inflation, financial repression and overall deterioration of the macro economic fundamentals of the economy. Plagued by these situations, and in consequence thereof, the Indian economy in 1990-91 was characterised by the following features:

a) High inflation –16.7% in August, 1991.

b) High interest rates.

c) Large fiscal deficits – 8.3% of GDP.

d) Higher trade tariffs – import duties ranging from 75% to 350%.

e) Control of capital inflows and outflows.

f) High subsidies – (amounting to 2% of GDP or 10.2% of government expenditure with growing non-plan expenditure).

g) Higher Current Account Deficit – 2.6% of GDP.

h) Very low foreign exchange reserves, enough only to cover one weeks' imports.

i) Large internal and external debts.

The situation called for immediate correction highlighting the need for economic reforms. This forced the government to recognise the need for swift and radical changes in the fiscal system, not only to bring about macro economic stability but also to lay the foundation for a long term Structural Reforms (or Adjustment) Programme.

12.4 FISCAL DEFICIT AND FISCAL REFORMS

The economic crisis described above emphasised the need for adopting economic reforms in general and fiscal reforms in particular. A broad ranging programme of economic reforms were initiated in June/July 1991 to tide over the crisis. The observation of World Development Report (1988) is relevant in this regard: 'a prudent fiscal policy can be defined as one that maintains the fiscal deficit at a level that is consistent with other macro economic objectives viz. controlling inflation, promoting private investments and maintaining external credit worthiness'. A programme of fiscal consolidation to achieve the desired goals should therefore focus on reducing fiscal deficit to a sustainable level. The principal challenge was, therefore, to reduce fiscal deficit. In the light of this emphasis laid on reduction in fiscal deficit, it is timely to know the dangers of high fiscal deficits. These are:

i) The need for reducing fiscal deficit rests on the issue of sustainability. This is because fiscal deficits can be financed by borrowing either from domestic sources or external sources. Each of these methods, if carried out beyond a point, can lead to a crisis. Printing of money, over and above the demand for money leads to inflation. Financing fiscal deficits by borrowing becomes unsustainable if the *interest rate exceeds the GDP growth rate*. In such a case, the economy may end up in debt trap.

ii) Even if high fiscal deficits are sustainable, they may *crowd out* investment, thereby affecting growth. Hence high fiscal deficits are not desirable, even though they may be sustainable.

iii) High fiscal deficits significantly reduce the scope for flexibility in policy. Since deficits have to be eventually corrected, they may lead to high tax regime, and/or reduction in government expenditures, affecting incentives.

Thus, fiscal deficits are detrimental to growth as they:

i) Crowd out private investment;

ii) Set-in inflationary pressures;

iii) Increases foreign indebtedness and

iv) Raise externality risk.

The above factors therefore emphasise the need for fiscal prudence. The quality of fiscal adjustment is equally important in the sense that the deficit should be reduced by *raising public savings and not by reducing public investment.* Public savings should be raised gradually and consistently along with protection of social expenditure and improvement in the efficiency of the tax structure. Fiscal consolidation thus means stress on domestic resource mobilisation of which taxation is an important component. Therefore, the policy instruments for fiscal correction and reduction of fiscal deficits are to focus dually on: i) *tax reforms* to increase revenues and ii) *expenditure reforms* to improve the efficiency of public expenditure. We will therefore first focus on Tax Reforms.

12.5 TAX REFORMS

Tax reforms are an important component of fiscal consolidation. As budding economists, you would have by now recognised the importance of tax reform in relation to both fiscal stabilisation and structural adjustment. Fiscal stabilisation, in the ultimate analysis, can be achieved only through a buoyant revenue system. Increase in the productive efficiency and lowering of costs, which are the central objectives of tax reform programme, hinge on the characteristics of the tax structure to a significant extent. The Government set up a high powered committee in August, 1991, under the chairmanship of Dr. Raja J. Chelliah, a noted Public Finance Expert, to make recommendations for a comprehensive reform of the system of central taxes. It was called the Tax Reforms Committee.

12.5.1 Chellaiah's Tax Reforms Committee, 1991

The tax reforms committee (TRC) was tasked to examine the existing tax structure in the country and make appropriate recommendations to reform in order to make the system fair, broad based, elastic and more tax compliant. The TRC identified its approach thus: 'as is well known, the best results in terms of compliance, efficiency and equity are obtained through a system of incorporating moderate rates on a broad base'. The

main approach of the committee was therefore to make the tax system simple, efficient and transparent and at the same time productive in terms of revenue generation. The committee also felt that a good tax system was one which brings most revenue to the Government by way of *direct taxes*. As for indirect tax, taking simplicity and transparency into account, the committee desired a system of taxation that was based on value added at every stage.

The TRC advocated the adoption of a limited number of simple broad based taxes with moderate and limited number of rates and with very few exemptions and deductions. In reforming the country's tax system, the TRC observed that the alarming scale of tax evasion in India was due to ***high tax rates, complex procedures of filing returns, administrative lapses, inefficiency and corruption***. With this approach, the TRC made recommendations for the reform of Direct Tax and Indirect taxes in the country as follows.

Recommendations of TRC: Direct Taxes

In formulating its proposals for reforming direct taxes, the TRC's approach was to build a fairly simple structure with:

1) Reasonable tax rates;

2) Progressive Tax rates, yet not leading to tax evasion and not adversely affecting the desire to work, save and invest; and

3) Easy to enforce.

The most important tax recommendations of the Committee are that in order to make the country's direct tax system more effective, it is necessary that tax rates are reduced in respect of all taxes. With this in view, the recommendations of the TRC relating to direct taxes were as follows.

Personal Income Tax

i) The Committee recommended a reduction in the top marginal rate to 40% and adoption of a 3-tier slab system with an entry rate of 20% and a top rate of 40% (i.e. 20%, 30% and 40%).

ii) Aggregation of minor's income, other than wage income, with the income of the parents.

iii) Abolition of tax concessions, rebates and allowances, under various incentives for saving schemes.

Wealth Tax: The TRC opined that the Wealth tax has failed to achieve any of its objectives i.e. reducing inequalities and helping the enforcement of income tax through cross checks thereby preventing further concentration of economic power. It therefore recommended

the abolition of wealth tax on productive assets. Only unproductive assets and socially undesirable forms of wealth was recommended to be taxed.

Capital Gains Tax: The TRC suggested a moderate flat tax rate on long term capital gains after due indexation for inflation.

Corporate Income Tax: The TRC recommended that the rate of tax be fixed at the same level as the top marginal rate of personal income tax and a uniform rate be applied to all domestic companies. It suggested a phased reduction of the corporate tax to 40% and abolition of surcharge on corporate tax.

Recommendations of TRC: Indirect Taxes

In general, TRC's recommendations relating to indirect taxes aimed at lowering the level of indirect taxes, rationalisation and simplification of the indirect tax system and improving administrative efficiency. The specific recommendations in respect of the major central indirect taxes are indicated below:

Import Duties

i) It recommended a drastic overhauling of the system by suggesting a merger of the regular and auxiliary duties;

ii) A phased reduction of extra-ordinarily high rates of import duties (many of them above 200% in 1991) to a range of 15% to 30% for manufactures and 50% for certain agricultural items by 1997-98;

iii) Reduction with the renewal of rates to 4 or 5; and

iv) Abolition of exemptions and special treatments.

The Committee suggested that the process of the reform should be gradual, so as to moderate the impact of the adjustment, both in terms of possible revenue loss and the pace at which the industry is expected to compete.

Union Excise Duties

i) The TRC recommended that the ultimate objective of Union Excise Reform should be to make the excise tax system move towards a full-fledged Value Added Tax (VAT) system i.e. graded conversion of the Union Excise Tax into a genuine VAT.

ii) VAT is to be levied at only 3 rates – 10%, 15% and 20% for general commodities.

iii) For non-essential commodities, the rates should be 30%, 40% and 50%.

iv) Reduction in the number of commodities enjoying exemptions.

Besides the above, the TRC suggested far reaching reforms of the system of tax administration, simplifying the assessment and computational procedures so as to reduce the cost of compliance.

Implementation of the TRC Recommendations on Direct and Indirect Tax

Many of the recommendations of the TRC were carried out by successive Finance Ministers, starting with Dr. Manmohan Singh, the present Prime Minister. In respect of Direct Taxes, the progress of implementation of TRC recommendations so far has been as follows:

i) The direct tax structure has been greatly reformed;

ii) Personal Income tax has been restructured with lower tax rates, (10%, 20% and 30%), fewer scales, a higher exemption limit and reduced saving limit tax exemptions;

iii) There is now only one rate of separate income tax for all domestic companies (30%);

iv) Wealth tax on all assets, other than those termed as unproductive assets, has been abolished;

v) Taxation of capital gains has been restructured so that only capital gains of price increases would be taxed; and

vi) Shift in the structure of taxes towards direct taxes (direct taxes to GDP ratio has increased to 5.7%).

Implementation of the TRC recommendations in respect of indirect taxes is as follows:

a) Import duties have been reduced;

b) The peak level of customs duty has been reduced to 10%;

c) Reforms in the Excise Duties have been guided by the need to simplify the rate structure to: (i) give some relief to articles of mass consumption, (ii) help the domestic capital goods industry so as to increase its competitiveness, (iii) reduce capital costs, assist industries suffering from depressed demand conditions and (iv) provide relief to small-scale industries;

d) Till December 2005, VAT has been adopted by 25 states and Union Territories, uniformly across all the states. A 3-rate structure – 4%, 2.5% and 1% is adopted.

Service Tax

In addition to the reforming of the existing direct and indirect taxes, the TRC also referred to Service Tax.

The power to levy a tax on services in general is not mentioned either in the Union list or State list. However, by virtue of entry 97 in the Union list which gives power to the Centre for levy and collection of 'any tax not mentioned in either of these lists' (i.e. the State list or the concurrent list), it is clear that the Union Legislatures is competent to levy indirect tax on services.

The TRC suggested that, to begin with, a few selected services should be subjected to tax. It suggested that i) advertising services, ii) services of stock Brokers, iii) services of automobile insurance, iv) services of insurance of residential property, personal effects and jewellery, and v) residential telephone services, be taxed.

In 1994-95 budget, a 5% union service tax on 3 services – namely telephone, general insurance and stock brokerage was introduced. The number of services liable for taxation was raised from 3 in 1994-95 to 6 in 1996-97 and from then on gradually to 100 in 2007-08. The service tax rate is 12% of the value of taxable services. The service tax has been a buoyant source of revenue in recent years, as it helped widen the tax net.

Besides the TRC Report's recommendations and its implementation, the Government of India subsequently appointed some more Committees to pursue the process of tax reform more vigorously and effectively. Let us examine the recommendations of these committees.

12.5.2 Shome Committee, 2001

The Planning Commission constituted an advisory group headed by Dr. Parthasarathi Shome to make appropriate recommendations on Tax policy and Tax Administration. The 5-member group submitted an Interim Report in February, 2001 and Final Report in May, 2001. The Report is known as The Report on Tax Policy and Tax Administration (for the 10th Plan).

The major recommendations of the advisory group are:

i) Maximum marginal rate of personal Income tax should be retained at 30%. Tax incentives should be abolished and tax concessions should be given in the form of tax credit rather than as deductions from income;

ii) Corporate tax should be reduced to 30% to bring it in line with the existing level of maximum marginal rate of income tax;

iii) Regarding the union excise, two rate structure of 16% together with a higher rate should be introduced. Moreover, services should be

integrated as early as possible with the central value added tax (CENVAT) to arrive at a full-fledged VAT at the centre;

iv) The median Tariff Rate should be reduced to 15% by 2004-05. Exemptions in respect of customs duties should be removed. Also, there is no need for so many export promotion schemes by way of exemptions and entitlements;

v) States should reform their sales taxes and introduce broad based VAT by April 2002;

vi) The ultimate goal should be to have a harmonised VAT for both the centre and the states; and

vii) State excises should be rationalised further and its revenue potential fully tapped.

12.5.3 Kelker's Task Force, 2002

In September 2002, two task forces were set up under the chairmanship of Vijay Kelkar, the then Advisor to the Ministry of Finance and Company Affairs to recommend measures for simplification and rationalisation of direct and indirect taxes. The Task Forces submitted their Final reports to the Government in December, 2002. These two Task Forces have made several important recommendations on improving tax administration to make it simple and effective.

Recommendations of the Task Force on Direct Taxes

The Committee has argued that a tax system should balance the requirements of: a) equity, b) ease of collection, and c) fostering the efficiency in resource allocation. The Committee, in the interests of efficient tax administration, has opined that a fairer tax structure should comprise of: a) low rates of taxation, b) few nominal rates, c) a broad base, d) minimal tax exemptions and incentives, e) no surcharges, and f) clearly articulated exemptions.

Personal Income Tax

a) Regarding personal income tax, the task force recommended an increase in exemption limit to Rs. 1 lakh for the general categories of tax payers and Rs. 1.5 lakhs for widows and senior citizens.

b) Only 2 slabs of tax rates – 20% upto income of Rs. 4 lakhs and 30% for income above Rs. 4 lakhs.

c) elimination of standard deduction and tax incentives under Sections 88, 80c and interest income under section 10.

Corporate Income Tax

On Corporate Income Tax the task force recommended:

i) Reduction in tax rate to 30% for domestic companies and to 35% for foreign companies;

ii) Reduction in general rate of depreciation for plant and machinery to 15% from existing 25%;

iii) Elimination of the Minimum Alternative Tax (MAT);

iv) Long term capital gains be aggregated with other incomes and subjected to taxation at the nominal rates; and

v) Abolition of wealth tax.

Recommendations of the Task Force on Indirect Taxes

Customs Duty

i) Multiplicity of levies to be reduced to 3 – i.e. basic customs duty, additional duty of customs and anti-dumping duties.

ii) Substantial duty reduction (0%) on items like life saving drugs and equipment, sovereign imports and imports by RBI; 10% duty on raw materials, inputs and intermediate goods and 20% duty on consumer goods (by 2004-05), 5% duty on basic raw materials like coal, 8% duty on intermediate goods, 10% duty on finished goods other than consumer durables and 20% on consumer durables by 2006-07.

iii) Duty reduction to the level of 5-10% should start after the introduction of state level VAT.

iv) A duty of 8% on crude oil and 15% on petroleum products from 2004-05.

v) A higher duty up to 150% - on certain agricultural products.

vi) All exemptions should be removed except in the case of life saving drugs, goods of security and strategic interest, goods for relief and charitable purposes and international obligations.

Central Excise Duty

i) All levies should be reviewed and replaced by only one levy: CENVAT.

ii) Zero % excise duty on life saving drugs and equipments, security items, food items and agricultural products; 6% for processed food products and matches; 14% standard rate for all items not mentioned against other rates; 20% on motor vehicles, air conditioners and aerated waters.

iii) A uniform rate of 16% on all fibres and yarns.

iv) All exemptions to be removed on the textile sector except for handloom woven fabrics and certified as khadi.

v) Duty exemption in respect of small scale sector to be extended to only small units with a turnover of Rs. 50 lakhs.

vi) Uniformity in all state legislations and procedures relating to VAT.

vii) Extension of service tax in a comprehensive manner leaving only a few services by including them in a negative list.

To Recapitulate:

Main Recommendations on Direct Taxes Relate to

i) Raising the exemption limit of personal income tax;

ii) Rationalisation of exemptions;

iii) Abolition of concessional treatment to long term capital goods;

iv) Reducing rates of corporate tax; and

v) Abolition of wealth tax.

Main recommendations on Indirect Taxes relate to

i) widening of the tax base;

ii) removal of the exemptions;

iii) lowering the tax rates; and

iv) expansion in the coverage of service tax.

A number of these recommendations were adopted in 2005-06 budgetary provisions subsequently. Thus, the tax reform process has been helped by the recommendations of the various expert Committees as explained above. Reforms in the direct tax system simplified the tax system, reduced exemptions and tax rates, and expanded the tax base providing for better tax compliance. Customs duties were reduced. Service tax was introduced and now it is extended to cover about 104 services. Thus, most of the tax reforms measures recommended were adopted.

Check Your Progress 1

1. Mention the conditions which led to the implementation of fiscal reforms becoming imperative.

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2. What are the dangers of high fiscal deficit?

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3. What was the basic approach of the Tax Reform Committee towards evolving a simple direct tax structure?

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4. Mention the main recommendations of Kelker's Task Force on direct and indirect taxes?

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12.6 EXPENDITURE REFORMS

Apart from tax reform, expenditure reform is also needed to reduce fiscal deficits and restore fiscal balance. Expenditure reform is key to control fiscal deficit. Expenditure management is an integral part of expenditure reforms. The burden of fiscal deficit reduction crucially depends on public expenditure management. In the effort to contain expenditure, there is also a need to reorient public expenditure for the creation of productive assets. In this context, it is necessary to distinguish between three types of expenditures viz. plan expenditure, non-plan expenditure and capital expenditure. ***Plan expenditure*** refers to expenditure on developmental programmes leading to creation of assets. ***Non-plan expenditure*** refers to expenditures on defence, interest payments, subsidies, etc. which do not add to capital assets. In light of this, while plan expenditure has to be increased, non-plan expenditure should be reduced. ***Capital expenditure*** is the expenditure incurred for the creation of assets like land, building, machinery, equipments and the like. Thus, plan expenditure and capital expenditure are the two types of expenditure on which there should be greater focus. However, in the case of Indian economy, plan expenditure has been around 4 to 4.5% of GDP (it was 4.5% of GDP in 2002-03, 3.9% in 2005-06, 4.1% in 2006-07, 4.4% of GDP on 2007-08). The non-plan expenditure, on the other hand, was increasing at an average annual rate of about 15% in

the initial years of the present decade (i.e. 2000s). As a proportion of GDP, it was about 10% of the budget for 2007-2008. As stated before, in the context of fiscal reforms, it is important that non-plan expenditure is reduced.

A disconcerting feature of the expenditure compression policy of the Government of India bas been a reduction in capital expenditure. Capital expenditure as a proportion of GDP is declining over the years; 1990-91 (4.4%), 2002-03 (3%), 2006-07 (1.7%). It is important to note that in any expenditure reform program, expenditure compression should not be at the expense of social expenditure like education and health. There is a view that the fiscal reforms have lead to a decline in the social sector expenditure. For instance, in the post-reform period, total government expenditure on education declined as a proportion of GDP from 3.2% in 2000-01 to 2.8% in 2007-08. As a proportion of total expenditure, expenditure on education declined from 11.3% to 10.2% during this period. The total expenditure on health in India is less than 1% of GDP (0.99%) and that on social services was only 6.2% of the total expenditure in 2004-05. Again, expenditure on agricultural infrastructure, especially irrigation, was a mere 0.09% of total expenditure in 2004-05 and 0.06% in 2007-08. Since social services and agriculture are priority sectors identified by the government, reduction of expenditure in these sectors is a matter of concern.

The other category of expenditure that needs attention in the context of expenditure reform is the Revenue Expenditure. ***Revenue expenditure is expenditure incurred for purposes other than the creation of assets of the Government***. Revenue expenditure consists of pay and allowances, interest payments, grants to the States and the Union Territories and subsidies. Trends in the Revenue expenditure shows that as a proportion of GDP, it has been in the range of 11% to 14% over the period 1991-2008 [1990-91 (13%), 1997-98 (11.8%), 2006-07 (12.4%), 2007-08 (11.9%)].

Thus, we see that in the post reform period, revenue expenditure has been high at over 10% of GDP, while capital expenditure has declined steadily as a proportion of GDP till 2006-07. The axe of fiscal reforms has thus fallen heavily on capital expenditure. This needs to be corrected. On the other hand, revenue expenditure which is not only high but also increasing needs to be arrested. Expenditure reform programme should therefore pay attention to these components.

12.6.1 Expenditure Reforms Commission, 2000

An Expenditure Reforms Commission (ERC) was appointed in 2000 to suggest measures for rationalising public expenditure. The ERC paid special attention to subsidies (a major component of revenue expenditure) and made several suggestions for reducing them. The important recommendations of the ERC are the following.

i. Food subsidy should be reduced by allowing it only to the population below the poverty line. For this purpose, the State Governments should identify the population below the poverty line, in their respective States.

ii. Fertiliser subsidies which have grown over the years should be withdrawn in a phased manner. For this purpose, the control system should be dismantled over time. Fertiliser industry should be completely decontrolled in course of time as a result of the implementation of this recommendation.

iii. The ERC also considered down sizing the government. It found that there is excess staff in the government. For optimising the government staff strength, it suggested a cut of 10% on the staff strength as on January, 1, 2004, to be carried out by the year 2008. There should be complete ban on creation of new posts for two years.

Expenditure reform, compared to tax reforms, is a difficult matter and is therefore understandably on a slow track. Reduction of subsidies, to contain revenue expenditure and reduce revenue deficit, is an important component of expenditure reform. This is discussed in more detail in the next section.

12.6.2 Rationalisation of Subsidies

In the case of expenditure reform, the containment of the growth of non-plan expenditure is a major concern. As said before, non-plan expenditure mainly refers to maintenance expenditure like salaries including: (i) expenditure on defence, (ii) interest payments and (iii) subsidies. Since 1980s, there has been uncontrolled growth in non-plan expenditure. The containment of the growth of non-plan expenditure is a major issue having implications for expenditure and fiscal deficit reduction.

The major component of non-plan expenditure are: i) defence expenditure, ii) interest payments and iii) subsidies. These three, together account for more than 70% of the non-plan expenditure. Of these three, defence expenditure is a charged item, and for security reasons, cannot be interfered with. Interest payments being contractual obligations also cannot be avoided. Therefore, the only item of non-plan expenditure, in the reduction of which some scope and discretion exists, is subsidies. Any plan for expenditure reform or expenditure reduction should therefore pay attention to subsidies.

Over the years, subsidies have increased continuously. Budgetary subsidies - i.e. subsidies which were provided for in the central government's budget – were very negligible at the beginning of 1970s but increased to 2.3% of GDP at the end of 1980s. They are on the decline but still account for more than 1% of GDP. Pruning of subsidies has been a crucial component of fiscal reforms initiated in 1991-92.

When economic reforms were initiated in 1991 – three subsidies – food, fertiliser and export development subsidies – were considered as the major subsidies, accounting for 1.7% of GDP. These three subsidies accounted for more than 75% of all subsidies in the 1990s. In the beginning of 1991, export development subsidies were abolished as part of the reform programme. Hence, the most important explicit subsidies, that remain are food and fertiliser subsidies, which together account for more than 1% of GDP (and 80% of total subsidies). In recent years (i.e. from 2002-03), petroleum subsidy is added to the list. Today, ***food, fertiliser and petroleum*** subsidies are the major subsidies which are to be considered for any fiscal reform programme. In 2002-03, expenditure on these three subsidies was Rs. 40,716 crores. It increased to Rs. 52,935 crores in 2006-07 and is budgeted at Rs. 51,247 crores in 2007-08. However, as a proportion of GDP, subsidies declined from 1.7% in 2002-03 to 1.2% in 2006-07 and further to 1.1% in 2007-08 budget. Though as a proportion of GDP, major subsidies have declined during the last 5 years, they are still at a higher level, accounting for 8% of total expenditure. Let us now look briefly at the nature of these three subsidies and the need for their rationalisation

Food Subsidy

Food subsidy is aimed at ensuring supply of food grains to the consumers, especially the poor, at affordable prices. Public distribution system (PDS) was introduced to provide food grains at cheaper rates and to insulate the vulnerable sections from higher prices in the market and also to ensure minimum nutritional status to them. PDS is highly subsidised in India and this has put a severe fiscal burden on the central government.

Subsidy on the PDS arises from the difference between the issue price and the economic cost of Food Corporation of India (FCI) – procurement and operational costs. The economic cost of FCI is going up due to i) regular hikes in procurement prices and ii) increasing costs of storage and distribution. While these are rising, the issue prices are deliberately kept low in order to supply food grains at lower prices. Thus, the gap between the two is increasing over the years and hence food subsidy is going up.

Many studies have shown that food subsidy is badly targeted and most of it goes to the not so poor. Food subsidy is justified on the ground that it is aimed at poverty relief, but in reality the poor have not benefited much from it. Further, a major part of the subsidy goes to covering the costs of the inefficient and corrupt FCI. In addition, there are leakages from the PDS, in the form of losses in storage and transportation and diversion to the open market. In view of this, there is a need for rationalisation of food subsidy and a targeted PDS (i.e. targeting only the poor and vulnerable sections of the population). This will help the real poor people and also reduce the burden of food subsidy.

Fertiliser Subsidy

Fertiliser subsidy is the other component of major subsidies. Government introduced this subsidy in 1977, with the primary aim of making fertilisers available to the farmers at affordable prices. This is aimed at encouraging more fertiliser use in agriculture, increasing agricultural production and attaining food self sufficiency. The fertiliser subsidy has two main components. A part of the subsidy goes to the farmers. The other part goes to the fertiliser production units.

The second component is aimed at ensuring fertiliser producing units a fair return and attract investments in the industry to increase the production of fertilisers. A Retention Pricing System (RPS) was introduced in 1977 towards this end. The excess of the cost of production (retention price) and distribution (transportation and distribution) costs over the controlled price is regarded as a subsidy and paid to the production units. In actual working, it is found that fertiliser subsidy is not reaching the poor farmers. 50% of the subsidy is going to the inefficient and high cost domestic fertiliser industry. The fertiliser producing units have not shown any inclination to reduce the cost of production in view of the RPS. Further, the fertiliser pricing policy of the government of India has resulted in imbalance in the use of different fertilisers [viz. nitrogen (N), phoperous (P) and potassium (K)]. This has, in fact, led to excessive use of urea relative to other fertilisers. This has had an adverse effect on the environment affecting the quality of the soil. Likewise, nitrogen is heavily subsidised and therefore it is used in excess relative to other fertilisers.

Petroleum Subsidy

From 2002-03 onwards, petroleum subsidy is regarded as a major subsidy. The Government of India gives petroleum subsidy for domestic LPG and PDS kerosene. Kerosene is distributed through PDS, as it is supposed to be poor man's cooking fuel, at a heavily subsidised price. But, half of it is used to adulterate diesel and petrol, in view of its relative cheapness. In Bengal and Bihar, much of it is smuggled to Nepal and Bangladesh to be sold at a profit.

The subsidy on kerosene and LPG is financed by huge cross subsidy on petrol. This is highly distortionary in nature. It is, thus, clear that these subsidies - food, fertiliser and petroleum subsidies – while imposing heavy fiscal burden on the government, are responsible for distortions in the working of the price and delivery mechanisms, in addition to leakages. There is therefore every need for their rationalisation.

12.6.3 Reform of the Subsidy Regime

There have been several suggestions for the reform of the subsidy regime to make it efficient and less burdensome. In May 1977, the Finance Minister placed before the Parliament, a discussion paper, entitled

'Government Subsidies in India'. This discussion paper was based on a detailed study conducted by the National Institute of Public Finance and Policy (NIPFP), New Delhi. Outlining the rationale for the reduction of subsides, the study stated that 'the existing regime is not tangibly progressive, as on an average, nearly half of the fertiliser subsidies accrues to the producers/suppliers rather than the farmers. Similarly, a significant portion of the food subsidies does not filter through to the consumers but are absorbed in costs of handling and storing food grains'. Taking the stand that these subsidies are the cause of inefficient and wasteful use of resources, the study indicated the lines on which the subsidy regime is to be reformed.

As explained in the earlier section, the Expenditure Reforms Commission (ERC) also suggested that food grains subsidy should be reduced and should be allowed only to the population below the poverty line. It also suggested that fertiliser subsidy should be withdrawn in a phased manner and that the present control systems be dismantled. At a meeting of the Planning Commission in December, 2007, The Prime Minister expressed concern that the current subsidy regime has become untenable as it is contributing to fiscal deficit and inefficiency in public expenditure. Observing that 'over rupees 1 lakh crore would be spent this year alone, he said that too much money is being spent on financing subsidies in the name of equity, with neither equity objectives nor the efficiency objectives being met'. He emphasised the importance of restructuring subsidies so that only the really needy and the poor benefit and all leakages are plugged.

The position is, however, very critical requiring political will and commitment. Better targeting of subsidies, plugging leakages and improving the delivery mechanisms are the much needed measures in this regard.

12.7 FISCAL RESPONSIBILITY AND BUDGET MANAGEMENT (FRBM) ACT, 2004

To bring about the fiscal balance effectively, it was thought better to enforce fiscal balance legally. India opted for this course of action in the year 2000 with the constitution of a committee on Fiscal Responsibility Legislation to examine the various aspects of the country's fiscal system and recommend a draft legislation on the Fiscal Responsibility of the government (central government). Subsequently, the Fiscal Responsibility and Budget Management (FRBM) Bill was introduced in the Lok Sabha, in December, 2000.

The FRBM bill had stated its important objectives as follows:

i) to make the central government responsible for ensuring inter generational equity in fiscal management and long term macro economic stability for attaining a sufficient revenue surplus by eliminating fiscal deficit;

ii) to remove fiscal impediments in the effective conduct of monetary policy;

iii) to ensure prudent debt management consistent with the fiscal sustainability through limits imposed on the central governments' borrowings, debt and deficits; and

iv) to ensure greater transparency in the fiscal operations of the central government.

The original bill recommended certain time-table for the reduction of revenue deficit and fiscal deficit. A diluted version of the original FRBM Bill (in terms of targets and time frame) was passed by the Parliament in July, 2004. The FRBM Act became effective from July 5, 2004. The Act required the elimination of Revenue Deficit by 2008-09. This means from 2008-09 onwards, the central government will have to meet all its Revenue Expenditure from its Revenue Receipts only. Any borrowing would only be to meet capital expenditure, repayment of loans, lending and fresh investment.

The Act mandates a 3% limit on Fiscal Deficit after 2008-09. This is a reasonable limit that allows significant leverage to the government to build capacities in the economy without compromising fiscal stability. Besides stipulating annual targets for the reduction of fiscal deficit and revenue deficit, the FRBM legislation provides for greater transparency in fiscal operations. For formulating annual targets and drawing up the framework for fiscal policy, a taskforce headed by Dr. Vijay Kelkar was constituted by the central government. By providing for quarterly review of fiscal situation and regulating direct borrowing from the Reserve Bank of India, the FRBM Act makes an effort to control expenditure through fiscal discipline.

The FRBM legislation has now made it mandatory for the Finance Minister to make an annual statement to Parliament on the fiscal situation, explaining any deviation in meeting the fiscal obligations cast on the centre. Following the enactment of the FRBM Act, the trends in the deficits of the central government have begun to decline as indicated in Table 12.1.

The trends indicate that the fiscal deficit and revenue deficit are getting reduced as per the targets set by the FRBM Act. The revenue deficit was, however, supposed to be reduced to zero by the year 2008-09. The trends indicate that by 2009-10, the government might be able to achieve the zero percent revenue deficit.

The Approach Paper to the Eleventh five year plan has incorporated the fiscal parameters relating to Fiscal Deficit broadly within the FRBM Act. The Approach Paper recognises the importance of meeting the FRBM Act targets, which would have a salutary effect on the overall credibility of policy. Adherence to the FRBM targets is critical to

TABLE 12.1: Trends in the Deficits of the Central Government

(% of GDP)

Year	Fiscal deficit	Revenue Deficit	Primary Deficit
2003-04	4.5	3.6	0.0
2004-05	4.0	2.5	-0.1
2005-06	4.1	2.6	0.4
2006-07	3.4	1.9	-0.2
2007-08 (RE)	3.1	1.4	-0.6
2008-09 (BE)	2.5	1.0	-1.1

Source: *Economic Survey 2007-08*

ensure budgetary sustainability and macro economic stability. The FRBM Act is thus an important step in the direction of reducing fiscal deficit over a period of time as the targets laid down in the Act enable the government to formulate its tax, expenditure and debt policies so as to be able to meet the targets.

12.7.1 Fiscal Reforms at the State Level

We have so far discussed the fiscal reforms at the level of the central government. In a federal country like India, fiscal imbalances at the state level and the need for its reform is equally important. Fiscal reforms at the State level are important because States raise more than 1/3 of the combined revenue of the centre and the states. Central and state governments' revenues also account for more than 50% of the total or combined revenue expenditure. In 1990-91, the fiscal deficit attributable to the states was substantial at 3.5% of GDP. The share of states' fiscal deficit in the combined fiscal deficit of the centre and states was 35.1% in 1990-91. Revenue deficits of the state governments were substantial and increasing during 1990s.

As we have seen, a number of fiscal reforms have been undertaken by the central government since 1991. In a federal setup, state level fiscal reforms should complement the efforts of the central government to evolve a healthy fiscal system. The Eleventh Finance Commission recommended creating a Rs. 10,607 crores incentive fund so that the states that implement reforms would be eligible to draw funds from this incentive pool. It identified 15 states with revenue deficits and stipulated that each of these states should contribute 15% of its revenue deficit grants to the fund, with a matching grant from the centre. Each of these states should reduce their revenue deficits as a proportion of their receipts by at least 5% annually between 2000-2005. The states which do not follow the set time-table for reform would forego their share of withdrawals from the incentive fund in that financial year. Accordingly,

the government of India created an incentive fund of Rs. 10,607 crores to encourage states to implement monitorable fiscal reforms. Thirteen state Governments have so far evolved and undertaken their own fiscal reform program and also entered into an agreement with the central government in 1999 – 2000.

The Twelfth Finance Commission also recommended that each state government should enact a Fiscal Reform Legislation which would be a precondition for debt relief. To facilitate a rule based fiscal program at the state level, the Reserve Bank of India constituted a group to frame a model fiscal responsibility bill. The group submitted its report in January, 2005. In accordance with this, states have begun the process of fiscal consolidation in line with the Twelfth Finance Commission's recommendations to complement the efforts of the central government. Almost all the states have since enacted their fiscal reform legislations.

The fiscal situation of the states have shown considerable improvement in the wake of Fiscal Reform Legislations. In fact, the State's performance in this regard may be considered even better than the performance of the central government in terms of FRBM targets. The aggregate revenue deficit of the States was 0.1% of GDP in 2006-07 (R.E). The states are expected to have a revenue surplus of 0.3% of GDP in 2007-08.

The enactment of Fiscal Reform Legislations has provided a crucial impetus to the process of attaining fiscal sustainability as reductions in revenue deficit and fiscal deficit are critical for redrawing the maintaining level of the states debts. The enactments by most of the states has ushered in a rule based fiscal policy framework at the state level. This has moved the process of fiscal reforms in the country further ahead.

12.8 BUDGET OUTLAYS AND OUTCOMES

Each budget announces some programmes allocating money for its implementation. The actual amounts spent on a program usually are below what is budgeted reducing the desired effect of the programme. Thus, expenditure would increase consequent to inefficiency in expenditure. There is a growing concern about the efficiency of government expenditure and about effectively utilising public resources. This led to a discussion, in recent years, about the relation ship between outlays and outcomes. The Twelfth Finance Commission (TFC) addressed this problem in its report making a distinction between outcomes and outputs thus: 'the conventional budget exercises have focussed on allocation of resources to different heads without taking into account how these government expenditures get translated into outputs or outcomes.

Outputs are the direct result of government expenditure and outcomes are the end results. For example, in the case of education, opening a

new school or appointing a new teacher is an output and reduction in the rate of illiteracy, as a result of this, will be considered as outcome.

A critical part of the budgetary reforms, the TFC Report notes: 'must include information on the relationship between expenditure and the corresponding performance in producing real results'. This is necessary for the management of public expenditure to be guided by economy, efficiency and effectiveness. It must be noted, however, that relating outlays to output or outcome is complex as it is difficult to establish a one-to-one correspondence between outlays on the one hand and outputs or outcomes or the other. For example, upgrading educational standards depends not only on expenditure on education but also on a number of other variables such as quality of teaching, attitudinal factors and the like. Further, the relationship between outlays and outcomes is not always linear; if the amount spent is doubled, it may in some cases yield more than twice the benefits.

In view of this debate, the central government has taken the initiative in output budgeting. In presenting the budget for 2007-08, the Finance Minister has presented the outcome budget to the parliament. This is a welcome step as ultimately, the effectiveness of expenditure on various programmes has to be judged by the outcomes (the final results) and not by the outlays (i.e. amounts spent).

Check Your Progress 2

1. What are the two components of productive expenditure? Which of the two results in asset creation?

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Fill in the blanks:

2. An expenditure reforms programme should not be at the cost of …… ………..…………………

3. The three major components of non-plan expenditure are: ...., ……….........…., ……………....………

4. Which are the three commodity fronts on which reduction of subsidies needs to be focused? ……………………, ……………………., …………………..

5. What is the relationship between budgetary outlays and outcomes? Which of the two needs to be especially focused upon and why?

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12.9 LET US SUM UP

The need for economic reforms in June/July, 1991 was acutely felt in view of the balance of payment crisis and the growing fiscal imbalances. The fiscal crisis, was a result of the fiscal profligacy of the central and state governments during 1980s. This contributed to a balance of payment crisis necessitating wide ranging economic reforms of which fiscal reforms is the important one. The need for restoring fiscal balance by reducing fiscal deficits was widely recognised and a number of tax reforms and expenditure reforms were initiated. The tax reforms, introduced in the light of the Chelliah's tax reforms committee and Kelker's committee included altering the tax structure of direct taxes by expanding the tax base, reducing the rates leading to improved tax compliance and making the tax administration more efficient. The indirect tax system is also reformed by reducing import duties and reforming the excise duties towards a VAT system. A new tax, service tax, was introduced covering about 104 services as on date. All these increased tax revenues considerably. Expenditure reforms have concentrated on the major subsidies in the areas of food, fertilisers and petroleum so as to rationalise them. The FRBM Act, which stipulated targets for the reduction of fiscal and revenue deficits is a major feature of fiscal reforms. Progress in the enactment of similar legislations in the states, in line with that at the centre, is in line with the targets as fiscal legislations at state level are a crucial part of the overall fiscal reforms.

12.10 KEY WORDS

Fiscal Deficit : difference between the total government expenditure and total revenues and non-debt capital receipts.

Revenue Deficit : difference between revenue expenditure and current revenues.

Fiscal Profligacy : higher governmental spending, particularly unproductive spending, like subsidies including inefficient utilisation of resources due to unrealised outcomes and time-overruns on projects resulting in increased expenditure.

Fiscal Imbalance : difference between government revenue and government expenditure.

12.11 SUGGESTED READINGS

Ruddar Datt & K.P.M Sundharam, *Indian Economy*

Vijay Joshi and I.M.D Little; *Indian Economic Reforms* 1991-2001, Oxford University Press, 1996.

Govt. of India, Ministry of Finance — Discussion Paper: Government Subsidies in India, May, 2007.

12.12 HINTS/ANSWERS TO CYP EXERCISES

Check Your Progress 1

1. See Section 12.3 and answer.
2. See Section 12.4 and answer.
3. See Section 12.5.1 and answer.
4. See Section 12.5.3 and answer.

Check Your Progress 2

1. Plan and Capital expenditure. Of the two, capital expenditure is asset creative.
2. capital expenditure.
3. defence, interest, and subsidies;
4. food, fertiliser and petroleum.
5. See Section 12.8 and answer. Ensuring the desired 'outcomes' is more important as our experience of developmental failure suggest that they are on account of not realising the intended outcomes and not due to the required budgetary allocations.

UNIT 13 PHASES IN AGRICULTURAL DEVELOPMENT

Structure

13.0 Objectives

13.1 Introduction

13.2 Overall Growth

13.3 Transformation of Traditional Agriculture into Modern Agriculture

13.3.1 Phase I : Traditional Agriculture

13.3.2 Phase II : Technologically Dynamic Agriculture Wth Low Capital Intensity

13.3.3 Phase III : Technologically Dynamic Agriculture With High Capital Intensity

13.3.4 Factors Essential for Modernisation

13.3.5 Performance During the Modernisation Phase

13.4 Long-Term Problems of Agriculture

13.5 Let Us Sum Up

13.6 Key Words

13.7 Some Useful Books

13.8 Answers or Hints to Check Your Progress Exercises

13.0 OBJECTIVES

After studying this unit, you will be able to:

- make an assessment of the importance of agricultural sector in the Indian economy;
- identify the different phases of transformation of Indian agriculture from a traditional system to a modern system;
- explain the different factors that brought about transformation;
- establish the course of growth in agriculture through its different phases; and
- highlight the different problems that the Indian agriculture is currently faced with.

13.1 INTRODUCTION

Agriculture has been the major source of livelihood in the Indian economy. Although, over the years, its contribution to GDP has come

down to 20.9 percent in 2004-05, the sector still supported an overwhelming 52.1 percent of workers in 2004-05. Notwithstanding major diversification in the structure of the economy over the last few decades, the dependence on agriculture thus still continues heavily. As agriculture remains a key sector in rural areas, it continues to have great potential for reducing poverty and hunger in the rural sector. For every additional rupee generated through agricultural production in India, the existing linkages can add three more rupees to the income of the rural economy. The pulls and pressures in the agricultural sector continue to exert their influence on the overall course of economic activity, although the relative dependence of the economy on the agricultural sector has registered a marked decline. Although double digit growth of the economy in some years may be feasible even with a very low contribution from agriculture, this cannot happen year after year without triggering an industry downturn.

During the era of economic planning (right from the first plan period to the eleventh) agricultural output has recorded a steady growth, along with growth in other sectors of the economy. The present unit provides a profile of growth in the agricultural sector distinguishing its different phases of growth, highlighting their features and identifying the factors underlying the growth in each of the phases.

13.2 OVERALL GROWTH

We begin by taking a look at the aggregate picture as it obtained beginning with the year 1951-52. For this purpose, we make use of the data presented in Table 13.1. It would be seen from Table 13.1 that:

1. Agriculture and allied activities sector maintained a steady growth of about 2.5 percent per annum during the period 1951-52 to 1980-81, when the total economy was growing at about 3.5 to 3.7 percent.

2. With acceleration in the rate of growth of GDP during the period 1981-82 to 1996-97, the growth rate in the agricultural sector also moved up to an average of 3.5 percent during 1981-82 to 1990-91 and 3.7 percent during 1991-92 to 1996-97.

3. Subsequently, while the total economy moved to a higher growth trajectory, clocking 6.6% during 1997-98 to 2004-05 and 9.5% during 2005-06 to 2006-07, growth rates in the agricultural sector initially dropped from 3.7 percent during 1991-92 to 1996-97 to 2.5 percent during 1997-98 to 2004-05 but accelerated to record 4.8% growth during 2005-06 to 2006-07.

Table 13.1 : Average Growth Rates of GDP, Agriculture and Non-Agriculture Sectors (percent)

(1999-2000 Prices)

Sl. No.	Phase/Period		GDP	Agriculture	Non-Agriculture
1.	Pre-Green Revolution	1951-52 to 1967-68	3.7	2.5	4.9
2.	Green Revolution Period	1968-69 to 1980-81	3.5	2.4	4.4
3.	Wider Technology Dissemination Period	1981-82 to 1990-91	5.4	3.5	6.4
4.	Early Reforms Period	1991-92 to 1996-97	5.7	3.7	6.6
5.	Ninth Plan	1997-98 to 2004-05	6.6	2.5	7.9
6.	Early years of Tenth Plan	2005-06 to 2006-07	9.5	4.8	10.7

It would be further seen from the data in Table 13.1 that:

(i) Growth of agriculture over the entire period i.e. 1951-52 to 2006-07 remained lower than the growth in non-agricultural sector.

(ii) The gap between the growth of agricultural and that of the non-agricultural sector began to widen since 1981-82, and more particularly since 1996-97, because of : (a) an acceleration in the growth of industry and service sectors, and (b) a deceleration in the growth of agriculture. This deceleration in the growth of agriculture is a cause for concern in view of the dependence of large proportion of workforce on the sector in the economy.

The growth in the agricultural sector, though lower than in the non-agricultural sector, remained higher than the growth of population. Between 1950-51 and 1990-91, production of food grains increased at an average annual rate of 2.5 percent compared to the growth of population which averaged 2.1 percent during this period. As a result, India almost became self-sufficient in food grains and there were hardly any imports during 1976-77 to 1990-91, except occasionally. The rate of growth of food grains production, however, decelerated to 1.2 percent during 1990-2007, lower than annual average rate of growth of population of 1.9 percent. The per capita availability of cereals and pulses, therefore, witnessed a decline during this period.

How did the initial transformation come about? Why did the rate of growth slow down? What were the determinants of growth in each of the phases? We analyse these factors in the subsequent sections below. Before that, you may attempt the following questions to know your grasp of what we have outlined so far.

Check Your Progress 1

1. Why is agriculture important to the Indian economy?

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2. In terms of the relative position of growth in the agricultural sector, with that in the non-agricultural sector, presented in Table 13.1, identify two periods in which the growth in the latter was more than that in the growth of the former.

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3. What was the major consequence of slow-down in growth of output in the agricultural sector?

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13.3 TRANSFORMATION OF TRADITIONAL AGRICULTURE INTO MODERN AGRICULTURE

A study of the economic framework within which traditionally low productivity agriculture is transformed into high productivity modern agriculture is important in policy-formulation and planning for growth. Productivity here refers to productivity of available land, labour and capital resources; and this involves larger use of the more abundant labour resources and a smaller use of scarce resources like capital, foreign exchange and expert personnel. An absolute criterion cannot be laid down about the content and chronological order of such compositions, since agriculture varies vastly from area to area in terms of **physical conditions** (i.e. soil moisture, cropping pattern, responses, availability of labour, etc.), **cultural factors** (education, receptivity to innovations, consumption pattern, etc.), **economic factors** (prices of inputs and outputs) and **institutional factors** (nature of research, extension, marketing supply and other institutions). Nevertheless, in the context of Indian agriculture, three distinct phases of growth can be distinguished as follows.

Phase I : Traditional agriculture

Phase II : Technologically dynamic agriculture, with low capital intensity

Phase III : Technologically dynamic agriculture, with high capital intensity

13.3.1 Phase I: Traditional Agriculture

This is a technologically stagnant phase in which a larger farm production becomes generally possible only through increased application of all three traditional inputs viz. land, labour and capital. The rate of increase of output is normally smaller than the rate of increase in inputs - revealing diminishing productivity of inputs, even at a low yield. Even if some elements of dynamic agriculture like application of fertiliser, improved seeds, and land reform are introduced, the increase in productivity is smaller. Further, given their resources and knowledge, the traditional farmers cannot become any more efficient as both these factors strongly limit their participating actively in contributing to higher production.

Till mid 1960s, the Indian agriculture was typically embodied within the framework of traditional agriculture outlined above. The period 1950-51 to 1966-67 can be easily divided into two sub-periods as follows:

1. **First sub-period (1951-61) :** This period lasted over the first decade of economic planning spread over the period covered by the first and second Five Year Plans. The primary characteristic of this period was that production of agricultural crops consistently maintained an upward trend, except for small dips in two years, 1957-58 and 1959-60. The index number of production of all crops went up from 45.6 in 1950-51 to 66.8 in 1960-61 (Base: 1981-82=100).

2. **Second sub-period (1961-67):** During this period [i.e. 1960-61 to 1966-67] production either declined or remained stagnant in the case of a number of major crops, especially food grains, as can be seen from Table 13.2 below:

Table 13.2: Production of Food Grains in India

(Million Tonnes)

Year	Output
1961	60.9
1962	61.8
1963	60.2
1964	61.8
1965	67.3
1966	54.6

This led to a serious crisis in the Indian economy prompting a re-appraisal of the growth strategy pursued in the agricultural sector. This reappraisal of policies and strategies brought about a transformation in Indian agriculture, leading to what can be marked as phase II of Indian agriculture.

13.3.2 Phase II: Technologically Dynamic Agriculture With Low Capital Intensity

The Indian agriculture entered the next phase after mid 1960s. This is described as phase II marked for technologically dynamic agriculture with low capital intensity. This is the beginning of the process of transformation from traditional agriculture to modernisation.

In this phase, agriculture still represents a large portion of the total economy. But population and incomes would be rising, increasing the demand for agricultural products while the size of the average holding would be coming down. There is scarcity of capital both for industry and agriculture. The farm sector tends to use more labour than capital, since labour, owned or hired, would be still, relatively cheaper than mechanisation.

The distinguishing feature of phase II is the application of science and technology, evolved by research institutions, in a progressively large measure. This increases the productivity of farms when small capital additions are made in the form of improved seeds, fertilisers and pesticides. The profitable innovations are accepted by the farmers despite imperfections in land tenure, marketing and input supply system.

Indian agriculture entered this phase of transformation after the mid-1960s. The stagnancy that had marked the agricultural sector during the early 1960s, had largely been overcome around the end of the decade. In the wake of the new agricultural strategy of growth (called the Borlaug seed-fertiliser-technology) that had been adopted, agricultural production especially food grains, began to increase sharply (Table 13.3).

Table 13.3: PRODUCTION OF MAJOR CROPS

(Million Tones)

Crop	1960-61	1970-71	1980-81	1990-91
Food grains	82.0	108.4	129.6	176.4
Oil seeds	7.0	9.6	9.4	18.6
Sugarcane	110.0	126.4	154.2	241.0
Cotton	5.6	4.8	7.0	9.8
Jute	5.3	6.2	6.5	7.9

This fact is brought out more clearly by the index numbers of agricultural production presented in Table 13.4.

Table 13.4: Index Numbers of Agricultural Production

(Base : 1981-82 = 100)

Year	Index No.
1960-61	66.8
1970-71	85.9
1980-81	104.1
1990-91	148.4

Increase in agricultural production can be attributed either (i) to increase in area under cultivation (i.e. horizontal expansion) or (ii) to an improvement in yield per hectare (i.e. vertical expansion) or (iii) to both an increase in area under cultivation and an improvement in yield per hectare. During this phase of transformation, significant contribution to improved agricultural output was achieved by way of improvement in agricultural productivity with little change in area under cultivation. Index number of area under cultivation changed marginally from 96.3 in 1970-71 to 105.2 in 1990-91. On the other hand, the index number of agricultural production increased from 85.9 in 1970-71 to 148.4 in 1990-91 (Base: 1981-82 = 100).

This phase of agriculture transformation came to be known as the period of **Green Revolution**. The green revolution was, however, confined to a few crops- wheat and rice, and to few regions. The shortcomings of this revolution are discussed separately in the next unit (unit 14: section 14.4).

13.3.3 Phase III: Technologically Dynamic Agriculture With High Capital Intensity

As phase II advances, more and more innovations giving small returns singly, but large returns jointly, would be accepted leading to higher productivity. In order to expedite progress, there should be an extensive utilisation of available abundant factors. At the same time, relatively scarce infrastructural facilities like research, extension, marketing, etc. should be utilised optimally with efforts directed towards expanding the infrastructural resources.

Indian agriculture entered the third phase of technologically dynamic agriculture with high capital intensity towards the end of the decade of 1980s. This was precisely the period when the non-agricultural sectors also began their march towards modernisation. Non-agricultural sectors were facilitated in their move towards aggressive modernisation by the new policies of liberalisation, privatisation and globalisation. You will be studying more about this in units 21 and 23 separately.

This phase of agricultural transformation is thus characterised by the substitution of labour by capital by way of large-scale farm machinery, and considerable competition between the sectors for capital.

Before we review the performance of the agricultural sector in this phase of modernisation we first identify the factors that brought about this transformation to modernisation.

13.3.4 Factors Essential for Modernisation

The various factors that can be identified as essential for modernisation of agriculture can be classified into following five groups.

I. Physical Input Factors

(1) Non-human physical inputs: (a) land, (b) climate, (c) seeds, (d) water, (e) fertilises, (f) pesticides, (g) institutional arrangements, (h) work animals, (i) other animals, (j) tools and machinery, (k) fuel and power other than animal power.

(2) Human resources: Manual labour and skilled labour

II. Economic Factors

(1) Transport, storage, processing, and marketing facilities.

(2) Facilities for the supply and distribution of inputs, including credit.

(3) Input Prices including interest rates.

(4) Product prices including prices of consumer goods.

(5) Taxes, subsidies and quotas.

III. Organisational Factors

(1) Land tenure

(2) Farm size

(3) General government services and policies

(4) Voluntary and statutory farmers' organisation for:

(a) Co-ordinating physical input use like irrigation, tractors, etc.;

(b) Economic services like purchase, sale, credit, etc.;

(c) Social services like education and health;

(d) Diffusion of knowledge like adult education, youth clubs etc. and;

(e) Local government.

IV. Cultural and Motivational Factors

(1) Integration of agricultural institutions (like practices and values) within the culture and social system of the nation;

(2) Public administration factors like structure and mode of operation of the bureaucracy;

(3) Social structure like cultural values and dynamics of peasant communities;

(4) Processes of socio-cultural changes like barriers and motivations in the innovative practices, functional harmony, etc.

V. Knowledge Factors

(1) Organisations of research

(2) Diffusion of knowledge relating to

(a) technical knowledge like agronomy, plant genetics, soil science, water management, agricultural engineering, pest control, etc.;

(b) economic knowledge like land economics, general economics, farm management;

(c) knowledge of policies in planning and public administration;

(d) general educational initiatives like literacy promotion, adult education, mass communication, etc.

It would be observed from the above classification that modernisation of agriculture results from a whole galaxy of factors, that include economic, organisational, cultural, motivational and knowledge factors. While all these factors cannot be provided in one go, they trickle in slowly over a long time before they get established and stabilised.

There is thus no single point of time which can be identified as the point of transformation. Emergence of these factors is the culmination of efforts initiated both by the state and the market forces.

Check Your Progress 2

1. Broadly, outline the three phases of agricultural transformation in India.

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2 Outline the performance of agriculture during the traditional phase in India in about 50 words.

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3. Outline the salient features of Indian agriculture during the phase of early modernisation in about 50 words.

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4. Mention in brief the different factors essential for modernisation of agriculture.

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13.3.5 Performance During the Modernisation Phase

The phase of modernisation of agriculture, in terms of performance, can be divided into two sub-periods: (i) 1985-86 to 2000-01, and (ii) 2001-02 onwards.

(i) Sub-period 1985-86 to 2000-01: This phase of modernisation witnessed a jump in agricultural production. The index number of agricultural production jumped up to 165.7 in 2000-01 from 104.1 in 1980-81. There was not much change in area under cultivation; the index number of area under cultivation moved up from 99.7 in 1980-81 to a mere 102.7 in 2000-01. It thus follows that the improvement in agricultural output could be attributed solely to increases in yield per hectare. The index number of yield per hectare moved up from 102.9 in 1980-01 to 144.3 in 2000-01.

This phase of modernisation was different from the earlier phases because the sources of agricultural growth and growth processes were considerably different which may be identified as follows:

One, from a food grain led growth of the earlier period, to horticultural products, livestock products and fishery.

Two, food grain growth in the past was largely driven by technology, incentives by the government in terms of support/procurement prices and heavy investments in public sector as in canal irrigation and power supplies. But in this phase the growth was *demand and market driven*.

Three, incentives in terms of trade, and private sector investments in minor irrigation and agricultural machinery have acted as *new drivers of growth*.

(ii) **Sub-period 2001-02 onwards:** Despite favourable terms of trade for agriculture and normal south-west monsoon, growth of agricultural production has been sluggish during this phase. It fluctuated wildly as would be seen from Table 13.5 below.

Table 13.5: Index Numbers of Agricultural Production

Year	Index No.
2001-02	178.8
2002-03	150.4
2003-04	183.0
2004-05	177.3
2005-06	191.6
2006-07	197.1

The sluggishness and volatility in growth may not have big impact on overall growth of the economy. But as the agriculture sector supports more than half of the population, it implies rising skewness of income.

Factors Responsible for Sluggishness

The sluggishness and volatility in agricultural output in the post 2001 years can be attributed to the following factors:

1. Decline in public investment in agriculture, which slowed the expansion of irrigation.

2. Low public investment in R&D (0.5 percent of agricultural GDP as against the norm of 1 percent recommended by the ICAR), affecting technological progress.

3. Decline in the annual growth rate of area under high yielding variety (HYV) crops;

4. Fall in soil fertility due to intensive cultivation and wheat-rice rotation year after year in the north-western region.

5. Over-exploitation of groundwater due to unregulated expansion of tube-wells.

All these factors make it imperative that closer attention is paid to the long-term problems.

Check Your Progress 3

1. How was the growth in agriculture during the early phase of modernisation different from its earlier phase (i.e. traditional agriculture).

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2. Make an assessment of agricultural growth during the recent phase of modernisation i.e. during post-2001 years in about 50 words.

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3. Account for the sluggish growth in agriculture in recent (i.e. post-2001) years in about 50 words.

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13.4 LONG-TERM PROBLEMS OF AGRICULTURE

The current phase of modernisation has thrown up some challenges which cannot be ignored any more. Unless these are squarely faced and comprehensive solutions worked out, the growth of the economy may be up against insurmountable barriers. The more important of these challenges are as follows:

1. **Problems Relating to Rain-fed Crops:** In respect of rain-fed crops such as course grains - poor man's food - specially pulses, constraints on raising production are well-known. These are:

   i) An effective set of fully-developed technologies and extension methodology requires to be devised.

   ii) High degree of uncertainty together with the relative poverty of the farmers make the application of even known improved practices difficult and risky.

   iii) The rural poor, particularly in the drought-prone areas and in remote areas of the country, continue to suffer from fluctuations in employment and income and inadequate availability of food grains in years of drought.

2. **Problems Relating to the Use of Farm Inputs:** No less crucial to sustaining high growth rates in agriculture is the role played by farm inputs. Problems in this respect are the following:

(i) In regard to irrigation, though the area has shown a good improvement, the flow of benefit has not been commensurate. This is reflected both in the low intensity of cropping and in the under utilisation of the potential created. The efficiency in the use of irrigation facilities also leaves much to be desired. In view of this, the productivity of irrigated land in the country is less than 50 percent of the potential.

(ii) We have not been able to reach the targeted levels in the consumption of fertilisers. Even more important than the quantity consumed is the efficiency in the use of fertilisers. This has not been the case in the recent past, although there is a growing awareness of the problem. Besides this, the pattern of fertiliser consumption in the country is very highly skewed. In certain regions, a few crops and the rabi season account for the bulk of the fertiliser use.

Recent plans have stressed the need for equitable and efficient distribution system, reduction in regional disparities and correction of the crop-wise imbalance that now exists in regard to various inputs.

3. **Problems of Small Farmers:** Over 80 million of 90 million operational farm holdings in the country are below 2 hectares in size. About 60-70 percent of GDP from agriculture comes from subsistence agriculture. Unless small farmers are helped to improve their productivity and profitability through optimum use of their land, water, credit and other resources, it will not be possible to achieve our goal in food production for a population of billion-plus.

4. **Decline in Productivity of Input:** A major concern has been the decline in the productivity of modern inputs. Various explanations have been given for declining productivity of inputs. These are:

   i) The new technology was initially adopted in areas with assured irrigation. The extension of new technology into more difficult terrains is bound to be more costly and capital intensive.

   ii) Of late, there is evidence to suggest that new agricultural technologies are also spreading in the rain-fed areas. The investment cost are substantially higher in the case of rain-fed areas than in the areas with assured irrigation.

   iii) The fall in productivity could also have taken place because of the inefficiency in the use of inputs.

5. **Rising Cost of Production in Agriculture:** Over the last two decades, the prices received by the farmers have lagged behind the input prices, especially with regard to the prices of industrial inputs. The prices of important agricultural crops are reviewed every year by the government to keep them in line with costs of production and input prices. But often, what the farmers receive in effect is a weighted sum of the prices offered by the government and those prevailing in the free market. In

this situation, the deteriorating terms of trade for farmers would mean either the inability of the government to compensate them adequately for the increases in cost of production and/or inadequate impact of the government measures on the free market prices.

6. **Weakening of Linkages Between Agriculture and Industry:** Although the inter-dependence of the agricultural and the industrial sectors has increased over the years, the strength of linkage between the agricultural and the manufacturing sectors has weakened. It must be realised that with the majority of the population still depending on agriculture, and with a high rural bias in the culture of population, weakening of this linkage is a serious matter of concern. One should recognise that it is not just the neglect of the agricultural sector, but also the declining strength of the linkages between the agriculture and the industry that could be quite disastrous for the development process.

7. **Highly Regulated Sector:** Equally critical is the fact that agriculture is highly regulated that imposes restrictions on movement of agricultural products. Among these, the more important can be identified as: (i) compulsory levies (e.g. sugarcane, cotton); (ii) licensing requirements (e.g. exports of agricultural products), and (iii) internal trade restrictions (i.e. inter-state restrictions).

To sum up, although during the last six decades impressive gains have been made in agricultural production in some parts of the country, much still remains to be done to establish a balanced progress.

Check Your Progress 4

1. State in brief the problems relating to rain-fed crops in India.

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2. Make a brief assessment of use of inputs in farm sector in India.

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3. Account for the declining productivity of inputs in Indian agriculture.

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13.5 LET US SUM UP

Agriculture is the major source of livelihood in the Indian economy, notwithstanding a significant diversification and structural change that has been witnessed over the last six decades. Along with other sectors of the economy, the agricultural sector has been undergoing remarkable transformation. We have slowly and gradually, moved from a system of traditional agriculture of the 1950s to the modern technologically dynamic high capital intensive agriculture, in which along with food and non-food crops, horticulture and other allied activities have also expanded. However, rapid transformation of agriculture is faced with the challenge of meeting the food and non-food needs of a billion plus population. The challenge is daunting calling for out-of-box solutions to different problems which the sector is currently facing. In the past i.e. mid 1960s and afterward, we found a viable solution in HYV-fertiliser-water technology which ushered in Green Revolution. We have to, however, move beyond the Green Revolution now. The subsequent unit 14 deals with this theme.

13.6 KEY WORDS

Productivity : Refers to output per hectare of land.

Traditional Agriculture : A system of agriculture in which primitive inputs and techniques of production are used; it is more dependent on natural factors.

Modern Agriculture : A system of agriculture in which scientifically-developed inputs and advanced techniques of production are used.

Borlaug Seed Fertiliser Technology : Refers to the technology that banked heavily on seed and fertiliser mixed application. So named after its discoverer Norman Borlaug.

Intensity of Cropping : $\frac{\text{Gross Cropped Area}}{\text{Net Sown Area}} \times 100$

Diversification of Agriculture : It implies a use of resources in a larger mix of diverse and complementary activities within agriculture.

Support Price : Minimum guaranteed price at which the government is to purchase any quantity offered to it for sale.

Procurement : Refers to purchase of crop by the government.

13.7 SOME USEFUL BOOKS

1. Dhingra, Ishwar C. (2008), The Indian Economy, Environment and Policy, Twenty-Third Edition, Sultan Chand, New Delhi.
2. Government of India, Economic Survey (Annual).
3. Hanumanta, Rao (2005), Agriculture, Food Security, Poverty and Unemployment, OUP, New Delhi.
4. Bhalla, G.S. (2007), Indian Agriculture Since Independence, National Book Trust, New Delhi.
5. Basu, Kaushik (ed.), (2007), The Oxford Companion to Economics in India, OUP, New Delhi.

13.8 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See Section 13.1
2. See Section 13.2
3. See Section 13.2

Check Your Progress 2

1. See Section 13.3
2. See Section 13.3.1
3. See Section 13.3.2
4. See Section 13.3.4

Check Your Progress 3

1. See Section 13.3.5
2. See Section 13.3.5
3. See Section 13.3.5

Check Your Progress 4

1. See Section 13.4
2. See Section 13.4
3. See Section 13.4

UNIT 14 IMPACT OF GREEN REVOLUTION

Structure

14.0 Objectives

14.1 Introduction

14.2 Growth Strategy in Agriculture

- 14.2.1 Background
- 14.2.2 Earlier Growth Strategy
- 14.2.3 Components of the Earlier Strategy

14.3 New Agricultural Strategy

- 14.3.1 Theoretical Background
- 14.3.2 Evolution of New Strategy
- 14.3.3 Components of the New Strategy

14.4 Green Revolution

- 14.4.1 Meaning and Significance of Green Revolution
- 14.4.2 Economic Effects of Green Revolution
- 14.4.3 Sociological Impact of Green Revolution

14.5 Suggested New Strategy

- 14.5.1 Soil Health Enhancement
- 14.5.2 Irrigation Water Supply Augmentation and Management
- 14.5.3 Credit and Insurance
- 14.5.4 Technology
- 14.5.5 Market
- 14.5.6 Regionally Differentiated Strategy

14.6 Let Us Sum Up

14.7 Key Words

14.8 Some Useful Books

14.9 Answers or Hints to Check Your Progress Exercises

14.0 OBJECTIVES

After you have studied this unit, you will be able to:

- state the basic features of the strategy of growth in agriculture implemented in the earlier phase of planning;
- explain the phenomenon of Green Revolution and the impact it had on the rural economy;

- make a case on the need for a course-correction;
- explain the need for a change in the present strategy of agricultural growth;
- identify how a new strategy required should be different from the earlier strategy; and
- make an assessment of the new strategy.

14.1 INTRODUCTION

India had for long practised traditional system of growth. One of the results of this was the experience of slow growth in the economy. With the adoption of economic planning the growth rates in the economy accelerated. The resultant increase in incomes, accompanied by swift demographic changes coupled with growing demand from the industrial sector for raw materials of agricultural origin, brought out the significance of agricultural output as an important determinant of long-term sustained growth. The traditional agriculture, and the strategy of growth embedded therein, were not equipped to meet the pressures on the agricultural sector in the fast-emerging economy. A serious debate over the issue led to a reappraisal of the earlier strategy pursued. This suggested a new agricultural strategy which was formulated and implemented after the mid-1960s. The results, in terms of output growth, were immediate and phenomenal. The phenomenon came to be known as The Green Revolution. The Green Revolution seemed to have solved, at least for some years to come, the problem of food security. But the Green Revolution brought in its train a whole plethora of inequalities - personal, crop and regional. Immediate solutions had to be sought to these and others. We address ourselves to a study of Green Revolution and its associated issues in the present unit.

14.2 GROWTH STRATEGY IN AGRICULTURE

Accelerated growth in agricultural production has been one of the principal aims of the Government from the beginning of the First Five Year Plan. As a matter of fact, as early as in 1948 it was reiterated by the government that 'everything else can wait but not agriculture.' In this backdrop, it would be interesting to review the changing contours of growth strategy adopted in Indian agriculture.

14.2.1 Background

During the First and the Second Five Year Plans, the production of agricultural crops persistently maintained an upward trend, except for small dips during 1957-58 and again in 1959-60. Subsequently, the eight years between the Third and the Fourth Five Year Plans (i.e. 1961-69)

were the years of great significance for Indian agriculture. This is particularly true of the latter half of the period. This period was marked by a near disaster on the one hand, and much achievements on the other. On the one hand, agriculture stagnated; food grains production and the production of other crops were not picking up even in the face of rising population and an increasing domestic demand for agriculture based raw materials. Simultaneously, however, forces were under way which were making the conditions favourable for the growth of agriculture in future. The farmer responded favourably to a combination of good prices, high-yielding variety (HYV) seeds and adequate fertilisers. He took to improved farm practices as readily as to non-traditional farm inputs. Groundwater was put to intensive use. Institutional credit was sought to be expanded. In view of the urgency of the need, it was decided to direct state effort in the first instance to those areas which were best endowed for food production.

This was the basis of what has come to be known as the new strategy of agricultural development.

14.2.2 Earlier Growth Strategy

The strategy of agricultural growth adopted since the middle of the 1960s, came to be known as the 'new strategy'. What made the strategy 'new'? The strategy is called 'new' because it marked a departure from the past.

During the first three five year plans, India's approach to agricultural development was characterised by a commitment to two main goals viz. (i) the economic aim of achieving maximum increases in agricultural output to support rapid industrialisation, and (ii) the social objective of reducing disparities in rural life.

A serious dilemma arose from the obvious advantage of concentrating scarce inputs of improved seeds, fertilisers, pesticides, and equipment in irrigated areas of the country where they could be expected to bring the greatest returns in output. Indeed the selection of the first Community Development Project was guided by this consideration. They were allocated only to the districts with assured water from rainfall or irrigation facilities.

Almost immediately, however, a serious social objection was raised to the practice of 'picking out the best and most favourable spots' for intensive development while the larger part of the rural area was economically backward. Within a year, the principle of selective and intensive development was abandoned. The Planning Commission announced a programme for rapid all-India coverage under the National Extension Service (NES) and Community Development Programme (CDP) with special attention to backward and less-favoured regions.

The social goal of reducing disparities also influenced the selection of

methods of agricultural development. The planners were inclined to give only secondary importance to the introduction of costly inputs as a means of increasing agricultural production. Instead, they devised agricultural development programmes based on 'intensive cultivation of land by hand', i.e. non-mechanisation methods of production like improving the condition of living in rural areas through community projects, land reforms, consolidation of holdings, etc.

14.2.3 Components of The Earlier Strategy

The basic elements of the growth strategy adopted in the earlier phase of agricultural development are as follows:

1. **Extensive Cultivation:** A major plan of the government policy was to bring more land under cultivation. It was hoped that this will help in increasing agricultural production. The objective was sought to be realised by reclaiming fallow and water-logged lands and making the non-cultivable land suitable for cultivation. The efforts bore fruit as would be seen from the fact that the index number of area under cultivation went up from 100 in 1950-51 to 122.8 in 1966-67. But the country was faced with a dead-end, i.e. there was no more area of land available for reclamation. The futility of depending on this policy measure in the long run was soon realised. It began to be appreciated that agricultural development policies will have to emphasise the adoption of 'intensive cultivation' practices which became a major component of the new strategy.

2. **Institutional Reforms:** It is universally accepted that agriculture responds to two sets of measures, viz. (a) institutional reforms, and (b) technological reforms. Institutional reforms refer to such measures as are designed to change the land relations system and the size of land holdings. It also incorporates infrastructural facilities like finance and marketing. Technological reforms, on the other hand, are concerned with improvements in agricultural practices and techniques. In the earlier period of development, the state relied almost exclusively on institutional reforms, to a near total neglect of the technological reforms. The state had come to adopt the basic principle of '*land to the tiller*' as the hallmark of its land reforms policy. In pursuance of this policy, a land reforms programme of such policy measures as abolition of all intermediaries' interest on land, grant of protection to tenants, etc. were taken. How far these measures were successful would be examined in Unit-15 below. Similarly, legislation enacted to fix a ceiling on land holdings and consolidation of holdings designed to change the ownership pattern of land were also not of much use. Rural finance was sought to be provided through the agency of co-operatives. At a later stage of the programme, even marketing was assigned to the co-operatives. But the institutional reforms of all these types were slow to come in. Steps related to technological reforms did not find a place in the 'earlier growth strategy'.

3. **Increased Availability of Traditional Inputs:** A third major component of the government policy related to the availability of inputs. The traditional inputs of agriculture - seeds, manure and water, received much attention. Arrangements were made to make available seeds to the farmer at his doorstep through various agencies, especially the co-operatives. Similarly, a number of irrigation schemes - both major and minor - were initiated during the First and Second Five Year Plans, so as to raise the irrigation potential. Efforts were also made to spread the use of underground water sources like wells. The nucleus of the government policy in this sphere again were the institutional reforms to arrange for the supply of these inputs. No attention was paid towards evolving better seeds or more superior production inputs. It was only in the later years that these aspects began to get the attention that was due to them.

4. **Community Development Programme and Extension Services:** The community development (CD) programme was seen as the most significant device for the development and welfare of rural India. By community development is meant the upliftment of the rural community with the combined efforts of the government and the people using the resources of the community as a whole. For carrying out the national programme of community development, the country was divided into 6,265 development blocks. Each of these blocks was expected to be supplied with the basic infrastructure required for agricultural growth. However, as the experience later was to prove, the CD programme turned out to be very ambitious in terms of its content and coverage. It was realised that it would have been better had small blocks with the best growth potential been selected and helped with the required infrastructural facilities before a national programme was implemented.

In short, the agricultural development policy of the government during the first decade of its implementation was centred around institutional reforms in the rural sector. Co-operatives and community development blocks were visualised as a major means of change. The programme conceived on a national scale, was in consonance with the declared objective of 'growth with social justice'.

Check Your Progress 1

1. What were the two major goals of agricultural development policy in India during the first two five year plans?

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2. Mention in brief the steps taken to achieve the stated goals of development in agriculture.

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3. Distinguish between extensive cultivation and intensive cultivation.

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4. Distinguish between institutional reforms and technological reforms in agriculture.

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5. Which type of reforms in the agricultural sector were given priority during the first two five year plans?

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14.3 NEW AGRICULTURAL STRATEGY

The government's agricultural development policy, and the programmes based thereon, were in consonance with the declared objectives of 'growth with social justice'. But, as it turned out, the results were not encouraging especially when measured in terms of agricultural production.

As early as in 1958, lagging growth rates in the agricultural sector became a serious limiting factor on the overall rate of economic advance. By the middle of the Third Five Year Plan, four years of relative static production levels convinced the government that continuation of short-falls in agriculture would jeopardise the entire programme of industrial development in the country.

In 1964, the government announced a fresh set of plans for implementation in the field of agriculture. In this, two major departures made from the earlier policy were in respect of the following:

(a) Development efforts were concentrated in the 20 to 25 percent of the cultivated area where supply of assured water provided 'fair prospects of achieving rapid increases in production'. In other words, to recall Tholepin's famous expression, a conscious decision was taken 'to bet on the strong'.

(b) Within these areas, there was a 'systematic effort to extend the application of science and technology' including 'adoption of better implements and scientific methods' to raise yields. These two departures in the new approach became the basis of what came to be known as the *new strategy of agricultural development*, put into practice in October 1965.

14.3.1 Theoretical Background

The theoretical background of the new strategy are to be traced to the Chicago School Thesis which stated that 'farmers are everywhere capable of producing the right things in the right amounts at low costs if they receive the proper economic signals.' The crux of this thesis is that *farmers are efficient and economically rational*. They are profit maximisers, can allocate resources efficiently and respond to market signals appropriately.

A lucid explanation of this thesis, in the context of traditional agriculture, was provided by the Chicago economist, T.W. Schultz in a seminal book published in 1964. Citing various pieces of empirical evidence, Schultz argued that farmers in traditional agriculture allocate available resources, in such a way that factor rewards equal their marginal products. The fact that they do so shows that they can respond to market signals, despite the fact that they are poor. Their poverty, therefore, is to be attributed to the nature of inputs and techniques of production they adopt. As these are inputs and techniques of cultivation that have been in use for many years, their rates of return to investment tend to be meagre. Given the low rates of return, there is no inducement for additional work effort and savings. It is thus that traditional agriculture has reached a stage of long-run low-equilibrium level.

14.3.2 Evolution of New Strategy

The implementation of the new strategy began with the Intensive Agriculture District Programme (IADP) launched in 1960-61. Initially launched in three districts, the IADP was subsequently extended in stages to another thirteen districts. While the performance varied among districts, it clearly demonstrated both the values of the 'package approach' and the advantage of 'concentrating efforts in specific areas'.

A modified version of the same approach was extended to several other parts of the country in the year 1964-65. Implemented in the form of Intensive Agriculture Area Programme (IAAP), the programme focused on some specific crops. While both the IADP and IAAP were concerned with the promotion of intensive agriculture, they operated within the limitations set by existing crop varieties which had relatively low response to fertilisers.

A major change in this direction was made with the introduction of the High Yield Variety (HYV) seeds. Hybridisation techniques for maize and millets had been initiated as early as in 1960. But a beginning of major importance was made in wheat in 1963-64 when the Mexican dwarf variety was tried out on a selective basis. Paddy seeds of exotic varieties were subsequently introduced in 1965. By 1967-68, nearly 6.04 million hectares were brought under the purview of the HYV programme. The application of various other HYV seeds, over fairly large areas, was later taken up as a full-fledged programme from 1967-68 onwards.

The year 1967-68 thus marked the beginning of the new agricultural strategy. Since then, agricultural production and productivity picked up fast and the country could get out of the whirlpool of stagnation in which it had got stuck for many years. The year 1967-68 is also therefore known as the *benchmark year* in the history of Indian agriculture.

14.3.3 Components of the New Strategy

Although it is proper to identify the new strategy with the HYV seeds, there are other components of the strategy which are also important. These can be identified as follows:

I. Greater Intensity of Farming

The new strategy is concerned not only with cropping. Entirely new crop relations have been made possible by the development of *chori* duration varieties of paddy, jower, maize and bajra suited to different agro-climatic conditions. Among other crops included in the rotation are barley, oilseeds, potato and vegetables. Besides, the other factors contributing to the cropping intensity are: programmes like major irrigation projects, flood control, development of markets and rural infrastructure, urbanisation and rural industrialisation, pricing policies, etc.

II. Agricultural Technology

(i) A new emphasis has come to be attached to the role of agricultural technology as a major input of agricultural production. A number of steps have been taken to facilitate organisation and development of agricultural research through the state-funded National Agricultural Research System (NARS). Towards this end, the Indian Council of Agricultural Research (ICAR) was reorganised in 1965. To it were

transferred the research institutes which had been previously administered by the union Government. An important step was the establishment of agricultural universities which were conceived as extension of education. Another development of importance was the organisation of all-India co-ordinated research projects. All these constituted a significant advance towards the planning of agricultural research on a national basis.

(ii) *Monsoon Rainfall Predictions*: This has been another major technological breakthrough facilitated by recent advances in remote sensing techniques. The Indian Meteorological Department has managed to develop a fairly reliable monsoon prediction model based on 16 global weather-related parameters. Preliminary monsoon rainfall predictions made as early as in March-April by using this model have consistently been holding true for several years. An early monsoon forecast and advance knowledge of the likely pattern of rainfall makes crop planning possible and efficient. In case of an anticipated unsatisfactory rainfall, farmers can evolve contingency crop plans and make necessary arrangements for their implementation to minimise the damage. Technology is now available for mitigating the impact of such a situation.

III. Package of Inputs

The approach in the new agricultural technology, is the application of the package or a 'combination' of improved practices. In other words, instead of recommending to the farmers to adopt an improved practice in isolation, the strategy aims at making them adopt simultaneously all the elements needed for augmenting production. The constituents of package are: improved seeds, fertilisers, plant protection, manures, improved agricultural practices, etc. It is only when a standard combination of all components as recommended by agricultural scientists is applied that the yield can be maximum.

IV. Role of Public Institutions

In view of the importance assumed by inputs and services in the new agricultural strategy, several new public institutions were promoted and provided with funds to lend support to production programmes.

i) **The National Seeds Corporation** was set up in 1963 with sole responsibilities in the field of seed production, particularly the foundation stock of HYV seeds.

ii) **The State Farms Corporation of India** was set up in 1969 for developing quality seed and farm yields.

iii) Starting with 1965, **agro-industries corporations** have been set up in different states.

iv) The **National Co-operative Development Corporation** was set up on a statutory basis in 1963.

v) Also in 1963, the **Agricultural Refinance Corporation**, since redesignated as Agricultural Refinance and Development Corporation, which was subsequently merged with National Bank for Agriculture and Rural Development (NABARD), was set up.

vi) A policy of support prices for food-grains came to be adopted throughout the country in 1964. In 1965, the Agricultural Prices Commission (now known as the Commission on Agricultural Costs and Prices) was set up to advice the Government on policies of agricultural commodities.

vii) In 1965, the Food Corporation of India was also established to provide an all-India machinery for purchase of food-grains.

In brief, it can be observed from the above that the new agricultural strategy cannot be identified with one input or one institution as such. It touches the whole of the agricultural economy providing for a package of measures, services and practices. The adoption of the new agricultural technology has led to a breakthrough in agricultural production - a phenomenon that has come to be known as the Green Revolution.

Check Your Progress 2

1. State the two major departures in the 'new agricultural strategy' from what was followed in the 'earlier strategy of growth.'

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2. Which year is known as the benchmark year in the history of Indian agriculture and why?

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3. What do you mean by package of inputs? What are its important components?

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4. Name some of the important public institutions that were set up during the 1960s to promote agricultural growth.

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5. What was the major consequence of adoption of the new agricultural strategy?

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14.4 GREEN REVOLUTION

As stated earlier, the adoption of the new agricultural strategy led to a breakthrough in agricultural production - a phenomenon that has come to be known as the **Green Revolution**.

14.4.1 Meaning and Significance of Green Revolution

The word 'revolution' implies two things:

i) a fast change in some phenomenon, the change being so fast that it is well marked; and

ii) the impact of the change is felt over a fairly long period of time bringing about certain fundamental changes.

When we add the prefix 'Green' (the colour being symbolic of agriculture crops), to the word revolution and coin the phrase 'Green Revolution' it implies:

i) well-marked improvement in agricultural production in a short-period; and

ii) the sustenance of a higher level of agricultural production over a fairly long period of time.

It is this type of green revolution which occurred in India after the 1960s. The basic significance of the green revolution therefore lies in the fact that it brought out the farmer from the whirlpool of stagnation. In the process, the farmers responded in an active manner to many incentives and policies.

14.4.2 Economic Effects of Green Revolution

Two important effects of the green revolution are: (i) an increase in agricultural production, and (ii) an increase in productivity.

I. Increase in Agricultural Production

The first major direct effect of the green revolution was a sharp rise in agricultural production. The results of the implementation of new strategy, as measured by the production of agricultural crops, were immediate and spectacular, i.e. there was no more waiting involved and the returns were very fruitful (for a study of trends in agricultural production refer Unit-13).

Concentration on Wheat: In the second phase of Green Revolution, the revolution spread, at least in parts, to other crops. The production of wheat maintained its upward trend. In addition, production of other crops like rice, cotton, Jute and Sugarcane also registered a significant improvement.

However, this improvement was not shared equally by all the crops, at least not in the initial stages. The gains of the green revolution were largely cornered by wheat, and only to a very little extent by rice, both of which happen to be food crops.

II. Increase in Productivity

The increase in agricultural production was a result of the adoption of intensive agricultural practices. By implication, the productivity of agriculture, as measured in terms of yield per hectare, also increased during the period with no large-scale shift in the land-use pattern. This is held out by the data relating to the index number of agricultural productivity (refer to Unit-13 for more details).

14.4.3 Sociological Impact of Green Revolution

Important sociological impact of Green Revolution can be briefly stated as follows:

I. Personal Inequalities

The green revolution promoted inequalities, widening the already existing gulf between the rich and the poor in the rural sector. Different methods are generally applied to measure the extent of inequalities. We can make use of the following two important ways.

i) Under the impact of the new strategy, the landowners' income per unit of land increased between 50 and 100 percent and that of labour between 25 and 30 percent. Thus, while labourers and landowners both benefited from agricultural development, the latter cornered most of the benefits giving rise to disparity between the landowners and the labourers. The

relative share of labour in the value of the gross output therefore declined.

ii) The institutional framework of India's rural economy has always been such that it has always favoured the big i.e. those who matter by virtue of their command over land and other assets. As a result, the green revolution has, by and large, bypassed the small and marginal farmers. It has instead become the handmaid of the rich to become richer.

II. Regional Inequalities

Another harmful consequence of green revolution has been that it promoted regional inequalities. However, this could be expected as a natural consequence of the shift of strategy from "*something everywhere to 'everything somewhere*'".

The above point is confirmed by a comparison of the state-wise cumulative growth rates of agricultural output over the period. The point is sharply made if we compare the growth performance of the top and the bottom districts during this period i.e.. irrigated areas in the major river basin such as those of the Indus and the Ganges in the north, of Godavari and Kaveri in the south, and some assured rainfall areas at the foothills of the Himalayas along the northern plains. The Assam Valley, and the western coastal plains, all together covering about 14 percent of the districts recorded more than 5 percent per annum growth in their agricultural production over the triennium 1962-63/64-65 to 1970-71/ 72-73. At the other end there were 25 districts located mostly in the regions of the central plateau and around its fringes together covering 27 percent of the country's gross cropped area where the agricultural production declined over the same period at rates up to 3 percent per annum. In relation to these districts, the agricultural income of the top districts was thus growing at more than 8 percent per annum.

This mixed pattern of sharp agricultural growth and decline involving more than 40 percent of the country's gross cropped area in its orbit positively contributed to the widening of regional disparities.

The main reasons for the differentiated rates of growth have been the following:

i) Differences in the availability of water and irrigation facilities;

ii) Different levels of fertiliser use at the right time and in the right amount;

iii) Differential flow of information about the HYV seeds and other complementary inputs;

iv) Differences in the availability of new varieties of seeds, fertilisers and pesticides; and

v) Differences in the nature and attitude of farmers towards risks and uncertainties.

Check Your Progress 3

1. Explain briefly the meaning of the term 'green revolution'?

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2. Define and elaborate the term 'package of inputs'.

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3. What was the impact of green revolution on agricultural output in India?

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4. Did green revolution result in better distribution of income in India?

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5 How did green revolution contribute to widening of regional disparities in India?

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14.5 SUGGESTED NEW STRATEGY

We have reached a stage in development where we need what the noted agricultural scientist, M.S. Swaminathan calls an 'evergreen revolution', i.e. producing more in less land with less water.

Agri-business and agri-processing should be the main driver of this revolution with crop diversification as one of the main strategies. We can thus outline the main components of the strategy as follows:

14.5.1 Soil Health Enhancement

Agricultural universities, research institutes, krishi vigyan kendras, fertiliser companies, state departments of agriculture, and farmers' associations should aim to increase the productive potential of soil through concurrent attention to their physics, chemistry (macro - and micro-nutrients), and micro-biology. Dry farming areas need particular attention.

14.5.2 Irrigation Water Supply Augmentation and Management

Water is a public good and a social resource and not a private property. The privatisation of its distribution is fraught with dangers and could lead to water wars in local communities. Improving supply through rainwater harvesting and recharging of the aquifer should become mandatory. In addition, a nationally debated and accepted strategy for irrigating 10 million hectares of new area under Bharat Nirman Programme should be developed. All existing wells and ponds should be renovated. Demand management through improved irrigation practices, including sprinkler and drip irrigation, should receive priority attention.

A water literacy movement should be launched and regulations developed for sustainable use of ground water as well as for preventing pollution. Seawater farming should be promoted in coastal areas through the cultivation of mangroves, salicornia, casuarinas, and appropriate halophytic plants. The conjunctive use of rain, river, ground, sea, and treated sewage water should become the norm.

14.5.3 Credit and Insurance

Credit reform is the primary pathway to enhancing small farm productivity. The spread between the deposit and lending interest rates is high in India by international standards. The need is to improve efficiency in the financial delivery system by controlling both transaction and risk costs.

On the part of the Government, crop insurance as well as the speed and manner in which the debt recovery and settlement process operates would need to be considerably improved. Keeping in view the decline in profitability of agriculture, and the farmers' distress, the Government must consider providing support to the banking system for reducing the rate of interest for crop loans. There are areas in the country where recurrent and frequent drought and floods cripple the incomes of farmers. These farmers become defaulters to the banks and thereby become 'push-outs' of the formal credit system. Rescheduling and restructuring of

farmers' loans are not enough in the event of successive natural calamities. The Central and State governments must step in to create an Agriculture-Risk Fund to provide relief to the farmers in the case of successive droughts and in areas hit by floods and heavy pest infestation.

14.5.4 Technology

Agricultural 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. For this purpose, there is a need for a farming system orientation involving crop-livestock integrated production systems to both research and resource use. There should be a proper match between production and post-harvest technologies. A post-harvest technology wing should be added to every krishi vigyan kendra. Also, lab-to-land demonstrations should include post-harvest technology. Many of them should be organised in dry farming areas where millets, pulses, oilseeds and cotton are grown. Value addition to biomass will help generate skilled jobs in the non-farm sector. Rice occupies the largest area in the country and there are opportunities for generating more jobs and income by establishing rice bio-parks. Similarly, eco-boards can be produced from cotton stalks as a replacement for plywood made from timber.

Biotechnology (BT) and Information Technology (IT) should be demystified and a cadre of Rural Farm Science managers should be developed by training a couple of women and men members of every panchayat in the management of new technologies, such as the establishment of refugia in Bt cotton fields. A professionally led National Biotechnology Regulatory Authority should be established to assist the development.

14.5.5 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 a means to livelihood. Market reform should begin with production planning, so that every link in the cultivation-consumption-commerce chain receive adequate and timely attention.

14.5.6 Regionally Differentiated Strategy

With wide variations in agro-climatic and economic conditions across the country, there cannot be a single strategy of agricultural growth to be followed everywhere. At the macro level, the development strategy need to be differentiated by broad regional characteristics of agro economic situations as follows:

I. **North-Western High Productivity Region:** The strategy will be to promote diversification of agriculture and raising of high value crops and to strengthen strong linkages with the agro-processing industry and exports, besides creation of relevant infrastructure.

II. Eastern Region: Productivity in this region is very low despite abundant water availability and good soil. The strategy for this region should be to achieve the productivity potential of this region to bring the yield to the levels of high productivity states like Haryana and Punjab. The major thrust should be on flood control, drainage management, improvement of irrigation facilities-especially minor irrigation, input delivery systems supported by adequate credit and extension services.

III. ARD Zones of Peninsular India: The productivity in this region is low because of water scarcity. The emphasis should be on: (i) development of efficient water harvesting and conservation methods and technologies; (ii) suitable irrigation packages based on watershed approach; and (iii) promotion of an appropriate farming system which economises on water use and generates higher value from land.

IV. Ecologically Fragile Regions Including Himalaya and Desert Areas: The thrust should be on the development of agricultural systems which do not damage the fragile ecological balance in the region, but help in conserving and strengthening the sustainability of natural resources.

Check Your Progress 4

1. Make some suggestions for better water management in agriculture.

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2. What should be the role of credit and insurance in a strategy to promote agriculture?

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3. Outline the different measures of growth for different regions of the country.

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14.6 LET US SUM UP

After a good start during the first two five year plans, agricultural output began to stagnate. Consequently, it became imperative to adopt a new strategy of growth. The new strategy of growth emphasised the adoption of 'package of inputs' approach in those areas that have demonstrated a high potential of growth. The new agricultural technology, i.e. HYV seeds, fertilisers, water technology, etc. brought about a phenomenal increase in agricultural production. The phenomenon came to be known as the Green Revolution. The Green Revolution came to result in widening of personal and regional inequalities. Moreover, the effect of this green revolution itself has been weakening in recent decades. There is therefore a need to adopt a new strategy to provide a further push to agriculture. Such a strategy involves varied institutional and technological reforms.

14.7 KEY WORDS

Intensive Cultivation : An agricultural practice wherein more and improved inputs are employed on a given piece of land to raise more output.

Extensive Cultivation : An agricultural practice wherein additional areas of land are brought under cultivation to raise more output.

Institutional Reforms : Refers to such measures that are designed to improve agrarian relations and size of holdings.

Holding : A piece of land.

Technological Reforms : Refers to such measures that bring about improvements in agricultural techniques and practices.

Package of Inputs : An agricultural practice that requires all the recommended inputs to be simultaneously used in order to derive the optimum results.

Regional Inequalities : Refers to differences in the rate of growth between different regions of the country.

Personal Inequalities : Refers to differences in the levels of income between different individual households.

14.8 SOME USEFUL BOOKS

Dhingra, Ishwar C., 2008, *The Indian Economy: Environment and Policy*, Sultan Chand, New Delhi.

Basu, Kaushik (ed.), 2008, *The Oxford Companion to Economics in India*, Sultan Chand, New Delhi.

Bhalla, G.S., 2007, *Indian Agriculture Since Independence*, NBT, New Delhi.

14.9 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See Section 14.2.2
2. See Section 14.2.3
3. See Section 14.2.3
4. See Section 14.2.3
5. See Section 14.2.3

Check your Progress 2

1. See Section 14.3
2. See Section 14.3.2
3. See Section 14.3.2
4. See Section 14.3.2
5. See Section 14.3.2

Check Your Progress 3

1. See Section 14.4.1
2. See Section 14.4.2
3. See Section 14.4.3
4. See Section 14.4.2
5. See Section 14.4.3
6. See Section 14.4.3

Check Your Progress 4

1. See Section 14.5.2
2. See Section 14.5.3
3. See Section 14.5.6

UNIT 15 AGRICULTURE, PRODUCTIVITY AND FARMERS' WELFARE

Structure

15.0 Objectives

15.1 Introduction

15.2 Productivity in Indian Agriculture

15.3 Measures to Increase Agricultural Productivity

15.4 Issues Related to Agricultural Reforms

- 15.4.1 Size of Holdings and Land Reforms
- 15.4.2 Organic Farming
- 15.4.3 Contract Farming
- 15.4.4 Futures Trading
- 15.4.5 Subsidies in Agriculture
- 15.4.6 Crop Insurance
- 15.4.7 Trade in Agriculture

15.5 Let Us Sum Up

15.6 Key Words

15.7 Some Useful Books

15.8 Answers or Hints to Check Your Progress Exercises

15.0 OBJECTIVES

After reading this unit, you will be able to:

- make an assessment of the level of productivity in Indian agriculture;
- suggest how to improve the level of productivity in Indian agriculture;
- identify the different issues related to agricultural reforms;
- explain the significance and relevance of land reforms in the present stage of economic development in India;
- elaborate the concept of organic farming and contract farming;
- enumerate the issues relating to futures trading in agricultural products;
- examine the rationale for subsidies;

- appraise the state for agricultural insurance; and
- assess the advantages and disadvantages of globalisation.

15.1 INTRODUCTION

Notwithstanding a significant increase in agricultural output brought about by improvements in productivity (as reviewed in units 13 and 14 before), productivity levels in Indian agriculture continue to be relatively low as compared to the potential in terms of yield per hectare. In the present unit, we deal with the reasons behind low productivity in Indian agriculture and examine the different areas of reforms that would have a bearing on increasing productivity like size of holdings, land reforms, organic/ contract farming, futures trading, subsidies, crop insurance, trade, etc.

15.2 PRODUCTIVITY IN INDIAN AGRICULTURE

We have reviewed in the earlier units of the present block (units 13 and 14) the trends in agricultural production in India. One unmistakable conclusion that emerges is that the productivity of agriculture is relatively low in India compared to other countries. This situation continues to obtain, notwithstanding marked improvements that have taken place during the last few decades.

Quantitative Evidence

There are three simple ways of examining the trends in the productivity levels of Indian Agriculture.

One, an easy yardstick is to make use of data relating to yield per hectare of major crops. The relevant data are summarised in Table 15.1. The data brings out that the yield per hectare of principal crops in India is very low - as low as 1/2 to 1/5 - as compared to yield in some other countries. In absolute terms, lower yield per hectare implies lesser total output, sometimes even with higher land area under cultivation.

Table 15.1 : Yield Per hectare

(Kg/hectare)

Crop	Potential of Indian HYV	India's Yield (actual)	World's Largest Producer		World's Most Productive	
			Country	Yield	Country	Yield
Rice	4,000-5,810	3,191	China	5,807	Australia	8,813
Wheat	6,000-6,800	2,671	China	3,295	Ireland	7,556
Jowar	3,000-4,200	1,196	US	3,704	Italy	5,949
Maize	6,000-8,000	1,841	US	4,505	Holland	25,000

Source: CMIE

Two, agricultural productivity is much less than the potential, as can be seen from Table 15.1 itself. With so much sun light round, India can grow at least two crops in a year with low technology, and three to four crops with higher investment and better technology. The available evidence shows that crop production, given the available technology, is far below the optimum. There is still a lot of scope for increasing production by following multiple cropping and through proper use of improved agricultural technology. There is a wide gap between the average yields obtained under national demonstration projects and the existing crop yields obtained under identical conditions in various states. It suggests an under performance.

Three, quantitative evidence of low productivity can also be found by placing India's rank in world in respect of: (i) area, (ii) production, and (iii) yield of major crops, as shown in Table 15.2 below:

Table 15.2: Indian's Global Rank in Major Agricultural Crops

Crop	Rank		
	Area	Production	Yield
Rice (Paddy)	1	2	52
Wheat	1	2	38
Coarse Grains	3	4	125
Pulses	1	1	138
Oilseeds	2	5	147
Cotton	1	4	77
Jute	1	1	13
Tea	2	1	13
Coffee	7	7	14
Sugarcane	2	2	31

Source: *Indian Agricultural Statistics, 2007.*

The data in Table 15.2 are averages over a period as per recent data available. The data shows that there is a serious mismatch between India's rank in terms of area and production of a crop on the one hand and yield on the other. This is suggestive of low productivity in Indian agriculture. For example, India is the largest producer of pulses in the world, but it ranks miserably low at 138 in terms of yield. The same picture, more or less, obtains when we look at other crops.

That the productivity levels are low in agriculture can also be seen in terms of the following:

i) About 58 percent of the labour force in agriculture produce only 18 percent of the GDP.

ii) Net income per hectare in the northern zone is only Rs. 95, in the central zone Rs. 76 and in the southern zone Rs. 110.

iii) The proportion of costs to gross returns per hectare in the northern zone is 78.5%, in the central zone 82.5% and in the southern zone 75.3%.

Read another way, deficiency means opportunities. The low productivity undoubtedly speaks of the vast potential of growth that exists for India to explore in future, but at the same time it needs a proper diagnosis; something lies at the root that hinders the growth of agricultural productivity in India.

Causes of Low Productivity

The various causes that are responsible for low productivity in agriculture can be grouped as follows:

I Demographic Factors

With demographic growth rates being what they are, an increasing addition to the labour force could be expected to be absorbed in the industrial sector of the economy. But the rate of growth in the industrial sector has been far from adequate. Consequently, the increasing population has fallen back on land for its livelihood, with the result that the mounting pressure has bred a number of evils like: (i) fragmentation and subdivision of holdings; (ii) supply of improved practices and services always falling short of requirements, (iii) conditions of unemployment and disguised unemployment, etc.

II Technological Factors

Under this, the following may be counted:

i) Inadequate availability and high costs of modern inputs.

ii) The irrigated component of total cropped area and the progress achieved in intensive cultivation of land are still at very modest levels.

iii) Slower diffusion of agricultural technology to the farmers, especially marginal and small farmers.

iv) Inadequate and poor post-harvest technology.

v) Pollution has stifled growth in the country's rice harvest, depriving the staple crop of the rain and cool night-time temperatures that it needs to flourish.

vi) Reduced research in Agriculture, for identification of HYVs in different crop.

III Institutional Factors

Among the more important causes responsible for low productivity in agriculture are the institutional and structural arrangements that exist in India. One needs to be reminded here that East Asia's success stems partly from the policies adopted and partly from the institutional mechanisms created to implement them.

Some of the institutional and structural weaknesses from which Indian agriculture suffers can be identified as follows:

i) In the immediate post-independence period, the zamindari system was abolished. The new system that has taken its place has proved no better. Absentee landlordism still prevails; large rents are still extracted; there is no security of tenure, etc. These are all manifestations of semi-feudal production relations.

ii) Agrarian structure is not supported by any sound infrastructure.

iii) There has been inadequacy of agricultural support programmes.

iv) Agricultural sector is devoid of entrepreneurship capabilities.

v) Deficiency of investment in this sector is another problem. The rate of capital formation in this sector has been declining.

vi) Decline in Public investment in agricultural infrastructure is also very significant in the recent years.

IV Weaknesses in Policy Perceptions

Owing to a number of economic and political compulsions, the Indian strategy for agricultural growth remained preoccupied with the goal of achieving quick increases in food-grains production by concentrating the resources and efforts on the relatively better-endowed areas and strata of cultivators. A consequence of the approach has been the less-than-optimum allocation of the critically scarce inputs like water and fertilisers across crops and group of farmers.

Check Your Progress 1

1. Advance arguments to prove that the productivity levels in Indian agriculture are relatively how.

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2. Briefly account for low levels of productivity in Indian agriculture.

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3. Identify the important institutional weaknesses in the agricultural sector of India.

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15.3 MEASURES TO INCREASE AGRICULTURAL PRODUCTIVITY

What are the various measures that can be taken to improve the agricultural productivity in India? In this section we will discuss the various issues arising out of such measures.

I Institutional Reforms

Institutional arrangements cover such measures as better agrarian relations introduced through land reforms, proper arrangements for adequate financing, and regulating the distribution of agricultural products, etc. While policies for strengthening the institutional structure for development of agriculture have been adopted and are in place, the key to their success lies in effective implementation - an aspect on which more concerted attention, than hitherto, needs to be given.

Another aspect of institutional reform is the need to improve the efficiency of delivery systems in rural development by empowering the institutions elected by the people. This would require devolution of functions, transfer of necessary resources and empowering the functionaries in discharging their administrative responsibilities.

II Technological Improvements

Technological improvements in agriculture can be classified into two broad kinds: biological and mechanical.

a) **Biological innovations** usually refer to factors that raise land productivity and are, therefore, generally land-saving. Better seeds and use of fertilisers in right doses at right time are useful instances.

b) **Mechanical innovations** usually mean the use of more machinery

like tractors that are labour-saving. In order to expedite these improvements, policies need to be so framed as to encourage and promote their adoption by designing suitable policies.

III Improving the Returns to Farmers

For this purpose both (a) price measures, and (b) non-price measures need to be adopted.

a) **Price measures** would include:

   i) Raising procurement and support prices so as to improve the terms of trade of agriculture.

   ii) In regard to the dry land and hilly areas, where only one crop can be grown - usually millets – the prices should be so fixed that the market forces would increase their demand generating more income for the growers.

b) The non-price methods include:

   i) Stabilising the returns from agriculture, especially in rain fed areas, by an effective crop insurance scheme;

   ii) Reducing the number of farmers per unit of output by promoting non-farm economic activities;

   iii) Providing the farmers direct access to market so that they can claim a share of the traders' profit;

   iv) Reducing costs by the implementation of less expensive technologies especially in rain fed agriculture;

   v) Promoting industry-agriculture linkages through contract farming;

   vi) Pooling land creating larger farms rendering benefit by economies of scale; likewise, pooling of capital making it possible to invest in items of advanced technology;

   vii) Lifting controls on free movement, stock limits, futures trading etc.; and

   viii) Improving farm productivity by an approach where agri-business is operated like an industry. In this, industry itself has to take initiative and arrange for the delivery of necessary inputs.

IV Producer Incentives for Stimulating Growth

The case for producer incentives for stimulating agricultural growth and adoption of new technology has been well argued in the literature on agricultural development. Such incentives as price supports, input subsidies, subsidised institutional credit, food subsidies, etc. are suggested for both stimulating growth and achieving certain welfare objectives like regional and social equity.

In short, **agricultural productivity is a function of a large number of determinants**. An effective policy requires a holistic approach in which the various factors outlined above are integrated with a view to achieve the desired objective.

In the subsequent section we will focus on a few important issues relating to agricultural reforms.

15.4 ISSUES RELATED TO AGRICULTURAL REFORMS

A few issues identified in current debate relating to agricultural reforms are: (i) size of holdings and land reforms, (ii) organic and contract farming, (iii) futures trading in agricultural commodities, (iv) subsidies in agriculture, (v) crop insurance, and (vi) trade in agriculture.

15.4.1 Size of Holding and Land Reforms

Size of holding has significant bearing on agricultural productivity. Although small holdings (holdings of less than 2 hectares) have certain advantages, the principles of economies of scale tend to make the large holdings more advantageous. Specifically, the arguments made in favour of the large holdings are the following.

- Large farms can make use of mechanisation in a big way. Undoubtedly, small farms can also make use of machinery, but the per acre capital cost would be prohibitive for small farmers to afford the same.

- Large farmers can afford more initial capital and better access to the credit market. This applies as much to the market inputs as for the non-market ones.

- Small farms are constrained by the fact that their risk-bearing ability is limited preventing them from adopting innovations.

- Large farms can increase the intensity of cultivation of their land by applying those inputs which matter most under the new technology like fertilisers, insecticides, hired labour and machinery.

The above factors influence the cost of production per unit of output in favour of larger farms defined as holding larger than 2 hectares. Farmers in the 4-6 hectare size category who have used the new varieties of fertilisers, seeds, etc. have been found to be the most efficient in terms of cost of production. This is seen even in cases where least farm equipment with animal ploughing methods are adopted. However, where alongside these inputs, better farm equipments have also been adopted, larger size farms have required lower cost of production.

The argument made above in favour of large farms does not mean that the small farm thesis has not received the attention of researchers and

policy planners. In fact, a series of studies, based on farm management surveys have claimed that there is an inverse relationship between the farm size and yield. Recognised as the **small farm hypothesis**, these studies have supported the contention that 'larger the farm size, smaller is the quantity produced per unit of land'. The reasons attributed to this contention have included: (i) greater reliance on highly motivated family labour; (ii) practice of multi-cropping in smaller farms giving the benefit of cropping intensity as opposed to extensive cultivation with the negative effects of non-organic farming (e.g. less nutrients in the agricultural produce, weed infestation due to more 'empty niche space', etc.) in case of large farms; (iii) practice of inter-cropping using the empty niche space; (iv) better management due to lower employment of non-family or hired labour; etc. Thus, in a country like India where the majority of farmers are small and marginal farmers, the need is to adopt suitable land reform measures to protect the interest of this large segment. What has been the experience in this direction and what corrections are further needed therein to meet the specific requirement of our agrarian economy is the subject matter of our next sub-section viz. the land reforms.

Land Reforms

Indian farming is dominated by marginal (i.e. holdings of less than 1 hectare) and small (i.e. holding size between 1 hectare and 2 hectares) holdings. They constitute more than 60 percent of the total number of holdings in the country. They, however, cover only about 36 percent of the gross land area under cultivation. The farming system is further afflicted by evils like fragmentation and sub-division of holdings.

In view of this, land reforms programme has remained one of the major policies for rural development ever since the inception of the planning process in India. The major objectives of land reforms in India have been:

1. Restructuring of agrarian relations to achieve egalitarian social structure.

2. Elimination of exploitation in land relations.

3. Actualisation of the goal of 'land to the tiller'.

4. Improvement of socio-economic conditions of the rural poor by widening their land base.

5. Increasing agricultural production and productivity.

6. Facilitating land base development of the rural poor.

7. Infusion of a greater measure of inequality in local institutions.

For the fulfilment of these objectives, the major steps adopted under the land reforms programme are:

1. Abolition of intermediaries.

2. Regulation of landlord-tenant relationship by fixing fair rents, conferring security of tenure on tenants subject to the landlord's right to resume limited area for personal cultivation, bringing tenants into direct relationship with the state in respect of areas which the landlord is not entitled to possess and gradual conferment of ownership rights on the tenants.

3. Redistribution of land by placing ceiling on future acquisition and existing holdings and acquiring surplus areas above the ceilings, resettlement of landless agricultural workers and increasing the size of uneconomic holdings.

4. Consolidation of scattered holdings into compact blocks and prevention of subdivision and fragmentation of holdings below an economic size.

5. Updating and computerisation of land records.

Recognising that the access to land remains a key element of the antipoverty strategy in rural areas, the programme of action for land reforms included, in addition, the following:

i) preventing alienation of tribal lands;

ii) providing access on a group basis to the poor on wastelands and common property resources;

iii) permitting the leasing-in and leasing-out of land within the ceiling limits;

iv) according preference to women in the distribution of surplus land and legal provisions for protecting their rights on land.

It may be emphasised that the principles on which the scheme of land reforms is based do not involve adjustments between the interests of different sections of society which depend on land, but are a part of a wider socio-economic outlook which has to be applied in some measure to every part of the economy.

Implementation and Relevance of Land Reforms Today

Although land reforms as an instrument of economic policy were conceived very early in the post-independence period and pursued vigorously during the first one and a half decade of economic planning, these were side-tracked subsequently, largely on account of the introduction and spread of new technology. However, the new agricultural technology demonstrated in clear terms its inability to break through the barriers of rural poverty and unemployment.

In the wake of the limitations of Green Revolution observed in the field (viz. it remained confined to a few pockets, small number of crops and

selected farming groups) the decade of the 1980s witnessed considerable experimentation with the strategy of 'direct attack' on poverty. The direct attack emphasised on the provision of minimum needs, employment generation and integrated rural development programmes. The direct attack on poverty was conceived as a complementary approach to stepped-up growth. The two together were expected to help the process of '*trickle down*' to gain in speed, spread and thrust.

However, the outcome of direct attack strategy has been far too modest as an approach to poverty eradication. This has happened despite the acceleration in growth in the 1980s along with substantial expansion in agricultural output. In particular, the core groups of the poor like landless labourers have obtained minimal enduring benefits from both growth and anti-poverty programmes. There is now increasing awareness that attempts to integrate growth with poverty eradication remained largely ineffective owing to the absence of adequate structural reforms and improved access for the rural poor to agricultural and common lands.

Ground Realities Necessitating a New Look at Land Reforms

Three factors which can be identified in this respect are:

1. Growth in the green revolution areas is now levelling off. It is also realised that it is being achieved at a high and increasing cost vis-a-vis scarce inputs like irrigation and fertilisers. Growth in dry land agriculture and in the potentially rich eastern parts of the country needs a combination of both technical and reformist strategies. The point is that, unlike in the immediate post-independence years, the need for land reforms is now even more pressing - since sustained growth depends on it - and this requires the strengthening of the political will for reforms to make it more effective.

2. There have been two favourable fall-outs from the extensive implementation of poverty alleviation programmes:

   i) The personnel associated in the development have been under fairly severe pressure to establish contact with the poor to assess their needs;

   ii) The rural poor are now in a better position and mood to demand more enduring benefits from the government than the mere adhoc relief provided during periods of distress. In this sense, poverty-alleviation programmes can be regarded as instilling a 'conscientising' influence on both the development personnel and the poor;

   iii) There is a subtle difference between the absentee-cum-non-cultivating owners on the one hand and the present dominant rural groups on the other in the nature of resistance they put up to land reforms. The former are rent-collectors whose resistance to reforms began to weaken only when they moved out of villages in

search of new economic opportunities in towns. The latter group, on the other hand, consists of profit-earners who may be expected to respond more readily and positively to new growth opportunities in the rural agricultural sector. If there are policies to ensure that the new opportunities are adequately labour-absorbing and bring a measure of affluence within the reach of even households with modest land-holdings, the feasibility of effective ceiling and tenancy legislation might show a marked improvement.

Check Your Progress 2

1. What do you understand by institutional reforms?

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2. Suggest price measures to improve the returns to farmers.

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3. Suggest non-price measures to bring about improvement in returns to farmers.

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4. Outline how bigger farms have better productivity than smaller farms.

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5. State in brief the objectives of land reforms programme in India.

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6. Bring out the need for land reforms in the present state of development in India.

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15.4.2 Organic Farming

The Green Revolution was brought about by the use of chemical fertilisers and pesticides. Over the period, three major problems came to be associated with the use of fertilisers.

One, the environmental costs of increasing fertiliser use are proving immense i.e. soil is getting degraded fast.

Two, the effectiveness of the use of fertilisers is on the decline i.e. increasingly more and more fertilisers have to be used to get the same level of output. As a result, the average cost of production in agriculture is on the rise.

Three, heavy imports of fertilisers impose a huge burden on our balance of trade.

In view of these problems, the use of an alternative system of farming, called organic farming, is being advocated.

Meaning and Purpose

Organic farming is a way of farming which excludes the use of chemical fertilisers, insecticides, etc. It is primarily based on the principles of use of natural organic inputs and biological plant protection measures. The purpose of organic farming is not to go back to primitive form of agriculture, but to blend modern scientific technologies with the indigenous knowledge and skills using the vast potential of various kinds of residues and water. This will help: (i) achieve sustainability of natural resources on the one hand, and (ii) exploit the growing global market for organic food on the other.

Progress

India has comparative advantage over many other countries because of the vast cultivated area which has remained free of contamination from chemicals. Also, it is spread over distinctly varying agro-climatic conditions. For example, large areas in north-east region, northern hills and rain fed regions with low or nil use of agro-chemicals can be instantly converted to organic farming.

In order to promote organic farming, the government has launched a new

programme, called **National Project on Organic Farming**. The programme is being implemented in the areas where use of agro-chemicals is very low, those which fall in agro-export zones, and in urban hinterland area. The main components of the programme are as follows:

i) Putting in place a system of certification of organic produce;

ii) Financial support for setting up commercial production units for the promotion and extension of organic farming like: fruits and vegetables, waste compost, bio-fertilisers, hatcheries for vermiculture, etc.

Standards are being developed for organic farming. Regulatory mechanism for export purposes is also being developed.

15.4.3 Contract Farming

Contract farming is viewed as an important tool to increase private corporate involvement in agro-processing. In this system, companies engaged in processing/marketing of agricultural products enter into contract with the farmers. They provide the farmers with the inputs and buy back the product at a later date at a rate specified in advance.

Contract farming has invited some criticisms. For instance, the Indian farmer had been attuned to traditional agricultural practices which provide security and stability to a small and marginal farmer. With contract farming, this degree of independence is lost, rendering him sensitive to market forces.

Policy Initiatives

In order to promote contract farming some important policy initiatives taken in recent years are briefly stated below:

i) The Agricultural Produce Marketing Committee Act forces farmers to sell only at mandis, ostensibly to protect them from exploitative traders. But this defeats the motivation behind contract farming. In order to rectify this situation, six states have repealed their versions of the APMC Act, and six others have drafted new legislation.

ii) India for long had been plagued by a maze of different food laws, some of which were self-contradictory. The Central Government has now instituted a new integrated food law replacing the old ones.

iii) The Government Proposes to legislate a Warehousing Receipts Act, which will make warehousing receipts negotiable instruments qualified for bank financing. As a result, the farmers would be in a position to borrow against their stocks reflected in warehousing receipts. This along with the futures trading (see section 15.4.4.) can modernise

agricultural trading just as stock market reforms have modernised the capital market.

iv) In order to curb hoarding, the Essential Commodities Act has long placed limits on commodity stocks restricting large-scale capital investment. To rectify this situation, the list of essential commodities has been cut from 30 to 15.

v) Tax laws and incentives are being liberalised to encourage private investment.

vi) Banks are keen to get into rural business. Cheap credit from banks and cooperatives can facilitate agri-business like horticulture.

These efforts are being supplemented further by private corporate sector. Corporate sector has chipped in by setting up networks to give practical shape to the concept of 'precision farming'. These networks provide remote-sensing technology, which is used to analyse soil, gather information about crop health, pest attacks and the insurance coverage of various crops; run crop clinics where agronomists access information using geographic information system (GIS) techniques; advice farmers on crop-related matters, and the type of area and nutrients to be used; set-up soil testing laboratories; and operate experimental farms where scientists conduct agricultural R&D.

Notwithstanding these initiatives, corporate farming is still facing many hurdles. Some of these are:

One, the legal and administrative system makes enforcement of contract difficult.

Two, Banks have never been able to seize the mortgaged land of defaulting farmers.

Three, Indian infrastructure is grossly poor with rural electricity, in particular, being totally unreliable.

Four, cold chains for keeping vegetables fresh repeatedly break-down.

Check Your Progress 3

1. Identify the problems arising out of the use of fertilisers.

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2. What is organic farming? Why is it being promoted?

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3. What is contract farming? State the policy initiatives taken to promote contract farming in recent years.

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15.4.4 Futures Trading

There is a considerable time gap between the time of initial investment and the receipt of returns from the final farm produce. As a consequence, a farmer is highly vulnerable to price fluctuations as planning is done at the time of sowing based on the then prevailing prices.

Likewise, purchasers of agricultural commodities for use as inputs in production must make judgements on their availability and cost at different points of time during the year. To guard against price volatility and uncertainty in availability, sellers and buyers often enter into forward contracts. These contracts specify the quantity, quality and price of the commodity they would deliver for sale or acquire for purchase at a pre-decided date in the future.

'Futures contracts' are, thus, standardised contracts to buy or sell a quantity of a standard quality of a commodity. These are traded in exchanges, through brokers, with no need for the buyer and seller to meet and negotiate. An important feature is that a contract need not be settled by actual delivery. It can be matched by an offsetting contract taken by the buyer or seller, and the two can be squared at any point at some gain or loss. To avoid paying margins, traders can buy an option to offer or acquire a contract at some specified future date. If the option is not exercised, because price movements are contrary to expectation, the loss is restricted to the premium paid to hold the option and the transaction costs of acquiring it.

Role of Futures Market

Futures trading has an important role in bringing about improvements in agricultural production system.

One, futures markets enable the farmers to deliver the crop at a specified price at some future date. The clearing houses of the commodity exchanges guarantee the performance of these contracts. A farmer, who is uncertain about the prices of his produce, can cover his risk by selling a futures contract sometime before the harvest day.

Two, the futures prices are readily available for the farmers as the commodity exchanges disseminate prices on a continuous basis through various channels. If the price available in the futures market is not profitable to the farmer, he can change his cropping plan at the beginning of production itself.

Three, the futures market provides a perfect collateral for the lenders to advance larger loans on easier terms to the farmers thereby ensuring a minimum-risk business for both the lender and the farmer.

Four, futures market provides a convenient mechanism through which a farmer who wants to speculate on commodity but does not have the storage capacity can increase his speculative ability. He can 'buy a position' while the crop is growing by buying a futures contract, and at the time of harvesting, can sell his crop in the cash market simultaneously squaring off his position in the futures market. This way he can gain from any price increase in both the spot as well as the futures market at the time of harvesting.

Five, commodity exchanges assist the producers and consumers in a fair price discovery and enable them to hedge their price risk. The prices disseminated by these exchanges are highly reliable and acceptable to both the business community and the farmers as they are discovered by discounting all information available at that point of time.

Six, the quality and delivery standards imposed by the exchanges in their products act as bench-marks and increase quality consciousness among farmers.

Progress

Indian commodity futures market has had a long and chequered history. Until 2003, the futures contract was being traded only at regional exchanges that specialised in one or a few commodities. In 2003, the government mandated the setting up of nation-wide online commodity exchanges and allowed futures trading in a wide gamut of commodities.

There are four national level commodity exchanges, namely, the Multi Commodity Exchange (MCX), National Commodities and Derivatives Exchange of India (NCDEX), National Multi Commodity Exchange (NMCE) and the National Board of Trade (NBOT). The first three exchanges trade in all the permitted commodities, while NBOT trades only in soyabean. The Forwards Markets Commission (FMC) currently regulates the commodities futures market.

15.4.5 Subsidies in Agriculture

Subsidy can be defined as a payment for the provision of goods or services at a price which is less than the cost of production. This payment could be made directly to the users or to the producers of the services.

In actual practice, the large bulk of these payments goes to producers and intermediaries rather than the final consumers. These are provided both through the budgetary provisions and through the pricing policies of public sector activities.

Subsidies are different from transfer payments which are straight income supplements to the poor and the vulnerable. Subsidies are the converse of indirect taxes and are specific to goods and services. And, in some cases, they could reflect positive externalities.

Governments, the world over, take recourse to subsidies. The common Agricultural Policy in the European Union leading to 'lakes of wine and mountains of beef and butter' as The Economist once derisively described the situation, is an extreme - and living - example of how subsidies once given can enslave a group of several nations. America, and Japan, are not any far behind.

Subsidies in India have a long history. Subsidy on land revenue in case of natural calamities and loans to farmers on concessional terms have been a traditional feature of the Indian revenue system. In free India, subsidies were introduced in 1947 when the relief and rehabilitation finance for refugee settlement was heavily subsidised. Since then, subsidies have covered a wide spectrum of Indian economy.

Kinds of Agricultural Subsidies in India

The main forms of agricultural subsidies in India can be identified as follows:

1. **Food Subsidy:** It is the difference between the price at which the food corporation of India (FCI) procures food-grains from farmers, and the price at which the FCI sells (issue price) either to traders or to the Public Distribution System (PDS) with the added cost borne by FCI for storage and distribution of the food-grain. The subsidy ensures a reasonably high price to farmers (Procurement Price) and a reasonably low price to consumers (issue price) and a reliable food supply (through PDS).

2. **Fertiliser Subsidy:** It is the difference between price paid to manufacturers of fertilisers (domestic or foreign) and price received from farmers. This subsidy ensures cheap inputs to farmers, reasonable returns to manufacturers, and stability in availability and price of fertilisers (to farmers).

3. **Power Subsidy:** It is the difference between the cost of generating and distributing electricity to farmers (by state electricity boards) and the price paid (or the cost incurred) by the SEBs. This acts as an incentive to farmers to invest in pump sets, bore wells, etc.

4. **Irrigation Subsidy:** It is the difference between the operating and the maintenance cost of irrigation infrastructure in the state and irrigation charges recovered from the farmers.

5. **Credit Subsidy:** It is the difference between interest charged to farmers and actual cost of credit to banks, plus other costs such as write-off on bad loans.

Rationale for Subsidies

The rationale of subsidising agricultural inputs is to be traced to the role that these subsidies play in stimulating development of any country through increased agricultural production, employment and investment. However, there are arguments advanced on both sides.

Arguments For: The principal arguments in support of subsidies are as follows:

i) Products of subsidised inputs sell at lower prices. If the subsidies were to be withdrawn, the prices of the products would rise as their production cost would go up. But their higher prices would affect their sale. Reduced application of inputs in cultivation would lower agricultural production, particularly food production, and compel the country to import food products.

ii) The subsidisation of inputs and credit has influenced and continues to influence the acceptance of the new technology.

iii) Input subsidisation also avoids raising food (and raw material) prices, thus avoiding the plausible adverse effect on poor (and the industrial sector). This has come to be known as '*cheap-input-cheap-output policy*'.

iv) Value-added by subsidised inputs far exceeds the cost of subsidy.

Arguments Against: The principal arguments against subsidies are as follows:

i) Fertiliser and irrigation subsidies have widened regional disparities to some extent.

ii) The maximum benefit of subsidisation of inputs is reaped only by large farmers, who possess the capacity to buy inputs at higher prices.

iii) Input subsidies tax the budgetary capacity of the government. Fiscal imbalance paves the way for macroeconomic imbalances creating inflation, lowering growth and create inability to finance imports. Growth, in order to be sustainable, has to be efficient and subsidies of the kind the Indian agriculture is used to, make for enormous wastage of power, water, fertiliser and pesticides.

iv) Heavy fiscal burden of subsidy on inputs is also responsible for stagnation, if not decline, in public investment.

v) Where the prices of inputs do not reflect their scarcity value, there is very little incentive for farmers to adopt methods which could make more efficient use of scarce resources.

To sum up, input subsidy should be seen as a short-term programme designed to meet specific objectives and should be phased out with development. The sequencing of reforms must start with liberalising the output markets, opening them to exports and thereafter involving farmers in carrying out reforms in input markets - particularly for non-tradable inputs like canal water, electricity and rural credit. It is only through such a comprehensive package of reforms that the accelerated and sustainable growth of Indian agriculture can be facilitated. You will study more on agricultural subsidies in the context of globalisation in units 20 and 22 later.

15.4.6 Crop Insurance

Climatic variability caused by erratic rainfall pattern, and increase in the severity of droughts, floods and cyclones and rising temperatures, have been the causes of uncertainty and risk resulting in huge losses in agricultural production and the livestock population in India.

Insurance schemes have been designed and implemented seeking to protect farmers from uncertainties and risks. Three of the more important schemes under this are:

National Agricultural Insurance Scheme (NAIS), 1999

The NAIS was launched in June, 1999. The main objective of the scheme is to protect the farmers against crop losses suffered on account of natural calamities, such as drought, flood, hailstorm, cyclone, fire, pests and diseases.

The main features of the scheme are as follows:

i) The scheme covers all farmers including those growing commercial and horticultural crops.

ii) There is no restriction on the sum insured and all crops including coarse cereals, pulses and oilseeds are covered. In addition, three cash crops - sugarcane, cotton and potato - have also been brought under the scheme.

iii) The scheme is available to non-loanee farmers on an optional basis, but is compulsory for loanee farmers. It covers all crops for which yield data is available and is available regardless of the size of the holding.

The scheme is being implemented by the Agricultural Insurance Corporation.

Farm Income Insurance Scheme (FIIS) 2004

A pilot project of the FIIS was inaugurated in January, 2004. The scheme covers all farmers - loanee farmers on compulsory basis, and non-loanee

farmers on voluntary basis. The scheme provides comprehensive risk insurance against loss in farm income in a notified area arising out of adverse fluctuations in yield due to natural perils or adverse fluctuation of market prices as measured against minimum support price or both.

Weather-Based Crop Insurance Scheme (WBCIS)

The WBCIS has been implemented in the selected districts of Karnataka on a pilot basis. It provides insurance protection to farmers against adverse incidence such as deficit and excess rainfall, which impact adversely the crop production.

15.4.7 Trade in Agriculture

Globalisation is the keyword of new economic policy. With World Trade Organisation replacing GATT, exports of agricultural goods have come in for attention lately. Since the global agricultural trade is moulded and exploited by the major players, it is being brought under an international discipline. The following two features included in the accord are important to note:

i) Reduction in aggregate measure of domestic support; and

ii) Tariffication of import barriers and their reduction.

Besides providing a level playing field, trade in agriculture is bound to open up new avenues for developing countries like India to push up their exports.

Advantages and Disadvantages of Globalisation

Opening up of agricultural trade should now be seen as a major opportunity for raising the overall growth rate by exploiting India's comparative advantage in agriculture, for improving the efficiency of resource use in agriculture, and for technologically upgrading the rural sector.

On the flip side, however, it may be argued that liberalisation needs more attention. Both unilateral liberalisation, which India may pursue as a part of its ongoing economic reforms, and multilateral liberalisation, which India may be obliged to pursue as a member of the WTO, are going to have their costs. In this connection, following three issues need a serious consideration:

i) Volatility of prices in the international markets,

ii) Trend of prices, and

iii) International trade market structure.

These factors considerably influence the realisation of gains to exporting countries of agricultural commodities. Proper knowledge of these factors

and intelligent response of a country lead to enhancement of its gain from the trade. On the other hand, lack of knowledge or improper response may lead to loss of exploitation of international market situation. As said before, you will be studying more on these issues in units 20 and 22 later.

Check Your Progress 4

1. What is 'futures trading' in agricultural products?

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2. State the role of 'futures trading' in promoting agricultural productivity.

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3. Mention the different kinds of subsidies available in the agricultural sector.

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4. What are the salient features of principal crop insurance schemes presently in operation in India?

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15.5 LET US SUM UP

Indian agriculture made significant progress after adoption of the new agricultural strategy, as is evidenced in large increases in agricultural production. Most of the increase in agricultural output could be attributed to improvements in agricultural productivity. However, notwithstanding these increases, agricultural productivity continues to be relatively low, both in comparison to (i) what obtains internationally and (ii) the yield potential demonstrated on farms. Low productivity, in a way, represents

an untapped resource. If we can successfully raise productivity levels there are immense possibilities of growth in agriculture. The unit has discussed a few important issues having a bearing on agricultural productivity in India.

15.6 KEY WORDS

Biological Innovations : refer to those measures that improve agricultural productivity and are therefore 'land-saving'.

Mechanical Innovations : refer to introduction of new machinery and tools in cultivation.

Price Measures : are measures which aim at keeping the prices of agricultural products at a high level in order to provide incentives to farmers to produce more.

Non-Price Measures : are measures, other than price measures, that are designed to assure better income to farmers.

Fragmentation of Holdings : Refers to scattered pieces of holdings owned by a household.

Consolidation of Holdings : a process by which the scattered pieces of holdings are pooled together to form a single large holding.

Empty niche space : bare ground between rows of crops inviting weed infestation.

15.7 SOME USEFUL BOOKS

Dhingra, Ishwar C., 2007, *The Indian Economy: Environment and Policy*, Sultan Chand, New Delhi.

Rao, Hanumanta, 2007, *Agriculture, Food Security, Poverty and Unemployment*, OUP, New Delhi.

Ray Shavan (ed.), 2007, *Handbook of Agriculture in India*, OUP, New Delhi.

Bhalla, G.S., 2007, *Indian Agriculture Since Independence*, NBT, New Delhi.

15.8 ANSWERS OR HINTS TO CHECK YOUR PROGESS EXERCISES

Check Your Progress 1

1. See Section 15.2 and answer.
2. See Section 15.2 and answer.
3. See Section 15.2 and answer.

Check Your Progress 2

1. See Section 15.3 (I) and answer.
2. See Section 15.3 (III) (a) and answer.
3. See Section 15.3 (III) (b) and answer.
4. See Section 15.4.1 and answer.
5. See Section 15.4.1 and answer.
6. See Section 15.4.1 and answer.

Check Your Progress 3

1. See Section 15.4.2 and answer.
2. See Section 15.4.2 and answer.
3. See Section 15.4.3 and answer.

Check Your Progress 4

1. See Section 15.4.4 and answer.
2. See Section 15.4.4 and answer.
3. See Section 15.4.5 and answer.
4. See Section 15.4.6 and answer.

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UNIT 16 INDUSTRIAL POLICY AND STRATEGY

Structure

16.0 Objectives

16.1 Introduction

16.2 Industrial Policy and Strategy Before 1991

16.2.1 Basic Features of Industrial Policy in the Pre-Liberalisation Phase

16.2.2 Phase of Liberalisation

16.3 Industrial Policy and Strategy After 1991

16.3.1 New Industrial Policy

16.4 Evaluation of New Industrial Policy

16.4.1 Strengths of New Industrial Policy

16.4.2 Weaknesses of New Industrial Policy

16.5 Small-Scale Industry (SSI) Policy

16.5.1 Basic Features of the Policy

16.6 Competition Policy

16.6.1 Competition Act, 2003

16.7 Special Economic Zones

16.7.1 Concept and Background

16.7.2 Debate over SEZs

16.7.3 SEZ Policy and Progress

16.8 Let Us Sum Up

16.9 Key Words

16.10 Some Useful Books

16.11 Answers or Hints to Check Your Progress Exercises

16.0 OBJECTIVES

After reading this unit you will be able to:

- outline the relationship between development strategy and industrial policy;
- identify the areas of operation of industrial policy;
- explain the basic features of the industrial policy as it evolved during the early strategy of growth in India;
- enumerate the reasons for initiating the changes in the approach to industrial policy;

- bring out the significance of appropriate industrial policy in the changing environment of liberalisation, privatisation and globalisation;
- apprise the importance of small scale industry sector in the industrial landscape of the country;
- discuss the importance of competition in the era of liberalisation; and
- explain the new phase of industrial development as is being sought to be introduced through Special Economic Zones.

16.1 INTRODUCTION

There are several dimensions of industrial policy which influence the direction of industrial investment and production. Among these, the more important are as follows:

i) An approach to industrial licensing for regulating the setting up of new (large and medium) industrial undertakings and their expansion.

ii) A policy to control the monopoly and concentration.

iii) A policy regarding technology import including import of capital goods, components and raw materials.

iv) A range of financial and fiscal policies pertaining to the provision of industrial finance, development of the capital market, and fiscal incentives/disincentives to investment and production.

It is in this background that we have to study the evolution of industrial policy in India. Mainly we will try to see: (i) how far its basic contours have changed in tune with the developmental strategy envisaged?; and (ii) how far it has worked as a potential tool to realise the goal of 'planned development'? Our attention would be focused on those aspects of industrial policy other than fiscal and financial policies as these two issues have been separately covered in the units of Block 3 of this course. We will also pay a particular attention to aspects like competition policy, policy towards small-scale industries and policy relating to special economic zones in this unit.

16.2 INDUSTRIAL POLICY AND STRATEGY BEFORE 1991

Economic policy is conditioned by the paradigm of development and the strategy of growth. Each specific strategy of growth requires creation of institutions that would smoothen its pursuit. For instance, a strategy of growth that depends on the growth of agriculture would be different from the one to be pursued for the promotion of light-goods industry. Whatever the strategy, the involvement of the state would be necessary

to ensure a smooth functioning in which monopolistic tendencies leading to erosion of values of social concern are curbed.

India made a conscious decision to follow the heavy-industry-led-growth strategy, right from the time of its Second Five Years Plan. The strategy found its concrete expression in the Industrial Policy Resolution (IPR) of 1956. The adoption of the IPR 1956 was necessitated by a series of developments of which the more important ones are as follows:

1. New Constitution of India which guaranteed certain Fundamental Rights provided by the Directive Principles of State Policy.
2. Acceptance by Parliament of the socialist pattern of society as the objective of the country's socio-economic policy.
3. Completion of the First Five Year Plan and the commencement of the Second Plan incorporating the framework emphasising the path to heavy industry led growth strategy.

The industrial policy, like all other policies was, therefore, to be governed by the principles and directions enshrined in the constitutional provisions. The IPR, 1956 which came to be known as the 'Economic Constitution' of India laid emphasis on the following:

- the development of heavy machine industries to lay the foundation of the 'capital goods industries';
- the expansion of the heavy industry's base in the public sector showing the commitment of the state to actively involve itself in the pursuit of the objective stated above;
- encourage the participation of the private sector in the pursuit of the above to make them co-partners; and
- establish a large co-operative sector to promote the growth of cottage and small scale industries alongside the promotion of heavy industries.

16.2.1 Basic Features of Industrial Policy in the Pre-Liberalisation Phase

Demarcation of Industries

As said above, the IPR 1956 reiterated the promotion of cottage and small-scale industries with the aim of reducing the regional disparities. For this, the IPR 1956 classified the entire industrial sector specifying the groups of industries into three schedules as per which either the State (i.e. the public sector) or the private sector or both were expected to participate in the process of industrialisation. The demarcation of industries into the three schedules, in terms of numbers, were made as follows:

i) **Schedule A:** 17 new industries, to be set up only by the state except where permission had already been given earlier (e.g. Tata Steel Plant);

ii) **Schedule B:** 12 industries, where the private sector was expected to supplement the efforts of the state; and

iii) **Schedule C:** all other remaining industries, except for the 29 mentioned in schedule A and B above, in which the developmental initiative was left entirely to the private sector.

Notwithstanding the demarcation, it was always left open to the State to undertake industrial production in any of the areas keeping the national interest in mind.

Industrial Licensing

Industrial license is an important instrument of state policy. It is a written permission from the government to an industrial unit to manufacture goods specified in the permission letter. It also specifies such particulars as the location of the plant, goods to be produced, capacity of the unit, period within which the industrial capacity is to be established, etc. The primary objective of the licensing system is to give effect to the industrial policy of the government. The broad objectives of the licensing system will, therefore, have to be in consonance with those laid down in the industrial policy. Any major structural change in industrial policy would need a corresponding change in the objectives of industrial licensing.

Legislative Framework for Industrial Licensing

The legislative framework for industrial licensing is embodied in three different Acts viz. (a) Industries Development and Regulation Act, 1951; (B) Monopolies and Restrictive Trade Practices Act, 1969; and (c) Foreign Exchange Regulation Act, 1973.

(A) **Industries Development and Regulation (IDRA) Act, 1951:** The Act makes the registration of all industrial units in the scheduled industries compulsory requiring the units to obtain a certificate of registration within a prescribed time. It also requires the new industrial units to be established only after obtaining a license from the central government. A license from the government is required for any of the following purposes: (a) starting of a new industrial unit; (b) a major expansion of the existing unit; (c) the manufacture of a new 'article'; and (d) shifting the location of an industrial unit.

(B) **Monopolies and Restrictive Trade Practices (MRTP) Act, 1969 :** Conceived as a competition law, the Monopolies and Restrictive Trade Practices Act comprises of the following objectives:

(i) curbing the concentration of economic power and growth of monopolies;

ii) imposing restrictions on the acquisition and transfer of shares of, or by, certain corporate bodies;

iii) controlling monopolistic trade practices; and

iv) controlling restrictive and unfair trade practices.

Thus, apart from ensuring that the operation of the economic system does not result in the concentration of economic power in the private sector corporation, the Act seeks to promote competition among the private enterprises by controlling monopolistic and restrictive trade practices.

(C) **Foreign Exchange Regulation (FERA) Act, 1973:** FERA 1973 also had its origin in the Foreign Exchange Regulation Act, 1947. The FERA 1947 was the outcome of various ordinances promulgated during the Second World War and immediately thereafter regulating the foreign exchange transactions. The term foreign exchange includes foreign currency, deposits and balances payable in foreign currency and foreign securities.

The preamble to the FERA 1973 states the scope and purpose of the Act as 'to consolidate and amend the law regulating certain payments, dealings in foreign exchange and the import and export of currency and bullion'. The underlying objective is to conserve the foreign exchange resources of the country so as to ensure its proper utilisation in the interest of the economic development of the country.

The Act empowered the Reserve Bank of India and the central government to:

i) see that foreign exchange earned by exports or otherwise properly accounted for and realised;

ii) control the acquisition and holding of foreign exchange in any form and making of payments in foreign exchange;

iii) give directions to banks, travel agents and others; and

iv) make rules and issue notifications for this purpose.

The Act sought to impose restrictions on the establishment of place of a business by an Indian national residing outside India or a foreigner or a company which is not incorporated under any law in India or in which the non-resident interest is more than 40 percent. The Act required the permission of the Reserve Bank of India to be taken for carrying out any activity of a trade either commercial or industrial in nature. The permission was also required for the acquisition of any undertaking in India including the purchase of shares of any company.

The Act empowered the government to call for information, search suspected persons, seize documents, stop and search conveyances, search premises, etc. in connection with the enforcement of the Act.

16.2.2 Phase of Liberalisation

The industrial policy and its adjunct industrial licensing system served to protect the Indian industry, both against potential domestic and foreign competition. Protection was thus considered the right approach in the initial stage of industrialisation in a developing economy like India struggling to come out of the stranglehold posed by two-centuries of colonial domination.

The industrial landscape underwent a dramatic change within a period of about four decades of attaining independence. However, a failure of the policy of protection was that it did not build a mechanism that could prompt the industry to adapt itself to the fast-changing technological scenario in the outside world. The industrial structure of India, under the burden of protection, therefore turned out to be high-cost and low-quality lacking in the basic ingredients of international competitiveness.

(a) **Mid-1970s Onwards:** Experiments with domestic liberalisation began in the mid-1970s. In 1975, a scheme was introduced which provided for an increase in licensed capacity up to a maximum of 25 percent in a five-year period. Other measures included regularisation of capacities in excess of authorised capacities for certain specified industries and liberalisation from controls for units which exported 100 percent of their production. A more general scheme of re-endorsement of capacities was introduced in 1982 which raised the exemption limit for industrial licensing from the Rs. 3 crore set in 1978 to Rs. 5 crore. This limit was again raised in 1988 to Rs. 25 crore for the units set up in the non-backward areas and to Rs. 75 crore for units set up in the backward areas.

The main emphasis during the 1970s through the mid-1980s was thus on reducing the restrictive and complex features of the licensing policy.

Mid-1980s Onwards: The process of reorientation of industrial policy gathered momentum after the mid-1980s with the government setting up several committees to examine its fiscal, monetary and trade policies. The general outcome of their findings and recommendations can be expressed in two sets of interrelated propositions viz. (A) Requirement for Accelerated Growth, and (B) Requirement for Enhancing the Domestic Resource Situation.

A) **Requirement for Accelerated Growth:** The principal factors sequentially linked to meet the requirement for accelerated growth are as follows:

   i) requirement of increased imports to boost production;

ii) increased exports to enable paying for increased imports owing to decreases in concessional aid and risks of onerous debt burden connected with large scale commercial borrowing;

iii) enhancing the competitive advantage of exportable goods to increase exports; and

iv) changes in industrial, trade and fiscal policies to increase the competitive advantage for exportable goods.

B) Requirements for Enhancing the Domestic Resource Situation: Its principal features were identified as follows:

i) the government budget is no longer an adequate source of finance for investment;

ii) reducing defence expenditure is not an option available to the government;

iii) subsidies can be reduced only gradually to avoid major social and political upsets; and

iv) the only way to raise additional resources is to make the tax system more responsive and make the public sector enterprises generate resources through greater efficiency.

In view of the above two propositions, the period beginning with 1985 saw the development of rule based industrial policies like dual prices, tax and tariff based interventions rather then direct price, output or capacity controls at the level of the firm, etc. With this, in general, the role of market and importance of private incentives came to be appreciated. Many concepts like broad-banding, minimum economic capacity and de-licensing made their appearance during this period. We will briefly outline these concepts before we proceed further.

Broad-banding: The licensed units were given the flexibility of the product-mix within the overall ceiling sanctioned in the licence. For instance, a producer may have the licence to produce 10,000 scooters, 20,000 motor-bikes, and 5,000 three-wheelers during a year making for an overall 35,000 units of output. Till broad-banding was introduced, the producer could not produce more than 10,000 scooters even though it chose to produce zero motor-bikes in view of the demand conditions. After broad-banding was introduced, if the producer so desired he could produce 35,000 scooters exclusively.

Minimum Economic Capacity: This means minimum scales of production were decided upon and fixed. If any production unit sought official assistance, it had to ensure that it would set up the capacity conforming to this minimum viable scale. More generally, there was no ceiling but only a threshold floor level prescribed.

Delicensing: This meant that certain products were exempted from licensing requirements.

Check Your Progress 1

1. What are the important factors on which the IPR 1956 laid its emphasis?

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2. What are the three basic features by which the Industrial policy Resolution, 1956 is governed?

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3. What were the major changes introduced in the early phase of liberalisation through the industrial policy of 1970s?

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4. What requirements were identified for achieving accelerated economic growth during the later part of 1980s?

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16.3 INDUSTRIAL POLICY AND STRATEGY AFTER 1991

By late 1980s, it had become clear that the growth strategy pursued in the past was unsustainable. Economic imbalances grew to critical levels

necessitating the taking of recourse to deficit financing. The monetised deficit quickly worked itself through the foreign trade multiplier to a current account deficit in the BOP. A rising BOP deficit could not be continuously financed within the domestic resource potential, resulting in a haemorrhage of the foreign exchange resources. This made it necessary to adopt external measures to adjust the budgetary deficit. The adjustments resulted in a slow down of the economy, as the public sector, owing to resource constraints, could not provide the required stimulus to demand creation. Thus, the tyranny of the twin deficits (viz. fiscal and BOP deficit) thwarted the hope of revival of the growth process.

To meet the emergent situation, the government responded with a well-crafted set of macro economic policies, including a new industrial policy. Based essentially on the neo-classical paradigm, the new industrial policy was designed to step up the growth momentum and help in the restoration of macro-economic and financial stability.

16.3.1 New Industrial Policy

Making a sharp departure from the Industrial Policy Resolution of 1956, the government announced a new industrial policy on July 24, 1991 with a new set of objectives and policy thrust.

Objectives

The principal objectives of the new industrial policy (NIP 1991) were identified as follows:

i) to consolidate the strengths gained during the four decades of economic planning over 1951-91;

ii) to correct the distortions (or weaknesses) that had crept in to the industrial structure (i.e. one of low productivity and high cost production);

iii) to improve and maintain sustained growth in industrial productivity with gainful employment creation; and

iv) to attain international competitiveness.

The pursuit of these objectives needed to be tempered with a need for: (a) sustainability concerns vis-a-vis protection of environment, and (b) efficient use of available resources.

Policy Changes

Important changes in the NIP 1991, including the subsequent changes, can be briefly stated as follows:

1. Industrial Licensing Policy:

a) Industrial licensing has been abolished for all projects except for a

short list of industries (e.g. industries of security and strategic concern, social concerns owing to usage or generation of hazardous substances creating environmental degradation or destruction, items of elitist consumption, etc.). Thus, the four industry groups which are specifically mentioned to require industrial licensing are:

i) distillation and brewing of alcoholic drinks;

ii) electronic aerospace and defence equipment, defence aircraft and warships, manufacture of aerospace substitutes;

iii) industrial explosives including detonating fuses, safety fuses, gun powder, nitro-cellulose and matches; and

iv) cigars and other tobacco products.

In addition, three industry groups where security and strategic concerns predominate and hence will be reserved exclusively for the public sector are:

i) generation of atomic energy;

ii) substances notified by the Department of Atomic Energy; and

iii) railway transport (where private capital is allowed for a limited extent)

b) In projects where imported capital goods are required, automatic clearance will be given:

i) where foreign exchange requirement is ensured through foreign equity; and

ii) where the value of imported capital goods required is less than 25 percent of the total value of plant and equipment subject to a maximum value of Rs. 2 crores;

c) Except for the Units or establishments mentioned under (a) and (b) above, all requirement for industrial approvals from the central government are freed provided the location of industries are not within 25 kms. of cities having population of more than one million.

d) Industries of non-polluting nature such as electronics, computer-software and printing are permitted to be located within 25 kms. of the periphery of cities with more than one million population. However, other industries are permitted only if they are located in designated industrial areas.

e) Till the announcement of this policy, any enterprise borrowing from a public development finance institution had to incorporate a clause i.e. 'mandatory convertibility clause' in the loan agreement that the lender had the right to convert loan into equity at his will. The

clause thus worked as a potential threat of takeover. The new policy provided that the mandatory convertibility clause will no longer be applicable for term loans from the financial institutions for new projects.

f) All existing registration schemes will be abolished.

g) Entrepreneurs will henceforth only be required to file an information memorandum on new projects and substantial expansion.

   i) The system of phased manufacturing programmes run on an administrative case-by-case basis will not be applicable to new projects.

   ii) The exemption from licensing will apply to all substantial expansions of existing units.

2. **Foreign Investment:** In regard to foreign investment, the principal features of the new policy are as follows:

   i) Automatic approval is available to FDI in almost all sectors except for a few sensitive ones. Automatic approval is available for 50 percent, 51 percent, 74 percent and 100 percent in specified industry groups.

   ii) To provide access to international markets, majority foreign equity holding of up to 51 percent will be allowed for trading companies primarily engaged in export activities.

   iii) A Foreign Investment Promotion Board has been constituted to negotiate with a number of large international firms and approve direct foreign investment in select areas.

3. **Foreign Technology Agreements:** The principal features of the policy on foreign technology agreements are:

   (a) Automatic permission will be given to foreign technology agreements in identified high priority industries up to a lump-sum payment of $ 2 million, 5 percent royalty for domestic sales and 8 percent for exports, subject to total payment of 8 percent of sales over a 10 year period from the date of agreement or 7 years from commencement of production.

   (ii) In respect of industries other than those specifically mentioned, automatic permission will be given subject to the same guidelines as in cases where no foreign exchange is required for any payment.

4. **Public Sector:** In regard to the public sector, the new industrial policy provides as follows:

   (i) Portfolio of public sector investments will be reviewed with a

view to focus its investments in strategic, high-tech and essential infrastructure. Whereas some reservation for the public sector is being retained, there would be no bar for areas of exclusivity to be opened up to the private sector selectively. Similarly, the public sector will also be allowed entry in areas not reserved for it.

ii) Public enterprises which are chronically sick and which are unlikely to be turned around will be referred to the Board of Industrial and Financial Reconstruction for revival/rehabilitation schemes.

iii) In order to raise resources and encourage wider public participation, a part of the government's shareholding in the public sector would be offered to mutual funds, financial institutions, general public and workers.

5. **MRTP Act:** With regard to the MRTP Act, the new industrial policy provides as follows:

   i) The MRPT Act has been amended to remove the threshold limits of assets in respect of MRTP companies and dominant undertakings.

   ii) Provisions relating to concentration of economic power, pre-entry restrictions with regard to prior approval of the central government for establishing a new undertaking, expanding an existing undertaking, amalgamations/mergers, etc. have been removed.

   iii) Emphasis will be placed on controlling and regulating monopolistic, restrictive and unfair trade practices.

16.4 EVALUATION OF NEW INDUSTRIAL POLICY

The new industrial policy has altered the industrial scenario in India. In intent and scope, the industrial policy is a watershed which has opened up a new era of industrialisation with both economies of scale and quality of products stressed. The two (viz. economies of scale and quality) virtually hold the key to higher productivity and competitiveness both in the domestic and the export markets for the Indian industry.

However, on the negative side, with the opening up of the economy, Indian industry has become far more unstable than before with the impact of this falling on the marginalised sections of the society. It is important, therefore, to focus specifically on the weaknesses of the new industrial policy. But first we list out its strengths.

16.4.1 Strengths of New Industrial Policy

The process of liberalisation got a strong push with the announcement of the NIP, 1991. It entered a new phase of what has been described as 'reform by storm' supplanting the approach of 'reform by stealth' of the later half of the 1970s and 'reform with reluctance' during the second half of the 1980s. The important strength of the new policy can be identified as follows.

1. The NIP made a bonfire of the industrial licensing system through various provisions. There has been a move away from extensive physical controls and an increase in the role of financial incentives in channelling investments in the desired direction. This, plus the lowering of the tax rates combined with better administration of the revenue collection system, is expected to attract more economic enterprise and investment. The role of the financial institutions becomes very important in the new regime.

2. There is considerable internal deregulation aimed at strengthening the more efficient domestic firms and encouraging them to invest and expand. This is expected to inject much more competition into the system, creating incentives for reducing costs. Scientists tell us that the diamond sparkles because of a phenomenon called total internal reflection. If our economy is to sparkle, total internal liberalisation is the key.

3. Measures have also been taken to improve the legal framework. The Securitisation, Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 gives powers to banks and financial institutions to enforce their claims on collateral for delinquent secured credit, without going through a long and cumbersome judicial process. The Competition Act 2003, aims at promoting competition through prohibition of anti-competitive practices, abuse of dominance and through regulation of companies beyond a particular size. In Companies (Second Amendment) Act 2002, industrial sickness has been redefined, a revival and rehabilitation fund has been set up, and protection from creditors has been withdrawn.

4. The internal liberalisation has been accompanied by a policy of maintaining an open access to imports to permit modernisation and technological upgrading in Indian industry which again will reduce costs and promote international competition.

5. An important feature of the process of policy reform underway in India is that it is gradualist as against the 'big bang' type adopted in some other countries. The system is being subjected to much stronger pressures for efficiency and modernisation, but at a controlled pace. The rationale for this gradualist approach lies in the perception that the system should be subjected to pressure commensurate with its ability to respond. Pressure beyond this point will only be disruptive.

In sum, the aim of the sweeping policy changes is to evolve an integrated economic package that can be implemented in stages to create an appropriate environment so as to encourage and promote greater efficiency, higher productivity and faster industrial growth in desired directions through a well-coordinated system of incentives.

16.4.2 Weaknesses of New Industrial Policy

The new industrial policy suffers from a number of weaknesses. Among these, the more important are as follows:

1. **Absence of suitable policy for exports:** Today, the high-tech industries are receiving a similar emphasis as was granted to their basic industry counterparts in the past based on the infant industry argument. In the environment of limited export incentives and regulated labour markets there seems little reason to believe that today's infants will provide an engine for growth consistent with the present targets.

2. **Distortions in industrial pattern owing to selective inflow of investments:** In the current phase of investment following liberalisation, while substantial investments have been flowing into a few industries, there is concern over the slow pace of investments in many basic and strategic industries such as engineering, power, machine tools, etc. This is mainly due to the low rate of return in these sectors which is less than that in the new or 'sunrise' industries (e.g. IT sectors). Such distortions in the investment pattern need to be rectified for ensuring balanced growth of industries in the country.

3. **Need for strengthening inter-linkages between new and old sectors:** New sectors should have strong linkages with the old ones and should push up the latter towards modernisation and new product development. Unless such inter-linkages are strengthened, a part of the impetus given by the new sectors could be lost through leakage to other countries where the comparative advantage is stronger.

4. **Labour questions:** Restructuring and modernisation of industries as a sequel to the new industrial policy, often leads to displacement of labour. This would call for redeployment of labour through rehabilitation schemes. Thus, while modernising a particular industry, simultaneous efforts should also be made to identify areas of operations in which labour could become redundant. Identifying and developing the areas of growth in which such surplus labour could be absorbed should be simultaneously provisioned so as to avoid labour displacement and rehabilitation problems.

5. **Absence of incentives for raising efficiency:** Studies have shown that the incentive structure in the 1980s was some what perverse leading to industrial growth moving away from the sectors in which the country had comparative advantage and strength. Such policies encouraged industries with high domestic resource cost. Focussing attention on internal liberalisation without adequate emphasis on trade

policy reforms, resulted in 'consumption-led-growth' rather than 'investment' or 'export-led-growth'. The resultant growth-process was therefore not sustainable in a longer time framework. Lessons from this should have been provisioned for in the New Industrial Policy which is lacking as the following point shows.

6. **Absence of incentives for technological innovations:** The policy of liberalisation appears to have failed to achieve one of its major objectives viz. creating more innovative firms. This is evidenced by the industrial structure which has led to greater technology imports than to greater in-house innovative efforts.

7. **Improperly-defined industrial location policy:** The NIP, while emphasised the detrimental effects of damage to environment, failed to define a proper industrial location policy which could ensure a pollution free development of industrial climate. In its absence, the new industries have gravitated towards the already well-established industrial centres with a well-developed infrastructure.

8. **Distributional consequences:** If the industrial growth has to be sustained, the policy reforms have to address the distributional issues from a fundamental sense. Evidence from Latin American countries show that countries with highly skewed income distribution also have a highly volatile growth process. The NIP, failed to adequately draw from such experiences of other countries. We will see a specific instance of this nature, in the SEZ policy of the government, in section 16.7 of the unit.

To sum up, there is a need for reviewing certain provisions of the policy to make it more meaningful and effective. With suitable reorientation, the new industrial policy has the potential to provide a strong growth push to the country's industrial growth.

Check Your Progress 2

1. What are the five areas in which 'policy changes' were introduced in the NIP, 1991?

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2. Enumerate the major weaknesses of new industrial policy (NIP 1991).

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16.5 SMALL SCALE INDUSTRY (SSI) POLICY

India has the longest history of small enterprise development policy both in Asia and the world. Over the last six decades, India has built up one of the world's most elaborate small enterprise development programmes for providing assistance to individuals and institutions, both in the urban and rural areas, for setting up small-scale enterprises. In the post-reforms period, there has been a shift in focus from 'protection' to 'promotion'.

The Micro, Small and Medium Enterprises Development Act, 2006, defines small enterprises as those manufacturing units which have investment above Rs. 25 lakh and up to Rs. 5 crore. It takes into account investments in plant and machinery only and does not consider money invested for effluent treatment, quality control, fire-fighting equipment and safety. It also excludes the 'standby' investment in land and buildings. A separate category of medium enterprises up to a capital investment of Rs. 10 crore has also been recognised in the Act.

16.5.1 Basic Features of the SSI Policy

As earlier stated, in the pre-reforms era before 1990, the focus of the small-industry policy was on extending 'protection' to the sector. The various dimensions of the protective framework for SSI sector have been presented in Table 16.1.

Table 16.1: Protective Framework for SSI

Sl. No.	Policy Measure	Implication
1.	Demarcation Through Definition	Eligibility limits to avail concessions, benefits and incentives meant for SSI
2.	Concessional Finance	Lower cost of capital
3.	Priority Sector Lending	Ensures the flow of a certain percentage of bank credits to SSI
4.	Fiscal Incentives	Wide ranging tax benefits. As a result, low or negligible tax payment.
5.	Price Preference	If quality is comparable, SSI products are preferred to large industry products by government departments even if prices of the former are higher than that of the latter to an extent of 16 percent.
6.	Reservation of items for exclusive government purchases	Assured market for SSI manufactures of reserved items.

Sl.No.	Policy Measure	Implication
7.	Reservation of items for exclusive manufacturing in SSI	Virtually prevents any kind of competition from large scale units who have to export 75 percent of the output if obtained license to manufacture a reserved item.
8.	Preferential access to raw materials and liberal import policy	Assured supply of scarce raw materials, both domestic and foreign and easier access to capital goods imports.
9.	Exemption from industrial licensing and labour policy	More operational freedom and further protection from competition since the rest of industry is subjected to industrial licensing and labour policy.

Constraints for SSI in a Liberalised Regime: The growth of SSIs under a liberalised regime is, however, constrained by a number of factors, among which the more important are as follows: (i) change in consumer preference, (ii) outmoded technology, (iii) uneconomic scales of operation, (iv) lack of organisation, (v) total disregard to environmental standards, (vi) high incidence of sickness, and (vii) problems of market access and organised market network facilities. To improve the situation on these fronts, the government announced on August 6, 1991, a new policy for small industries. The new policy proposed clear cut guidelines to deal with the four major areas of concern viz. (i) quality, (ii) technology, (iii) finance and (iv) marketing.

The problems of small industry in all these areas are closely inter-linked. Firstly, it is due to the lack of quality that the small industry units face the problem of marketing. To improve quality, technology up-gradation and modernisation of SSI units are required. This, is turn, demands enormous amount of funds. Even after modernisation, to sustain competitiveness, small industry should have access to changing technology and re-financing for quality up-gradation by modernisation. Thus, once the three specific aspects of quality, finance and technology are taken care of all that the small-scale industry needs is marketing assistance or information on marketing opportunities. The major features of the new small industry policy are presented in Table 16.2.

Table 16.2 : New Small Industry Policy : Major Thrust Areas

Sl. No.	Major Features	Objectives
1.	Emphasis to shift from subsidies/ Cheap credit to adequate credit	To meet the emerging demand for credit
2.	Equity participation by other undertakings domestic/foreign	

Sl. No.	Major Features	Objectives
3.	Preferential credit from banks	To strengthen small industry promotional measures
4.	Marketing of mass consumption goods under a common brand name	
5.	Industry associations to be involved in setting up Sub-Contracting Exchanges	
6.	Technology Development Cell in small Industry Development Organisation	To upgrade technology and promote modernisation
7.	Industry association to establish quality counselling and common testing facilities	
8.	Technology information centres	
9.	Reoriented modernisation and technology up-gradation programmes by a cluster based approach	

In pursuance of the policy measures outlined above, a comprehensive new policy package for small-scale industry was announced in March 1994. This was supplemented by a set of policy initiatives announced in June 1998 and August 2000, based on the recommendations of S. P. Gupta committee and other inputs from various sources. The new policy package aims at giving SSIs a level playing field vis-à-vis the large and medium sector in respect of availability of raw materials, credit and infrastructure facilities. The package will provide faster mechanism for review of list of items reserved for SSIs keeping in view the changing situation. It will also facilitate integration of the SSIs with other sectors, accelerate modernisation and technology up-gradation.

The success of the new SSI policy depends to a great extent on the quality of the downstream action required. This specifically includes some of the linked schemes like single window clearance scheme for composite loans, de-bureaucratisation, establishment of new marketing schemes, programmes for technology up-gradation and compulsory quality control, the nature of the legislation to ensure payment of bills of small-scale units, etc.

16.6 COMPETITION POLICY

In the pre-reforms era, various restraints to competition existed. These can be briefly recapitulated as follows:

i) investment restraints (licensing);

ii) entry restrictions for new enterprises;

iii) control over acquisition of economic power through MRTP;

iv) public sector reservation for infrastructure and other industries creating monopolies in various areas;

v) product reservation for the small-scale sector;

vi) procurement policies favouring public and small-scale industries;

vii) trade restrictions and high tariffs; and

vii) restrictions on foreign direct investment.

Competition is the foundation of an efficient production and market system. For increasing the competitive strength of the Indian economy, two factors are recognised as vitally important. These are: (i) enabling the Indian Players to become competitive globally, and (ii) creating a user-oriented and user-friendly environment in the domestic market.

The key issue in the current phase of transition being competition, a competition policy with its supporting laws are necessary to secure the gains brought about by national and international competitiveness. The contours of such a competition policy should seek to prevent restrictive business practices and controlled market structures that significantly lessen competition. The objective of such a policy should thus be to encourage competition in order to foster greater efficiency in resource allocation and maximise consumer welfare. Such objectives of the policy can be effectively realised only if there is a compatible interface with other economic policies and laws. The other economic policies include those relating to infrastructure, international trade, FDI, intellectual property rights, financial markets, etc.

If such harmonious balance of mutually supporting laws and institutional structures are established, the expected benefits of such composite laws that ensure competition are many [e.g. (i) stronger market forces, (ii) lower costs and prices, etc.]. In realisation of this, a Competition Act was passed in 2003.

16.6.1 Competition Act, 2003

In the light of international developments and the need to promote competition, the Government of India constituted a nine-member committee under the chairmanship of Shri S.V.S. Raghavan in October 1999 to recommend a suitable legislative and administrative framework relating to competition law. The committee submitted its report in May 2000. In line with the recommendations of this committee, the government enacted the Competition Act, 2003. The Act replaced the MRTP Act, with the aim of promoting competition through prohibition of anti-competitive practices.

Competition Commission of India (CCI)

The Competition Act, 2003 provides for the setting up of a Competition Commission of India (CCI) with a view to: (i) prevent practices having adverse effect on competition, (ii) curtail abuse of dominance, (iii) promote and sustain competition in market, (iv) ensure quality of products and services, (v) protect the interest of consumers and (vi) ensure freedom of trade carried on by other participants in domestic markets.

A subsequent Competition Amendment Bill (2007) seeks to make the CCI function as a regulator and give impetus to factors like: (i) quality of products and services, (ii) healthy competition, (iii) faster mergers and acquisitions of companies, (iv) regulation of acquisitions and mergers coming within the threshold limits, (v) allowing dominance with prevention of its abuse to give effect to the second generation economic reforms on the pattern of the global standards set by the more developed countries, etc. To cover these aspects, the key provisions of the Act include five sections (Sections 3 to 7): Section 3 to deal with anti-competitive agreements; Section 4 covering abuse of dominance; Sections 5 and 6 dealing with combinations (i.e. mergers and amalgamations) and Section 7 creating the CCI, the new national anti-trust agency charged with both the enforcement and advocacy functions. A brief description of these sections, by their themes, is provided below.

a) **Anti-Competitive Agreements**: This covers both the horizontal and vertical agreements. It states that four types of horizontal agreements between enterprises involved in the same industry would be applied. These agreements are those that: (i) lead to price fixing; (ii) limit or control quantities; (iii) share or divide markets; and (iv) result in bid-rigging. It also identifies a number of vertical agreements subject to review under 'rule of reach' test, defined as a test of whether the agreement will lead to an 'appreciable adverse effect on competition in India'.

b) **Abuse of Dominance**: A dominant position is defined in terms of a 'position of strength' enjoyed by an enterprise in the relevant market in India. The Act lists five categories of abuse: (i) imposing unfair/discriminatory conditions in purchase of sale of goods or services (including predatory pricing); (ii) limiting or restricting production, or technical or scientific development; (iii) denial of market access; (iv) making any contract subject to obligations unrelated to the subject of the contract; and (v) using a dominant position in one market to enter or protect another.

c) **Combinations Regulation (Merger and Amalgamation)**: 'Combinations' include mergers, amalgamation and acquisition of shares/control, when these are above the specified threshold size. The Act states that any combination that exceeds the threshold limits in terms of value of assets or turnover can be scrutinised by the

CCI to determine whether it will cause or is likely to cause an appreciable adverse effect on competition within the relevant market in India.

d) **Enforcement**: The CCI, the authority entrusted with the powers to enforce the provisions of the Act, can enquire into possibly anti-competitive agreements or abuse of dominance either on its own initiative or on receipt of a complaint or information from any person, consumer, consumer's association, a trade association or on a reference by any statutory authority. It can issue 'cease and desist' orders and impose penalties. The CCI can also order the break-up of a dominant firm.

First time contravention of the order of the CCI shall lead to imposition of monetary penalties. If non-compliance continues or the person does not pay the monetary penalties then it shall be treated as criminal offence, which may be punishable with imprisonment and/or steep monetary penalty.

The new competition law in India, despite some concerns expressed in certain quarters, is much more consistent with the current anti-trust thinking than the outgoing MRTP Act. Although the success of the new Indian model will now turn on its implementation, India would appear to have taken a very substantial step towards the adoption of a modern competition policy.

Check Your Progress 3

1. Outline the basic features of government policy towards small-scale industry sector in India.

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2. What are the two factors recognised as crucial for increasing the competitive strength of the Indian economy?

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3. Enumerate the principal features of the competition Act 2003 vis-a-vis the specific objectives set out for the Competition Commission of India.

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16.7 SPECIAL ECONOMIC ZONES

In 1980, barely a year after the Chinese strongman Deng Xiaoping initiated his country's switch over to a market economy, a non-descript town in the Guangdong province in southern China, Shenzhen, was designated as special economic zone (SEZ) by the Chinese authorities. It had virtually no modern industries worth speaking of with all the slow-paced lifestyle characteristics of backward district. Today, 28 years later, Shenzhen is a modern, sprawling metropolis with a population of more than 10.5 million and home to some elite global brands and Fortune 500 companies. In other words, crammed to the full with industries of every hue, it is now the economic heartland of China. More importantly, it showcases a model of growth that leapfrogs an underdeveloped region to a high-growth export-led powerhouse that is the envy of the world.

Today, India Inc. hopes to replicate the Chinese success story by creating its own brands of Special Economic Zones (SEZs).

16.7.1 Concept and Background

In simple terms, an SEZ is a designated free trade enclave that is deemed as a 'foreign territory' for trade operations, duties and tariffs. It has more liberal economic and labour laws than those in the rest of the country and hence has the capacity to attract foreign investments, help promote exports and create a level-playing field for domestic enterprises and manufactures to compete in the global market.

SEZ, however, is not a new concept. Since the end of World War II, SEZs, export-processing zones (EPZs) and free trade zones (FTZs) have been considered as a solution to jump-start economic development in the developing countries to catch up with their more developed western counterparts. India, too, has a long history of experimenting with varieties of export promotion schemes. Asia's first EPZ was set up in Kandla in 1965. It was followed by the Santa Cruz EPZ in 1973. Including these, a total of about eight EPZs were successively established in the country. Their performance have remained unimpressive for long owing to multiplicity of controls and clearances, lack of infrastructure and an unstable fiscal structure. In short, the very bottlenecks, which thwarted

the industrial progress elsewhere in the country, hampered the performance of these EPZs too.

EPZs and SEZs

While the EPZs are just exclusive industrial estates, SEZs are industrial townships that provide supportive infrastructure such as housing, roads, ports and telecommunication. The EPZs had little protection from cumbersome procedures and paperwork, not reducing in any way the transaction costs and procedural hassles involved. EPZs enjoyed no benefits in terms of relaxation of labour laws. In contrast, besides fast clearance for SEZ proposals, the SEZ Act allows state governments to relax the labour laws in units falling within the jurisdiction of the SEZs.

16.7.2 Debate Over SEZs

The SEZs have been an issue of intense debate. Arguments have been advanced both for and against.

Arguments for SEZs: Considering the country's creaking infrastructure, poor state of public finances and massive unemployment, getting private investment in infrastructure through FDI and setting up of labour intensive manufacturing units, should be the primary objectives of the policy-makers. **The major arguments for SEZs are therefore the following**:

- can attract global manufacturing companies;
- can bring investment into the infrastructure sector;
- can help create jobs across the country particularly for the low-skilled if labour intensive units can be promoted;
- can ease pressure on metros by creating new centres of employment;
- can ensure that risks of failure are minimised due to the stake holder interest of the private investor;
- domestic companies competing to set up units in the SEZs can have easier access to funds from foreign and Indian banks;
- can bring down transaction costs for companies;
- can make units competitive through flexible labour laws; and
- can bring in along with foreign investment, technology and managerial talent.

The major arguments made against SEZs are that the SEZs:

- lead to exploitation of the policy by fly-by-night developers;
- could result in significant revenue losses for governments;

- divert large tracts of farmland into non-performing SEZs;
- result in domestic markets becoming under-served;
- not produce world class facilities in all cases;
- not guarantee the future of units in unsuccessful zones;
- distort taxation structure, making domestic units uncompetitive in comparison;
- may not be WTO-compatible all the time.

16.7.3 SEZ Policy and Progress

The various incentives provided to manufacturers and developers under the SEZ policy are as follows.

Different incentives for manufactures include:

- Duty-free import of capital goods, raw materials, consumables and spares;
- 100% exemption on export profits for the first five years;
- 50% tax exemption on export profits for the next five years;
- 50% tax exemption for another five years on reinvested profits;
- Exemption from minimum alternate tax (MAT);
- Goods purchased from domestic tariff area (DTA) are exempt from central sales tax; and
- Exemption from service tax and capital gains on transfer from an urban area to SEZ.

Incentives for developers include:

- No duty on goods imported either from the DTA or abroad;
- Income tax exemption for the first 10 years;
- Service tax exemption for all services rendered within the SEZ;
- Exemptions from purchase, sales and turnover tax on all transactions;
- Exemption from stamp duty, registration fee and electricity duty;
- No tax on income from dividends and long-term capital gains tax; and
- 100% FDI allowed for developers.

India passed the SEZ Act in February 2005. The existing 8 EPZs were converted into SEZs. Since then, 20 more SEZs have become operational, 172 SEZs have been notified and 263 are awaiting notification. In principle, approval has also been extended to other 362 proposals. But it has not been a smooth drive. The events that unfolded in some states like West Bengal and Orissa were eye openers. These brought to the fore issues like:

i) **The issue concerned with the settlement of displaced populace**: In most of the cases, agricultural land had been sought to be acquired for raising the SEZs. The question arises as to what is to be done to those who are displaced from their land? What could be the source of subsistence and habitation for them?

ii) **Land is the only asset of value that the rural poor possess**: If land is to be acquired, how much compensation should be paid? What should be the mode of compensation? How to make sure that the compensation is not wasted away?

iii) **Is industrialisation at the cost of poor desirable?** Whether this is the right course of development that the rapidly globalising Indian economy has to go for, was the question raised here.

The above issues forced the government to revisit the SEZ policy. The new policy amended to strike a balance between the need for land for development purposes and protecting the interests of land owners and other displaced persons. It was specified that job would be provided to at least one person from each affected family. The other provisions would include training and capacity building for taking up suitable jobs and for self-employment, scholarship for education of the eligible persons from the affected families and preference to groups of cooperatives of the affected persons in the allotment of contracts and other economic opportunities in or around the project site. Adequate provisions have also been made for financial support to the affected families for construction of cattle sheds, shops and working sheds; transportation costs, temporary and transitional accommodation; and comprehensive infrastructural facilities and amenities in the resettlement area including education, health care, drinking water, roads, electricity, sanitation, religious activities, cattle grazing, and other community services. A strong grievance redressal mechanism has been prescribed, which includes Standing Rehabilitation and Resettlement (R&R) Committees at the district level, R&R committees at the project level, and the appointment of an Ombudsman duly empowered in this regard.

16.8 LET US SUM UP

Having made a conscious decision to follow the heavy-industry-led-growth strategy, India designed its industrial policy accordingly. This found expression in the form of the Industrial Policy Resolution, 1956.

Following this, the industrial landscape underwent a significant change over a period of about four decades. But the major failure of the policy was that it did not have a built-in mechanism to prompt the industry to adapt itself to the fast-changing technological scene. It therefore became imperative to liberalise the industrial sector from the multidimensional controls it was subjected to. The process of liberalisation began in late 1970s and gathered momentum with the announcement of the New Industrial Policy in 1991. Under the NIP, liberalisation, privatisation and globalisation became the three catch phrases to express its spirit. Responding to the complementary needs of liberalisation and globalisation, there has been a paradigm shift in adjunct areas of industrial policy. These find expression in the new policy by way of provisions for the small-scale industry sector, competition policy and policy relating to Special Economic Zones.

16.9 KEY WORDS

Industrial Policy : A blue print of governmental policy specifying the provisions for the industrial expansion in the country.

New Industrial Policy 1991 : A modified version of IPR 1956, in which the focus was on liberalising the industries sector from the kind of regulation and control that was the rule of law before. The underlying rationale is that by creating an atmosphere of healthy competition and support systems, productivity and efficiency of the industrial sector would be unleashed.

Competition Policy : A policy to encourage competition resulting in greater efficiency in resource mobilisation, allocation and for the achievement of maximum consumer welfare.

Special Economic Zones (SEZs) : A designated free trade enclave with liberal economic and labour laws than those in the rest of the country. Are designed to accelerate industrial growth leading to higher economic growth path.

16.10 SOME USEFUL BOOKS

Kaushik Basu (ed.), *The Oxford Companion to Economics in India*, Oxford University Press (OUP), 2008.

Bhatt V. V., *Perspectives on Development*, Academic Foundation, 2008.

Nagaraj R, *Aspects of India's Economic Growth and Reforms*, Academic

Foundation, 2008.

Reddy Y. V., *Economic Policy in India*, UBSPD, New Delhi, 2003.

Srinivasan T. N. and Suresh D. Tendulkar, *Reintegrating India with the World Economy*, OUP, 2003.

16.11 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See Section 16.2 and answer.
2. See Section 16.2.1 and answer.
3. See Section 16.2.2 and answer.
4. See Section 16.2.2 and answer.

Check Your Progress 2

1. See Section 16.3.1 and answer.
2. See Section 16.4.2 and answer.

Check Your Progress 3

1. See Section 16.5.1 and answer.
2. See Section 16.6 and answer.
3. See Section 16.6.1 and answer.

UNIT 17 INDUSTRIAL GROWTH AND STRUCTURE

Structure

17.0 Objectives
17.1 Introduction
17.2 Rationale for Planning and Priority for Heavy Industry Base
17.3 Direction of Industrial Development and Evolution of Control Regime
17.4 Growth and Structural Composition of Indian Industry
17.5 Phases of Industrial Growth
 17.5.1 The First Phase of Rapid Growth (1950-51 to 1965-66)
 17.5.2 The Second Phase of Deceleration (1965-66 to 1979-80)
 17.5.3 The Third Phase of Recovery and Revival (1980-81 to 1989-90)
 17.5.4 The Phase of Industrial Growth Under New Economic Policy (1991-2007)
17.6 Linkage Between Economic Reforms and Economic Outcomes
17.7 Let Us Sum Up
17.8 Key Words
17.9 Some References for Further Reading
17.10 Answers/Hints to CYP Exercises

17.0 OBJECTIVES

After going through this unit, you will be in a position to:

- delineate the evolutionary features of India's industrial development in the immediate post-independent years (decades);
- indicate the direction of industrial development envisaged in the initial years of planning with a thrust on import substitution leading to a phase of controlled regime;
- explain the growth and structural composition of Indian industry as it evolved over time;
- critically describe the phase-wise developmental performance of the Indian industry;
- discuss the overall performance of industrial development identifying the reasons for the variations in industrial performance during the five decade period of 1950s to 2000s; and

- provide a balanced picture based on the experience of five decades on what is required to achieve a sustained industrial growth suiting the conditions of the Indian economy.

17.1 INTRODUCTION

As you are by now well aware, development of industry is regarded as critical for increasing the employment potential and thereby the competitive strength of a country. Although this view can be regarded as conventional [particularly because a service sector led growth, bypassing the Lewisian stylisation (of a transition from agriculture to industry and then to services), is now seen as possible even in a labour surplus agrarian economy], it is nevertheless an accepted fact that the industrial base of a country should be strengthened by focused policy measures. The early thinkers and planners of independent India duly recognised this fact and laid a firm foundation for its industrial base. What was the direction and emphasis accorded for establishing an industrial base in the initial years of planning in the country? How did the industrial sector grow and what structure it came to acquire during the course of next two to three decades? To what extent it served the long term interests of the country? At which stage, a change in the direction and approach in the industrial promotion policy of the country was perceived essential? What has been the experience of adopting a radical change in the policy pursued in the initial few decades, as seen by the outcomes of the industrial performance during the course of last ten to fifteen years (i.e. 1990s and post-2000 years) in India? These are some of the questions to which the present unit addresses itself in the context of industrial performance in India.

17.2 RATIONALE FOR PLANNING AND PRIORITY FOR HEAVY INDUSTRY BASE

A study of the evolution of Indian industrial structure and its growth should imperatively begin with examining the pattern of Indian planning process immediately after independence. At the time of independence, the debate on planning was never on whether there should be planning, but about what sort of planning there should be? The broad agreement on the need for planning was in tune with the intellectual ambience of the period which reflected the state of the international economy. The Great Depression of the inter-war period had destroyed any faith in the virtue of the free market, and Keynesianism, a product of the Depression, advocated not just State intervention in demand management but the necessity of socialising investment decision. The vision of the Indian economic regime established in the 1950s had its roots in the freedom struggle. The economy had been dominated by imperial capital (i.e. international in nature and metropolitan by character) and hence

metropolitan commodity composition (undermining the needs of the large rural base) was the prevailing commodity structure in the economy. Freedom for the nationalist thinkers, who played a leading role first in the freedom struggle and later in the formulation of economic policies, therefore, meant freedom from this domination. This could not be ensured without giving priority for building up infrastructure, expanding and strengthening the productive base of the economy, setting up new financial institutions, and, regulating and coordinating economic activity to achieve the overall growth path envisaged. In terms of the strategy elaborated at that time, the State would not merely ensure a sharp increase in the rate of savings in the system, but also ensure an enhanced allocation of that savings to the heavy industrial sector in general and machine tools in particular, so as to reduce the economy's dependence on international capital and commodity markets.

When we look at the industrial scene at independence, the industrial sector was extremely underdeveloped with a very weak infrastructure base. The lack of government intervention in favour of the industrial sector was considered as an important cause of this underdevelopment. Keeping in tune with this line of thinking, export orientation was not considered to favour the country's interests. The structure of ownership was highly concentrated and technical and managerial skills were in short supply. As a result, the national consensus was that economic sovereignty and economic independence, focusing particularly on the promotion of industrial infrastructure, should be the guiding factors in the foundation to rapid industrialisation in the country.

The First Five Year-Year Plan, was essentially a collection of several projects. The plan sought to fix the growth rates in GDP to be achieved and specify the required savings rate to achieve the targeted GDP growth. This approach was based on the framework provided by Harrod –Domar Model which, in nut shell, specified the following: given the capital-output ratio and given the growth target, what is the required savings rate? The H-D model thus, in effect, gave ample scope for targeting the economic growth using *three macro parameters: viz. capital-output ratio, savings rate and growth rate of GDP.* The Second Five Year Plan marked a distinct shift in favour of heavy capital goods industries. The approach to the Second Five-Year Plan was slightly different in that it also incorporated the essentials of the Feldman-Mahalanobis structural model which emphasised on the physical aspects of investment needs. This approach, in essence, accorded importance to physical targets to be achieved subject to restrictive assumptions about transformation possibilities in terms of the three macro parameters as held forth by the H-D approach. The transformation was sought to be achieved by focusing on both domestic and foreign trade for which a certain rate of investment required was kept in view to support the domestic manufacture of capital goods. The underlying causes which pushed for such a developmental strategy were the following. **Firstly**, the basic constraint on development was seen as being an acute deficiency of material capital which prevented

the introduction of more productive technologies. **Secondly**, the limitation on the rate or pace of capital accumulation was seen to lie in the low capacity to save. **Thirdly**, it was assumed that even if the domestic capacity to save is raised by means of suitable fiscal and monetary policies, there were structural limitations preventing conversion of savings into productive investment. **Fourthly**, it was assumed that whereas agriculture was subject to diminishing returns, industrialisation would allow surplus labour currently underemployed in agriculture to be more productively employed in industries which operated according to increasing returns to scale. A **fifth** assumption was that if market mechanism were accorded primacy, this would result in excessive consumption by the upper income groups, along with relative under-investment in sectors essential to the accelerated development of the economy. Given all these perceptions, it was felt that the basic questions relating to how much to save, where to invest (i.e. the sub-sectoral thrust) and in what form to invest (i.e. in labour-intensive or capital-intensive industries) could be best handled with the help of a plan and the initial step should lay a foundation for heavy industrial base with simultaneous thrust also laid on other forms of industrial structure.

17.3 DIRECTION OF INDUSTRIAL DEVELOPMENT AND EVOLUTION OF CONTROL REGIME

The direction of industrial development in India is traced to several industrial promotion policies viz. the statement of Industrial Policy of 1945; the Industrial Policy Resolution of 1948, the enactment of the Industries (Development and Regulation) Act, 1951, the First and the Second Five-Year Plan documents and the Industrial Policy Resolution of 1956. The 1945 statement of Industrial Policy is remarkable as a originator of all the thinking on the other key industrial policy resolutions after independence. The statement also mentioned the concept of industrial licensing. Special importance was given to the development of steel, heavy engineering, machine tools and heavy chemical industries. The idea of licensing was mainly thought to be an instrument for the dispersal of industries preventing the establishment of excess capacity in only some industries and regions.

The First Five-Year Plan stated the objective of industrial planning as making good the deficiencies in production of key industrial items and initiate a developmental process which would enable the cumulative expansion of such basic production. The scope and need for development of India's industries was felt to be so great that it was necessary for public sector to develop those industries in which private enterprise would either be unable or unwilling to invest the resources required taking the risks involved. The industrial Policy Resolution of 1948 had identified certain industries to be reserved for production by the central/ state governments. For instance, production and control of atomic energy

and ownership and management of railways were to be the sole preserve of the central government. However, coal, iron and steel, aircraft manufacturing, shipbuilding, manufacture of telegraph and wireless equipment (except radios) and minerals were reserved for production by both the central and the state government undertakings.

The system of Indian industrial licensing has its origins in experiences of situations like: the post-war situation, nationalistic aspirations, socialistic leanings of the founding fathers of the country, etc. The planners and policy makers in India therefore felt the need for using a wide variety of instruments and controls to steer the course of Indian industrial development in a desired direction. However, there was always a mismatch between the expressed intentions and the outcomes from the instruments adopted for realising the plan intentions. For instance, the original intention of licensing was to use the power selectively for the promotion of important industries. It was, however, later used to control almost all industries with the result that regulation rather than development became the norm. Thus, until the recent industrial and trade policy reforms initiated in period of economic liberalisation i.e. the post-1990s, establishment of an industrial enterprise in India required many approvals from the government. Again, for instance, before making an investment, an entrepreneur had to first obtain approval from the Ministry of Industry. The granting of this approval resulted in a Letter of Intent (LoI) using which the entrepreneur could tie up the other requirements for setting up the project. If there was a need of imported capital goods, the entrepreneur had to obtain a capital goods import license from the Chief Controller of Imports & Exports (CCI & E) in the Ministry of Commerce. If there was a need for foreign technology collaboration, the entrepreneur had to obtain specific approval from Ministry of Commerce. If an entrepreneur wanted to raise capital from the capital market for raising funds for the project, he needed an approval from the Controller of Capital Issues in the Ministry of Finance. Imports of raw material and components required separate licenses which had to be obtained on an annual basis from the CCI & E. In addition to these approvals, with the enactment of the monopolies and restrictive trade practices (MRTP) Act in 1969, the firms covered under this needed to obtain separate MRTP clearance from the Department of Company Affairs. Further, resulting from the desire to promote small scale industries, as many as 836 items had been reserved for production in the small-scale enterprises. Since 1956, there was also a list of industries reserved for exclusive production in the public sector.

Around 1960s, it was realised that the system of approvals and licenses was unsuited for directing investments. The government appointed several committees to examine the industrial licensing system. Most of them identified that the licensing mechanism was not serving its purpose of channelising investments in the desired directions. For instance, the Hazari Committee (1967) observed that:

- the extent up to which the industrial licensing has served to channelise investment in the desired directions appears extremely doubtful;
- the gains in terms of balanced regional development and wider distribution of entrepreneurship are at best moderate;
- there is very little follow-up of licensing system to verify whether the approved projects fructified in time; and
- in attempting to cover almost the whole range of large-scale industrial development, licensing and other such legislative provisions have lost sight of the relative importance of different projects /products. This is to say that all applications have been treated by a similar processing process without any regard to the criticality of the projects to the economy.

The stagnation of Indian industrial production between the mid-1960s up to the late 1970s induced some serious new thinking. Towards the end of 1970s and by the early 1980s, there emerged a growing consensus that Indian industry was exhibiting a slow-down in growth due to low productivity, high costs, low quality of production and obsolete technology. Several committees were set up to suggest measures required for boosting up the industrial performance in the country. Of these, we will refer to four important committees which were set-up in the late 1970s and early 1980s which paved the way for liberalisation and in ushering an era of competition and growth.

The first is the P. C. Alexander Committee on Import-Export Policies and Procedures set up in 1977. The main recommendations of this committee included: (i) import licensing should be gradually liberalised; (ii) the scope of open general licensing (OGL) for import and sale should be expanded; (iii) actual user condition should be gradually relaxed by substituting, in the first instance, licensing with equivalent tariffs and later by focusing on reducing the 'equivalent tariffs' more and more ; (iv) the developmental role of imports should be recognised and imports should not be regarded only as a negative element in the BOP accounts and always controlled; (v) the name of Chief Controller of Imports and Exports be changed to Director General of Foreign Trade (DGFT) whose role should be one of promoting exports and managing imports so as to serve the developmental needs of the economy; (vi) the DGTD (Director General of Technical Development) and other bodies connected with licensing and control should be revamped; (vii) export subsidies should be phased out to the minimum level so that exports become competitive on their own after the initial hurdles of new markets and products are overcome; and (viii) commercial representatives (CRs) in the Indian embassies abroad should be made more professional by drawing the personnel from the business world. The liberalisation of the import policies began with this Alexander Committee Report submitted in 1978.

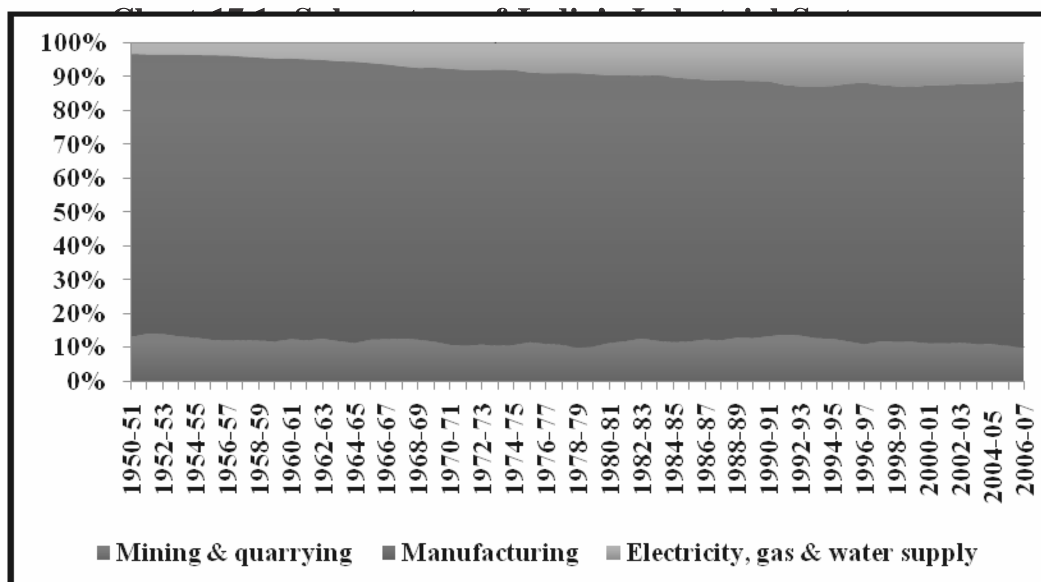
The other three important committees which are mentioned merely as illustrations of the seriousness on the part of the government (as there were indeed many more committees all of which cannot be referred here) are as follows: the Abid Hussain Committee on trade policy (1984), the Narasimham Committee on the shift from physical to fiscal control (1985) and the Sengupta Committee on public sector reforms. Each of these committees recommended an easing up of their respective area of focus i.e. trade policy, substitution of physical and quantitative controls by fiscal and other means of macroeconomic management and promotion of greater public sector autonomy in order to enhance productive efficiency and modernisation. The result of such thinking was that there was some progress in the process of deregulation during the 1980s. Under this, two kinds of delicensing activity took place. **First**, thirty-two groups of industries were delicensed without any investment limit. **Second**, in 1988, all industries were exempted from licensing except for a specific negative list of twenty-six industries. This exemption from licensing was, however, subject to investment and locational limitations.

The year 1991 was an important landmark in the economic history of post-independent India. The country went through a severe economic crisis triggered by a serious balance of payment situation. The crisis was converted into an opportunity to introduce some fundamental changes in the content and approach to economic policy- which generally began to be referred to as New Economic Policy. The response to the crisis was to put in place a set of policies aimed at stabilisation and structural adjustments. While the stabilisation policies were aimed at correcting the weaknesses that had developed on the fiscal and balance of payment fronts, the structural adjustment policies sought to remove the rigidities that had entered into the various segments of the economy. The structural reform measures introduced in the early 1990s broadly covered the areas of industrial licensing, foreign trade, foreign investment, exchange rate management and the financial sector. From the point of view of industrialisation, changes in the areas of licensing and foreign trade and investment had important implications. The thrust of the New Economic Policy has been towards creating a more competitive environment in the economy as a means to improve the productive efficiency of the system. This was to be achieved by removing the barriers to entry and the restriction of growth of firms. While the Industrial Policy of 1991 sought to bring about greater competitive environment domestically, its counterpart on Trade Policy set out in the same year, sought to improve international competitiveness subject to the degree of protection offered by the tariffs. The private sector was to be given a larger space to operate to the extent that some of the areas, earlier reserved exclusively for the public sector, were opened up to the private sector. In the New Industrial Policy of 1991, industrial licensing got abolished, irrespective of level of investment for all industries except certain specified industries for reasons related to security and strategic concerns, social concerns, issues relating to safety, overriding environmental issues, etc. The policy measures, right from its evolution to the liberalisation phase, had a distinct implication on how the entire industrial structure had evolved

and grew. The subsequent section will discuss the evolution of India's industrial structure and growth.

17.4 GROWTH AND STRUCTURAL COMPOSITION OF INDIAN INDUSTRY

The performance of industries can be assessed in terms of the rate at which the industrial output has grown over time and the changes in the structural composition of industries that have marked the industrial scene. For this, we need to understand the different sub-sectors of Indian industrial structure. The industrial sector consists of three broad sub-sectors viz. (i) manufacturing, (ii) mining and quarrying and (iii) electricity, gas and water supply. The manufacturing sub-sector, with its output share of about 80 percent in the total industrial sector, has two broad sub-divisions. One is the Factory Sector (referred to as the Registered Sector registered under the Indian Factories Act, 1948 also called as the Organised Manufacturing Sector; also called as the Unorganised Manufacturing Sector) consisting of all manufacturing enterprises. The other is the Non-Factory Sector (or the Unregistered Manufacturing Sector; also called as the Unorganised Manufacturing Sector) consisting of all manufacturing enterprises which are not registered under the Indian Factories Act. The non-factory sector covers all manufacturing units employing less than 10 workers, if using power, and less than 20 workers if not using power. It, thus, includes the household enterprises and the small-scale non-household enterprises. The share of manufacturing sub-sector in industrial output has gone down somewhat from 84 percent in 1950-51 to 80 percent in 2006-07. The share of electricity, gas and water supply has increased from 3 percent to 11 percent during the above period while in case of mining and quarrying it has declined from 13 percent in 1950-51 to 9 percent in 2006-07. The growth rates of Gross Value Added (GVA) in the sub-sectors of the industrial sector, in the agricultural sector and in the entire economy over the period 1950-51 to 2006-07 are presented in Table 17.1.



Source: Handbook of Statistics on Indian Economy, RBI

Table 17.1: Sectoral Growth of GDP at Factor Cost

(percent per annum)

Sector	1950-51to 1980-81	1980-81to 1989-90	1994-95	1999-00	2003-04	2006-07
Agriculture, Forestry & Fishing	2.1	2.9	5.0	0.3	10.0	3.8
Mining & Quarrying	4.5	6.4	9.3	3.3	3.1	5.7
Manufacturing	5.1	6.8	12.0	4.0	6.6	12.0
(a) Registered	6.0	7.5	14.4	3.7	7.2	12.0
(b) Unregistered	4.2	6.7	7.3	4.6	5.6	12.0
Electricity, Gas and Water Supply	9.5	8.8	9.4	5.2	4.8	6.0
Total Economy	3.5	5.2	7.3	6.1	8.5	9.6

Source: *National Account Statistics various issues*

It is observed that over the periods 1950-1980 and 1980-1989, each of the sub-sectors within industrial sector grew faster than the economy as a whole and the agricultural sector. Within the industrial sector the electricity, gas and water supply sub-sector displayed the highest growth of 9.5 and 8.8 percent per annum in respective periods. Although, registered manufacturing out-performed the unregistered manufacturing in both the periods, it is important to note that with much lower capital and technological inputs, the unregistered manufacturing has performed better than the agricultural and the aggregate economy's growth rates. The growth rate in the 1980s was far above than that in the earlier three decades, in all sub-sectors of industry, except electricity. The performance of the industrial sector and its sub-sectors show a distinct change in trend after the New Economic Policy of 1991 got implemented. The growth in value added for the manufacturing sector in general and its factory sub-sector sector in particular doubled in 1994-95. It, however, declined by 1999-00 but again picked up by 2007. More significantly, the unregistered sector performance equalled that of its registered counterpart in 2006-07. The experience of 1990s, particularly in the second half of that decade, needs an explanation for the sudden decline in the rate of growth in all the sub-sectors of Indian industry. This we will pick up when we look at the underlying causes of observed trends in growth rates in Section 17.5.

The most striking feature of Indian industrialisation is the extent of diversification achieved in a relatively short period. Self-reliance through the building of heavy industry was emphasised in the strategy formulated by Mahalanobis in the mid-fifties and India launched a major drive for industrial diversification. Steps were taken for the establishment of machine tool industries, heavy electricals, machine building and other branches of heavy engineering industries. In spite of some setbacks around 1965, progress in regard to diversification of the industrial structure was maintained. For quite long, since the second plan (1956-

61), the basic and capital goods industries witnessed a rapid growth during the period 1960-66. It, in fact, remained higher than the general growth rate of industries (Table 17.2). As a result, the industrial structure leaned heavily towards the capacity-building industries. This trend which started since the Second Plan was due to the high priority accorded to these industries. As against this, till 1980s, the growth of intermediate goods and consumer goods industries was moderate. Of the two type of consumer goods, namely, durable and non-durable consumer goods, the durable goods segment witnessed higher rate, comparing well with that of basic and capital goods industries.

Table 17. 2: Growth Rate of Industrial Production by Use Based Classification

(Percent)

	1959-60 to 1965-66	1966-67 to 1979-80	1981-82	1990-91	1994-95	1998-99	2002-03	2006-07
Basic goods	11.0	5.9	10.9	3.8	9.6	1.6	4.9	10.3
Capital goods	15.4	6.6	6.7	17.4	9.2	12.6	10.5	18.2
Intermediate goods	5.7	4.5	3.7	6.1	5.3	6.1	3.9	12.0
Consumer goods	4.7	5.0	13.8	10.4	12.1	2.2	7.1	10.1
Durables	11.5	10.8	10.9	14.8	16.2	5.6	-6.3	9.2
Non-durables	4.2	5.0	14.1	9.4	11.	1.2	12.0	10.4

Source: *Economic Surveys, GOI various issues*

The high growth rates in respect of capital goods and consumer durable goods industries, appear high only because the initial starting base of these industries was very low. This is to say, that a faster growth which was necessary to correct the imbalance in the industrial structure was made good by the high growth of these industries. The net result was, in fact, more than a mere correction of the imbalance with the overall industrial capacity for production becoming quite sizeable. The fast growth of the basic and capital goods industries thus contributed to the expansion of the country's capacity for production of industrial goods in general. This is indicated by the fact that the weightage to the basic and capital goods industries in the index of industrial production was (and has still remained) quite high [e.g. in the index with base 1993-94, it was 44.9%; in the index with 1980-81 base it was 55.8%]. This is a significant structural feature as it allows a country to build infrastructure facilitating other productive activities as it means larger possibilities of producing consumer goods. In fact, it is for this reason that the country is no longer dependent on imports of goods of basic importance for the economy. This has also increased the capacity of the country to produce goods which cannot be imported easily.

In this unit we are focusing on bringing out the efforts made to improve the industrial base in the country. You are already familiar from the units in the first block that plan-wise, the first plan laid exclusive emphasis

on agriculture. Also, this emphasis on the agricultural sector continued in the subsequent plans too with the emphasis on agriculture during 1970s shifting to promotion of agro-industries, agricultural infrastructure, etc. This emphasis on public agricultural investment, however, suffered during the 1990s contributing to the registering of lower growth rates in the agricultural sector in recent years.

Check Your Progress 1

1. What was the basic approach followed in the I and the II Five Year Plans to achieve the envisaged economic/industrial growth in India?

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2. What were the observations of the Hazari Committee (1967) on the industrial licensing procedure followed in India?

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3. What marked the two specific years of 1994-95 and 2006-07 in respect of growth performance of the manufacturing sector in India?

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4. What were the main recommendations of the P. C. Alexander committee on trade policies which laid the foundation for the reform process of the later periods?

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17.5 PHASES OF INDUSTRIAL GROWTH

It is necessary to understand the ups and downs of India's industrial performance by looking into the factors responsible for it. We can analyse this in four phases: the first phase of rapid growth from 1951 to 1966, the second phase of low growth (and deceleration) from 1966-80, the third phase of recovery and revival of growth in the1980s and the fourth phase of growth with a renewed vigour during the period of New Economic Policy (or economic reforms) in the1990s and beyond. An analysis of the underlying causes will enable us to understand the measures that can help promote industrial growth in a faster, efficient and equitable manner.

17.5.1 The First Phase of Rapid Growth (1950-51 to 1965-66)

There were several factors that influenced the industrial growth during this period. These factors emerged in the changed political context after the country's independence. The anti-industry attitude of the British Government before 1947 was replaced by the strongly pro-industry aims of the Indian Government. Planning came to be the medium of development. Beginning with the Second Five-Year Plan, the government gave a very high priority to the development of industries with a particular emphasis on basic and capital goods industries. This strategy dominated the scene till very recently.

Government's key role: During this phase the government played the most important role in which a number of industries were set up in the public sector. Most of these were basic and capital goods industries (see Key Words) like electricity, steel, machinery, etc. These were the industries in which the gestation period was long and required investment levels were very high, and therefore the fruits could be realised over a long term time frame. The government simultaneously undertook measures to ensure that these (and other) industries in the private sector also developed. Although little was provided in the First Plan (1951-56) for industries, the second (1956-61) and the third plans (1961-66) laid a firm foundation for industrial development. The amount of resources was stepped up from a small 3 percent of total outlay in the First Plan to as much as 30 percent in the Second Plan and 35 percent in the Third Plan. Apart from setting up industries, the government provided resources and facilities for the private sector to start industries on its own or jointly with the government, in the areas ear-marked for the private sector. Such help was extended by the establishment of public financial institutions to provide capital, large protection to domestic industries through high import duties including quantitative restrictions on imports, regulation of the use of resources to direct them along the lines laid down, etc. Activities in respect of industrial research and development were also undertaken by the government which benefited both the private as well as the public sector industries.

Expansion of private sector: The private sector also contributed considerably to industrial growth. Expansion of private sector took place principally on three counts. **One**, the entrepreneurial class, which had emerged before the freedom of the country, found further opportunities to investment as they had already gained experience in the running of many consumer goods industries. Private industries were also set up in the basic sectors like steels, machinery , etc. This enabled them to expand in the existing industries and also set up new ones. **Two**, profitability of the investment in industries increased due to measures like restriction on imports which enabled private entrepreneurs to tap domestic market without fear of foreign competition. Oddly enough, for a capital scarce country, interest rates remained low, keeping cost of investment also low. There were also many inducements in the form of tax concessions for the establishment of new industries. Large funds were also made available to this sector by the new financial institutions set up by government. **Three**, owing to industrial policy of India which permitted the entry of foreign capital under reasonable conditions, the inflow of ***private*** foreign capital increased. Most of the aid (in the form of loan on concessional terms) received from foreign countries was for industrial development. The twin benefits that India got from such aids were funds in the form of foreign exchange (which enabled India to tackle its balance of payment position which arose due to lack of exportable items) and technical know-how. A fact of important relevance in this respect is that there was spectacular growth in educational infrastructure, in the form of engineering colleges, IITs, management institutions, and entrepreneurship development institutions. This institutional infrastructural growth gave India the required strength in generating skilled manpower. The role of both the government and the private sector is notable in this regard.

It is thus evident that the state not only acted as the catalyst for the industrial growth by undertaking the task of developing industries itself, but also created an environment conducive for the private sector to contribute to the industrial development of the country. It was thus a state engineered growth.

17.5.2 The Second Phase of Deceleration (1965-66 to 1979-80)

The industrial growth experienced during the Second and the Third Five Year Plan periods could not be sustained. In fact, there was discernible reduction in the growth rates. There are several reasons put forward for this downturn which can be broadly classified into two broad categories, namely, the supply side constraints and the demand side constraints.

Supply Side Constraints

In the **first** place there were some major disturbances caused by wars (with China in 1962 and with Pakistan in 1965 & 1971), the draughts in 1965 & 1966 and the steep rise in oil prices in 1973 (first 'oil' shock).

Second was the reduced availability of critical inputs for production like power, infrastructure and raw material. Imports became costlier and fluctuations in agricultural production adversely affected the agro-based industries.

Third was the organisational weakness due to which many industries fell sick. Many industries were functioning at sub-optimal capacity owing to poor inventory control and financial management. There were losses due to work stoppage which adversely affected the production.

A **fourth** factor was the controls and regulatory measures. In the earlier years, these controls and regulatory measures were essential when saving/ investments were low. With improvement in the saving/investment ratio the controls and regulatory measures had become restrictive in character acting as impediments to industrial growth.

Demand Side Constraints Among the demand side factors inhibiting industrial growth, the principal ones are the following.

One was the declining demand due to policies of import substitution. For instance, till about the mid-1960s, industries were setup to replace imported goods. With time, the policies on this front resulted in the slow-down of industrial production. There was need for additional generation of domestic demand which did not take place. This affected the capital goods industries as it was the import of these goods which were replaced under the policy of import substitution initiated in the Second Plan.

Two, there was a decline in the growth of public sector investment resulting in a corresponding decline in the private sector investment. The gross fixed investment which grew at the rate of 12.2 percent during the period 1951-66, came down steeply registering negative growth (- 0.47 percent) during the period 1966-72. It, however, recovered to 8.0 percent during 1971-78. Since the public sector acted as the leader, there was a general slackening of investment level in the economy. Associated with this trend, there was a rise in the incremental capital-output ratio for the industrial output. What it actually amounted to was that the relative share of material and depreciation cost per unit of output went up.

Three, the weak performance of agriculture adversely affected the demand for industrial goods. The slow growth in agricultural output, for many years since mid-1960s, resulted in a decline in the demand for the products of the industrial sector. To an extent, the terms of trade, favourable to agriculture (as a result of relatively higher rise in agricultural prices in comparison with the price of manufactures), acted adversely for the industry. Barring large farmers having large surpluses to sell and benefit from it, vast number of the poor had to spend more on the purchase of food, resulting in reduced demand for industrial consumption. This also affected the demand for capital goods via saving and investment.

Four, the small rise in the per capita income and the worsening of inequalities in income distribution also caused a slow-down in the demand for industrial goods. On the one hand, there was a trend in the stabilisation of demand for consumer goods, particularly durable goods, owing to the small proportion of rich people in the country. On the other hand, large proportion of population with low buying power for industrial goods, were increasingly finding it difficult to keep up the pressure for industrial demand. As a result, the already narrow market for the industrial goods shrank further. It needs, however, to be added that these causes had operated at different times, for different periods and with varied intensities. However, cumulatively, their adverse impact on the economy was significant.

17.5.3 The Third Phase of Recovery and Revival (1980-81 to 1989-90)

The factors behind the resurgence of growth in the 1980s were exactly similar to those that contributed for its deceleration in the mid-sixties. Empirical evidence which pointed out to favourable trends included:

i) improvement in the rate of growth (and pattern) of gross domestic capital formation in general and public investment in particular;

ii) step-up in infrastructure investment and more efficient management of the infrastructure facilities;

iii) trends in the inter-sectoral terms of trade favouring the agricultural sector;

iv) increase in the use of manufactured inputs in crop production;

v) growth in per capita agriculture incomes and

vi) reforms in industrial and trade policies contributing to revival of growth in industrial output.

As a result of the above factors, there was an improvement in Total Factor Productivity which contributed significantly to growth in value added. Two other factors which contributed to the revival process are:

- role of technology and increased R&D activity and better access to imported technology under technical collaboration projects; and
- massive flow of remittances from the middle east during 1974-1980 resulting in large foreign exchange reserves which led to further liberalisation of imports.

Thus, from 1980 onwards, due to the above factors coupled with improvement in domestic political environment, industrial policy witnessed greater pragmatism. This process was further assisted by factors like: (i) a gradual loosening of controls, (ii) greater freedom to import technology, (iii) flow of foreign private capital facilitating modernisation of the manufacturing sector, etc. Greater realism in policy-making also included: (i) stepping up of public investment in infrastructure and energy

production and (ii) investment in rural development for diffusion of green revolution technology and for a 'direct' attack on poverty. The 'second oil shock' was successfully met by increasing domestic oil production and import substitution in fertilisers in a short time. The second half of the 1980s also witnessed considerable de-licensing and relaxation of import controls facilitating up-gradation of industrial technology. This was achieved by a greater reliance on the private corporate sector with fiscal incentives extended for stock market-based financing of industrial investment. Also, in the 1980s, many branches of manufacturing like automotive industry, cement, cotton spinning, food processing, and polyester filament yarn, witnessed modernisation and expansion of scales of production. As a result, industrial export growth also improved in the second half of the 1980s. Thus, the turnaround in the industrial output growth in the decade of 1980s is variedly attributed to liberalisation, improvement in public investment and private sector performance.

17.5.4 The Phase of Industrial Growth Under New Economic Policy (1991-2007)

During this phase, industry and trade policy reforms were accelerated. Public investment contracted sharply to reign in the fiscal imbalance. Financing of industrial development changed considerably as part of the financial sector reform which cut into directed lending. Although formal changes in industrial labour laws were avoided due to lack of political consensus, there were adequate signals to employers that the government would not come in the way of restructuring the industrial relations.

While the trend in the growth rate in the 1990s is the same as in the previous decade of 1980s, the yearly growth rates showed a marked difference. After an expected contraction in response to the external payment crisis in 1991-92, industrial output rebounded rapidly in the following four years, reaching a new peak in 1995-96 with an annual growth rate in output of over 14 per cent. The sharp upturn is widely credited to policy reforms leading to a liberalised and competitive industrial atmosphere. However, the expectation of further acceleration with more reforms was short-lived as the growth rate steadily decelerated in the following seven years, except for a minor improvement in the year1999-2000.

The policy initiatives of the 1990s were based in theory from the mainstream economics. They were, in principle, expected to set right what was widely believed to have been wrong with India's industrialisation effort. As the noted economist, T N Srinivasan argued, the reforms were based on an understanding of the experience of Indian development strategy since the 1950s that delivered 'neither rapid growth nor appreciably greater equity'. In the words of an yet another leading economist, Jagdish Bhagwati's views, the three main elements of India's policy framework that stifled growth and efficiency were: (i) extensive

bureaucratic controls over production, investment and trade; (ii) inward looking trade and foreign investment policies, and (iii) a substantial public sector going well beyond the conventional confines of public utilities and infrastructure. The control system followed by India has also been argued differently to imply that the industrial policy pursued was responsible for persistent fiscal deficits and periodic balance of payment crises. Although in broad terms, none of these features of the policy framework remained any more after 1991, the question that still remains to be answered is one of ***'why the growth of the industrial sector, especially the manufacturing sector's growth, slowed down in the mid-1990s'?***

The slowdown (or lack of sustained improvement witnessed in some years of 1990s) is also attributed to the delayed reforms in other complementing areas of the economy. It is argued that measures like: (i) a quick and sharp reduction in tariffs to the average levels of many Asian economies; (ii) scaling down the remaining restrictions on foreign direct investment, and (iii) removal of rigidities in the industrial labour market would deliver better fruits of reforms. If this argument is given credence, then the hastening of the reforms in the post-1990s, compared with the moderate liberalisation policies practiced during the decade of late 1970s and early1980s, ought to have improved the industrial growth rate during the 1990s. However, this has not happened as the industrial growth rates of 1980s (6.5%) and the period in post-1990s, from

Table 17.3 Growth in Agriculture, Industry and Overall GDP in India (% p.a.): 1980-2004

Period/Sector	1980-90	1991-2004
Agriculture	3.9	3.0
Industry	6.5	5.8
GDP	5.8	5.6

Source: *Atul Kohli (2006), EPW, April 1, p-1254.*

1991-2004 (5.8%), presented in Table 17.3 reveals. Notwithstanding the lower long term average in the latter period as compared to the former, it is relevant to recall from the data presented earlier in Table 17.1 that the year 2006-07 marked an yet another solitary year when both the registered and the unregistered segment of manufacturing recorded significantly high growth rates. Thus, although high sustained growth rates in the industrial performance is not observed during the post 1991-years, with the reforms in the complementary sectors (e.g. finance, insurance) introduced in the post-2000 years, the industrial growth of the decade 2001-2010, compared with the decade of 1991-2000, should be higher if the positive relationship between the pace of reforms and the economic outcomes, argued by many, holds good.

17.6 LINKAGE BETWEEN ECONOMIC REFORMS AND ECONOMIC OUTCOMES

The relevant question is therefore whether there is any evidence from theory or empirical results to suggest that we could expect a positive relationship between the pace of reforms and its economic outcomes. In a comparative experience, there is little evidence to suggest an unambiguously positive association between the scope (and speed) of reforms on the one hand and economic outcomes on the other. If one can cite cases from Asian economies as successful examples of following the expected trends, there are equally compelling cases from Latin America with adverse outcomes. Thus, there are no clear signals as to how to reverse the trend of decelerating industrial growth, for achieving sustained growths, except for the expectation that further relaxation of rigidities governing the use of capital (domestic and foreign) and labour would yield better results. Thus, the view that 'reforms have not gone far enough' bears similarity with the argument of earlier times that repeated failure of the five-year plans to meet the targets is attributable to 'inadequate planning' and 'inefficient implementation'.

Nonetheless, evidence of the economy's structural weaknesses coupled with heavy-handed bureaucracy have no doubt been among the main contributors for the stifled industrial performance in the country. The onset of slowdown can therefore be most possibly attributed to the satiation of the pent-up domestic demand for a host of import-intensive goods which could be domestically produced following trade liberalisation. The increase in domestic demand was evidently facilitated by easy access to credit, including consumer credit, in the wake of financial liberalisation. Once that pent-up demand of a transitory nature was met, industry entered the phase of slowdown in the absence of demand support (domestic or export). From a classical economic view, explanation could be related to the question raised by Arthur Lewis on manufacturing sector. His question was: 'What limits the size of the manufacturing sector?' His preliminary answer was, 'productivity of farmers whose marketable surplus will exchange for manufactures'. As India is still a large and poor agrarian economy with 3/5th of workforce still dependent on agriculture (in Bihar it is close to 3/4th), with land productivity being one-third of China's, per capita value added in manufacturing is the lowest among the newly industrialising economies and one-fourth of China's. Following Chenery's stylised fact, large countries in general have low trade ratios. India relatively has less abundant natural resources for exports and therefore industrial growth largely boils down to the size (and growth) of the domestic market. This, in turn, depends on how agriculture performs. The explanation on India's industrialisation experience of ups and downs therefore comes down to inadequate boost to domestic demand as a large volume of industrial base is rooted to agricultural inputs. This therefore poses a binding constraint on industrial growth of at least a short and medium term nature.

The long-term constraint in a developing economy is one of low savings for investment. Thus, from a variety of analytical perspectives, autonomous public investment has the potential to generate demand for industrial goods as well as improve the infrastructural inadequacies. Macro-econometric evidence also unambiguously supports the view that public investment 'crowds-in' private investment. Combining all the arguments, it can be asserted that industrial growth in India is largely dependent on the twin engines of agriculture productivity and public investment. Neither of these was functioning well in the 1990s which explains the swings experienced in the industrial performance during the decade of 1990s. Thus, before concluding the unit, we can briefly refer to the two specific performance of agriculture and public investment scenarios in support of the 'poor agriculture-low public investment' contention in explaining the industrial performance of 1990s.

Agricultural Performance: When we compare the performance of agricultural production between 1980s and 1990s, we observe that except wheat, the rate of growth of production of all other crops viz. food-grains, non-food grains, cereals, as well as rice went down. The poor agricultural performance in the 1990s was associated with the much-commented slowdown in public investment in this sector. Although an improvement in private investment partially compensated for the decline in public investment, there was a clear decline in agricultural investment. The lagged effect of the negative agricultural growth has contributed to the slow down in the growth of rural demand for consumer durables and non-durables. As the demand for industrial products, particularly the consumer durables, is significantly influenced by the rural demand, fluctuations in agricultural production has adversely impacted the industrial growth.

Public Investment: In the initial years of economic reforms, public investment – over one-half of which is in infrastructure – was deliberately reduced. The decline in infrastructure's share which had started in the second half of the 1980s particularly became sharp in the mid-1990s. Its impact was seen in the manufacturing sector's share in gross fixed capital formation (GFCF). If we take a longer time-period, we see that the share of public investment in the late 1990s, at about 30 per cent of total GFCF, had fallen close to the level at which it was in the early 1950s. The decline in public investment is seen in the precipitous fall in the growth of electricity generation (the most crucial infrastructural need for industry) from the 8-10 per cent growth per year in the 1980s to 4-6 per cent in the 1990s. This can also be seen in terms of decline in fixed investment in industry in terms of over-expansion of capacities during the manufacturing boom, slump in the capital market for new issues and rise in the real interest rates during the mid-1990s. The increase in real fixed investment in manufacturing from 6.8 percent of GDP in 1990-91 to 13 percent in 1995-96 and its subsequent decline to 7.9 percent in 2000-01 reflects the pattern of investment in manufacturing during this period.

Thus, the fluctuating industrial performance of 1990s was not only the result of exogenous factors. It is very much a consequence of the type of economic policies in general, and the gaps in the policies in the complementing sectors in particular, pursued in the country. A basic reason behind the disappointing performance is the adverse impact of import liberalisation and the decline in the role of the government in demand generation. Poor export growth in the mid-1990s made it worse. If import liberalisation results in higher efficiency through higher exports, higher production and higher employment the rationale for import liberalisation gets vindicated. But if import liberalisation (and other policies) result in inefficient production leading to lower demand with the consequent lower production and employment, then the policy needs to be seriously re-examined. If export demand is not high enough, then there is need to generate demand through other means by more government expenditure. This is what our early Indian planners had argued on the demand question. Such arguments are very relevant even today.

Check Your Progress 2

1. Mention the important demand side factors which contributed to the poor industrial performance during the 1960s?

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2. What factors induced greater pragmatism for the performance of Indian industry during the 1980s?

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3. To which factors the industrial slowdown of 1990s are attributed?

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17.7 LET US SUM UP

Over the last five decades, Indian industry has experienced major change both in its structure and growth. We saw that the Indian industry's growth experience can be divided into four different phases each of which is associated with different policy orientation. The first two decades (i.e. 1950s & 1960s) saw the importance laid on basic and capital goods industry under the Nehruvian import substitution strategy. In the subsequent decades, the intermediates and consumer goods industries grew steadily. In the initial stages the government acted as the catalyst for industrial growth by undertaking to lead the industrial development by a major public sector presence. This created a favourable environment for the private sector also to establish industries securing, in the process, foreign capital from its own account. It was thus a state engineered growth. But after mid 1960s, Indian industry experienced decline in growth due to constraints of demand and supply. The Industrial License Policy didn't serve to sufficiently channelise investment in the desired direction. During the 1980s, industrial policy witnessed greater pragmatism following a gradual loosening of controls, and a greater willingness to import technology and foreign private capital to modernise the manufacturing sector. The second half of the 1980s thus witnessed considerable de-licensing and relaxation of import controls and capital flows, contributing to the up-gradation in the industrial technology. The experience under New Economic Policy, during the 1990s, suggests that what is required for sustained growth is to nurture the demand for industrial goods, comprising of both the domestic demand (for consumer goods and investment goods) and the foreign demand (for exports). Towards this end, the growth in rural economy, both agricultural and the non-farm industrial growth, were recognised for their importance. In sum, in order that demand is fully tapped and the supply-position is also improved, it is essential that the industrial atmosphere is made efficient and competitive. This needs to be achieved by a combination of measures like abolition of controls, improvement of fiscal and monetary structure, prudency in public investment, etc. and suitable labour reforms.

17.8 KEY WORDS

Gross Value Added (GVA) : Refers to the value of total Output minus total material Inputs. If depreciation is also deducted from GVA, the value figure thus obtained is Net Value Added.

Total Factor Productivity : Refers to the residual growth i.e. growth in output minus the combined weighted growth rates of labour and capital. This is taken to indicate a host of factors ranging from technology, R&D, training, etc.

Gross Fixed Capital Formation (GFCF) : Capital formation which takes place in production units, consists of additions less disposals, to fixed assets and change in inventories. Additions to fixed assets are called fixed capital formation (which refers to the assets produced as outputs from the process of production which are themselves used in other processes of production for more than one year). Inventories consist of materials and supplies meant for intermediate input in production. The total fixed capital used in production loses its productive capacity in course of time due to wear and tear or obsolescence. The extent of loss of its productive potential is known as Consumption of Fixed Capital (CFC) which is to be compensated by acquisition of an equal amount of fixed capital in the current year. Fixed Capital Formation computed without netting for CFC is known as Gross Fixed Capital Formation (GFCF). Put simply, the term Gross Capital Formation (GCF) refers to the sum of GFCF and change in inventories. GCF less CFC is known as Net Capital Formation (NCF).

Basic Industries : Includes mining and quarrying, manufacture of fertilisers, heavy organic chemicals, cement, iron & steel, non-ferrous basic metal and electricity, etc.

Capital Goods : Includes industries like hand tools and small tools, specialised equipments, machine tools, agricultural machinery, heavy electrical equipment, electric motors, electrical cables and wires, rail-road equipment, etc.

Intermediate Goods : Includes industries like cotton spinning, jute textiles, tyres and tubes, synthetic resins and plastics, man-made fibres, dyes stuffs, products of petroleum and coal, bolts, nuts, etc.

Consumer Goods : Includes industries both consumer durable goods like automobiles, white goods, furniture, etc. and consumer non-durable goods like foods stuffs, cosmetics, toiletries etc.

17.9 SOME REFERENCES FOR FURTHER READING

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17.10 ANSWERS/HINTS TO CYP EXERCISES

Check Your Progress 1

1. See Sections 17.2 and 17.3 and answer.
2. See Section 17.3 and answer.
3. See Sections 17.4 and Table 17.1 and answer.

Check Your Progress 2

1. See Section 17.5.2 and answer.
2. See Section 17.5.3 and answer.
3. See Sections 17.5.4 & 17.6 and answer.

UNIT 18 FOREIGN INVESTMENT

Structure

18.0 Objectives
18.1 Introduction
18.2 Role of Foreign Investment in Economic Growth
18.3 Concepts Frequently Used: An Outline
18.4 Factors Influencing Foreign Investment Flows
18.5 FDI Policy in India
18.6 Trends in FDI/FII in India
18.7 Role of MNCs in Promoting FDI
18.8 Let Us Sum Up
18.9 Key Words
18.10 References
18.11 Answers/Hints to CYP Exercises

18.0 OBJECTIVES

After going through this unit you will be in a position to

- describe the role of foreign investment in economic growth;
- distinguish between the two concepts of foreign direct investment and foreign institutional investment;
- explain the policy towards the foreign direct investment in India;
- outline the factors influencing foreign investment; and
- identify the role of MNCs in influencing the flow of foreign investment to a country.

18.1 INTRODUCTION

As you are by now aware, a country needs to make lot of investment to achieve its growth targets. The first source of investment comes from 'domestic savings'. This may not be, however, adequate to meet the demand for investment. Also, in a globalised economic system, movement of capital is also liberalised. But such movements or flight of capital has a destabilising effect on the economic health of the host country. In this context, the present unit deals with the economic implications of foreign capital in India. Beginning with an outline of some commonly used terms like foreign direct investment (FDI), foreign institutional investment (FII), equity capital, portfolio investment, etc.

the unit proceeds to outline the FDI policy in India. The factors promoting the inflow of FDI and the trends (growth and pattern) of FDI flows to the country are discussed next. The importance of multinational corporations (MNCs) in contributing towards a sustained developmental process and the role of an institutional mechanism in the host country to safeguard its interest against the profiteering objectives of the MNCs is discussed towards the end of the unit.

18.2 ROLE OF FOREIGN INVESTMENT IN ECONOMIC GROWTH

Capital is one of the key inputs to economic growth. Conventional growth models (such as the Harrod Domar model) directly relate the rate of economic growth to the rate of capital accumulation in an economy. Rostow's Stages of Growth theory characterises a nation's 'take-off into sustained economic growth path' as a stage when the economy is able to enhance its national savings from under 5% of the GDP to about 10-12%. Empirical evidence also suggests that the accumulation of capital has played a very important role in the development of economies, both directly as a factor input, and indirectly, as an embodiment of technology. The importance of foreign capital thus derives theoretically from these works. Countries that are unable to save sufficiently face a capital constraint. One of the ways in which this constraint could be eased is through the import of capital from other countries. While international movement of capital gained prominence after the 1820s, the developmental role of foreign capital got recognised during the post World War II reconstruction of Europe under the Marshall Plan. Foreign capital came to be seen not only as a source for supplementing domestic capital formation, but also got recognised as an important mechanism for the transfer of technology including business organisation and institutions.

While mainstream economic theory focuses on the benefits of foreign capital to recipient countries, a significant contribution on the subject has been sharply critical of the impact of foreign capital on developing economies. In this literature, foreign capital is seen variously as an instrument of imperialism, or as a perpetrator of dependency, or of creating dualism in developing economies. They argue that the imperialists have an eye on exploiting the natural resources in the investing countries without having any real developmental objectives for those countries. They, therefore, view foreign capital as an agent for increasing the inequality both between nations and within nations. You will read more about these arguments later in section 18.7 of the unit.

18.3 CONCEPTS FREQUENTLY USED: AN OUTLINE

Foreign Investment (FI) refers to investments made by the residents of

one country in the capital assets of another country. In its strictest sense, the term 'investment' in Economics refers to changes in the stock of capital i.e. plants, machinery, construction, etc. Thus, when foreign nationals invest in establishing capital equipment in India, it constitutes foreign investment. In common parlance, this has come to be termed as *Foreign Direct Investment* (FDI). These are medium to long term investments, which add to a country's productive capacity.

Characteristically, FDI thus brings along with financial investment, access to technology and export market. Since FDI involves setting up of production base (in terms of factories, power plant, etc.) it generates direct employment in the recipient country. There is also multiplier effect of employment and income because of further domestic investment propelled in the downstream and upstream projects that gets generated in a host of other services. An example of such FDI in India is Maruti Suzuki which has been a trend setter in the automobile sector.

The above definition of FDI can thus be interpreted to characterise FDIs as lasting interest acquired in enterprises operating outside the economy of the investor. In this sense, FDI refers to a relationship between a parent enterprise and its foreign affiliate, the two together forming a *multinational corporation* (MNC). In such a situation, definitionally, for the investment to qualify as FDI, the parent enterprise should have *control* over its foreign affiliate. The international monetary fund (IMF) defines such control as owning '10% or more of the ordinary shares in the corporation' [or voting power of an incorporated firm (or its equivalent) in the destination country]. FDI can, thus, be more specifically defined as investment equal to or greater than a 10 percent *equity share* in a single firm. By contrast, portfolio investment is defined as acquisition of an equity stake of less than 10 percent.

A substantial portion of foreign funds that flow into countries these days, however, flow into secondary markets through financial instruments like equity, bonds, mutual funds, etc. Investments in such *secondary market* instruments are referred to as *Foreign Institutional Investment (FII).* The FIIs are also referred to as *portfolio investments* which are characterised by the features of investments made in secondary market with their total stake in a firm at below 10 percent. It is also important to note that the FIIs are characterised by their typically short term nature of investment, and therefore that, unlike the FDIs, are not intended to enhance the productive capacity of an economy by the creation of capital assets. On the contrary, they are made to make financial gains from differences in rates of return prevailing in the financial markets of different countries. The FIIs or the portfolio investments thus carry a potentially destabilising effect by virtue of their short term investment nature. Nevertheless, the confidence reposed by the foreign investors by way of volume of trading done in the stock exchanges plays an important role in boosting the domestic small investor's confidence in the state of health of the economy.

Equity Capital Flows: Foreign investment (FI) which flow into the country through FIIs are in the form of *equity capital flows*. The name acquires connotation from the fact that shares purchased are in terms of equity capital i.e. a percentage equity share where each share is valued at a certain rate in its current market value. Since the investments are made in the secondary market, the shares purchased are at a price higher than its original issued price i.e. at its current market value. Such purchases, which have a potential to alter the ownership structure, and carry with it implications for domestic interest like employment of workers engaged in such establishments, warrant a careful regulation, particularly in the small scale sector (or the labour intensive sector) where the majority of workers are from the '*unorganised sector*'. There is , however, a strong case being made by the private sector for '*labour flexibility*' which means that the companies should be given a free hand in their hiring and firing policies. While most Indian industries have been fully opened to FDI, with foreigners or foreign companies permitted to own up to 100 percent equity in Indian companies, India continues to limit FDI in some industries, particularly those in which the large unorganised sector of workers are engaged, by enforcing overall caps on total foreign-owned equity shares. For instance, as of March 2007, foreign investors were allowed to control a maximum of 51 percent equity in the Indian retail ventures.

The new equity capital flows in the form of FDI generally take one of two forms viz. (i) mergers and acquisitions (M&A) and (ii) green field investment. In a *merger or acquisition*, one firm acquires an equity stake in an existing foreign firm. In *green field investment*, FDI takes the form of establishment of a new overseas affiliate by a parent company. For most developing countries, the green field route is more prominent, as there are fewer existing companies available and attractive to acquire, as compared with the developed countries. You will read more about these two type of FDI, in the section on 'Trends in FDI/FIIs' in section 8.6 later.

Check Your Progress 1

1. Mention two theoretical arguments made in favour of foreign investment (FI) to developing economies like India?

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2. On what grounds do the opponents of foreign investment criticise the flow of FI to developing countries?

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3. Distinguish between FDI and FII in terms of limits on their 'equity shares/stakes'.

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4. Which of the two types of FIs (FDI or FII) is called as 'portfolio investment'? What is the implication of 'portfolio investment' to the recipient economy for its market stability?

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5. What do you understand by the term 'equity capital flow'? Distinguish between the two forms that the equity capital flows by way of FDI generally take?

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18.4 FACTORS INFLUENCING FOREIGN INVESTMENT FLOWS

Factors influencing foreign investment can be discussed under two heads: (i) those that attract or encourage FI; and (ii) those that repel or discourage FI. We discuss briefly some of the major factors that prevail in India under each of these two heads in this section of the unit.

a) Factors Favouring FI

i) *Strong Economic Growth*: The Indian economy has grown by more

than 7 percent for a number of years in the last decade. This has contributed to making India the fourth largest economy in the world in *purchasing power parity* terms. One of the main impacts of this growth is an expanding section of middle class population with higher purchasing power than the average. Even the overall (i.e. average) per capita income (by the nominal-GDP method; not the '*PPP method*'- see Key Words for a distinction) has also more than doubled since mid-1980s when it was around $310 to about $620 in 2004. The per capita income by this nominal-GDP method for India in 2007 has increased to around $ 1,000 ($ 942 by the IMF calculation for 2007 and $ 1,042 by the WB calculation for 2008). India's imports has almost tripled between 2001 and 2005, from $50.1 billion to $138.4 billion, while exports more than doubled, from $43.3 billion to $99.7 billion. The economic dynamism demonstrated by India has thus been a strong positive factor in favour of attracting FDI.

ii) *Huge Labour Force and High Educated Workforce*: With a huge labour force of close to 430 million, India has one of the largest labour force in the world. With significant facilities for education, particularly higher education, India has also the third largest number of students in higher education in the world (trailing only behind the United States and China). English is the primary language of instruction in all these institutions, which means that most educated Indian workers speak at least some English. The annual outturn of educated persons is estimated at more than 200,000 engineering graduates, more than 300,000 post graduates from non-engineering streams, and 2.1 million other graduates besides 9,000 PhDs. Although the number of educated persons are large in terms of their numbers, a significant number of workforce are uneducated forming the large 'unorganised sector' workers in the country. While this segment of workers may not be directly benefiting from the FDI flow, the fact is that the dichotomy has led to the prevalence of relatively low labour costs, particularly in the labour intensive sectors of the economy. But a majority of them are on-the-job-trained (i.e. uncertified but skilled/semi-skilled from work experience) which itself can be viewed in positive terms from the point of view of their potential for re-training, etc. This, therefore, is a positive factor in attracting FDI even to the many labour intensive sectors of the economy.

iii) *Access to Capital and Institutional Support*: While it is true that the capital market is unfriendly to the needs of a large number of poor, it is nevertheless a fact that India has a large banking system with deep inroads into its large rural country side. It is also a fact that many new schemes have been launched particularly to meet the credit needs of the large sections of the poor. This speaks for many supportive institutional arrangements in terms of promoting self employment pursuits. Thus, while the foreign investment introduces a competitive environment to 'include' the more enabled

segments of the Indian population, many programmes already in operation should be suitably strengthened to support the other part of the non-beneficiary segment who are otherwise 'excluded' from the growth related benefits accelerated by the FI inflow.

Paradox of growth related opportunities: The above enumerated advantages, however, pose a situation that can be described as a paradox of growth related opportunities. This is because, each one of the positive factors enumerated in favour of FI inflow, has also a simultaneous negative side to it. To recapitulate: (i) significant stock of educated persons is contrasted with huge illiterate and semi-skilled on-the-job-trained workforce; (ii) growing affluent middle class section is contrasted with a huge 250 million persons (25% population) subsisting below the poverty line; (iii) a small 'organised' sector presence is contrasted in the face of a predominant 'unorganised' sector labour force; (iv) well established credit market to cater to the more advantaged is contrasted with very little credit assistance available to the large disadvantaged; etc. In the face of such a dual scenario, a moot question, as the opponents to FI argue, could be on whether to encourage Foreign Investment which would only benefit the more privileged sections to the exclusion of the large underprivileged segment of the population? But as we are also aware, huge investment needed for supporting the country's growth potential cannot be met by domestic saving alone. Also, the indirect benefit which '*trickles down*' to the lower segment of the population following development at the top rung is also not something to be trivialised. In view of this, having noted the positive side of the Indian economy to promote FI inflow, we now turn to see the many critical areas of concern which thwart or discourage the flow of FIs into the country.

b) Factors Discouraging FI Inflow

i) *Poor Infrastructure*: The poor condition of India's infrastructure, in respect of insufficient power, poor roads, antiquated ports, and an overburdened rail system make it difficult for many firms to produce and deliver goods and services in a timely and efficient manner. Although the central and the state governments have achieved some success in expanding and modernising infrastructure, a significantly higher level of investment will be necessary to modernise and maintain infrastructure commensurate with international standards. India's capacity to produce electricity has fallen short of demand with the demand for electricity currently exceeding supply by 30 percent. This has led to frequent shortages and blackouts and increased costs of production. India's transport system has also lagged behind the country's rapid growth with most Indian roads being narrow, congested, and poorly maintained. Only 41 percent of the roads are paved, and of these, only 34 percent are 2-lane roads and only 1 percent are 4-lane roads. Forty percent of the rural population does not have access to all-weather roads and is thus isolated during periods of bad weather, particularly during the monsoon season. Urban areas suffer

from severe congestion with rapid growth in automobile ownership compounding the problem of inadequate roads. Insufficient funds for road maintenance leads to further deterioration of the roads. The capacity of the railway system, particularly in the highly-travelled urban areas, has also lagged behind the growth in demand for its services. Indian seaports have experienced dramatic increases in container cargo but have not expanded its handling capacity commensurately. A similar situation has occurred at Indian airports, particularly at the major international airports, where annual growth in air traffic is more than 15 percent in recent years. It has been estimated that India needs to invest at least 8 percent of its GDP annually (approximately $62 billion) in infrastructure to maintain its high rate of economic growth. Actual investment in infrastructure is estimated at around 3–4 percent of gross domestic product during the past decade. In addition, infrastructure projects are frequently plagued by long delays and large cost overruns. Projects are often started but not completed, or completed and not sufficiently maintained in the ensuing years. As infrastructure lags the economy, the effects are felt throughout the country, particularly in the manufacturing sector, where flexibility in production, low costs, and speedy transportation to market are particularly hampered by clogged roads, rail, ports and power outages.

ii) *Rigidity in the Labour Market*: Despite India's strong economic growth in recent years, the increase in employment in the organised sector of the economy has not kept pace with the growth of the labour force. This has generated national concern that the benefits of India's economic development have not been spread widely enough. The inability of the Indian economy to generate sufficient jobs in the organised sector is due, at least in part, to cumbersome and bureaucratic labour policies at the central and state levels. There are numerous federal and state laws covering labour issues, leading to administrative overlap and excessive bureaucracy. The federal (i.e. central) and state labour agencies also generally focus their enforcement activities on the organised sector, even though this sector accounts for only a small percentage (less than 10 percent) of the total Indian work force. One of the biggest difficulties for employers in India is their inability to lay off workers. The Industrial Disputes Act of 1947 and subsequent amendments govern the layoffs of workers and the closure of plants. Firms with 100 or more employees must obtain approval from the government to shut down plants and lay off workers. Approval is often difficult to obtain, although firms on occasion are able to reduce the number of employees by offering voluntary severance and retirement packages. In the past few years, however, as the Indian economy has experienced greater trade liberalisation, the governments, in an attempt to increase the flexibility and competitiveness of Indian firms, have reduced their enforcement of the Industrial Disputes Act particularly with respect to layoffs and plant closures.

iii) *Bureaucracy and Corruption*: Excessive bureaucracy and corruption discourage FDI by distorting the efficient allocation of resources, increasing the cost of doing business, and breeding mistrust of government officials. Although India has taken steps in recent years to open up more sectors of its economy to FDI, FDI inflow into the country remains hindered by government bureaucracy and corruption. Investment decisions and approval by Indian government ministries take lengthy periods of time.

iv) *State Level Obstacles*: Taxes levied on transportation of goods from State to State (such as octroi and entry tax) adversely impact the economic environment for export production. Such taxes impose both cost and time delays on movement of inputs used in production of export products as well as in transport of the latter to the ports. Differential sale and excise taxes (States and Centre) on small and large companies are a deterrent to FDI in sectors such as textiles. Investments that could raise the productivity and quality of textiles and thus make them competitive in global markets remain unprofitable. This is because they cannot overcome the tax advantage given to small producers in the domestic market. Other serious state level bureaucratic issues include land-use and environmental regulations. There are also regulatory burden of other forms like long delays in getting new connections from public sector utilities, frequent visits by government inspectors, and the payment of bribes to avoid bureaucratic red tape. The central government has made efforts to establish independent regulators in sectors such as telecommunications, securities, and insurance in order to streamline supervision below the federal level.

v) *Legal Delays*: Though India's legal system is considered by many legal experts to be superior to that of many other emerging economies, in practice, it is often found to be an obstacle to investment. One of the reasons for this is the inordinate delay in the interlocutory procedures that characterise the judicial procedures. As a result, the 'Rule of law' which has often been cited as one of the attractive features of the Indian economy for foreign investors, is often found to be a major impediment in disputes settlement by a large number of investors.

18.5 FDI POLICY IN INDIA

The Government of India, as early as in 1949, declared that it would not discriminate against foreign capital. However, in practice, right from 1951 onwards, extensive controls were imposed by the government on the flow of foreign capital, severely restricting its inflow to India. This was in line with the conscious inward looking industrial policy adopted by India in the immediate years after independence. The policy was aimed at limiting its dependence on other economies. As a result, the movement of foreign capital (and even currency) into and out of the

country was restricted leaving limited scope for foreign investment to flow into the country. Thus, in the early decades after independence, whatever financial support was received by foreign countries came in as 'foreign aid'. Consequent to the adoption of such an inward looking approach, although a certain diversified industrial structure was achieved during the early decades of independence (i.e. 1950s and 1960s), the Indian economy came to be characterised as internationally non-competitive and high-cost.

The first major shift in the policy was made in 1972, when the government permitted wholly owned subsidiaries of foreign companies to operate in India. It, however, imposed the restriction that such companies must undertake to export 100 percent of their products. With this shift, the government recognised that foreign capital was an important supplement to domestic savings for achieving technological up-gradation and industrial development in India. Despite this recognition, a focused policy to attract foreign investment for industrial expansion was not announced till 1991. The industrial policy of 1991 specifically made the following provisions to encourage the flow of foreign investment into the country.

- Approval would be given to direct investment up to 51% foreign equity in high priority industries. Such approvals would get quicker clearance if the foreign equity covered the foreign exchange requirement for the imported capital.

- Majority foreign equity of 51% holding would also be allowed in trading companies engaged in export activities.

- Automatic permission would be given for foreign technology agreements in high priority industries subject to specified limits on payment of royalty for domestic sales and exports for a period of 10 years from the date of agreement or 7 years from the commencement of the production.

A 'dividend balancing condition' for monitoring the payment of dividend was introduced initially. This was meant to ensure that outflows on account of dividend payments are balanced by export earnings. This condition was subsequently removed. Further, in 1999-2000, foreign equity limit in manufacturing was eliminated. The pace of FDI policy for industry liberalisation is affected due to resistance to speedier liberalisation from the industry and other civic/public supporters. However, liberalisation for infrastructure sector has been reasonably fast due to universal agreement on the need for FDI in this sector. Reform of domestic investment policy as well as the FDI in sectors like manufacturing and real estate has also picked up pace as the following account shows.

Special Economic Zones (SEZs): A major area of drawback in promoting FDI inflow into the country, as you read in Section 18.4 above, is poor

infrastructure. The government, by passing the SEZ Act in 2005, has taken a major initiative to remove the obstacle on the infrastructure front. In the SEZs, export oriented production units are assured of power supply and other infrastructural support (like water, good roads, transportation facility, etc.) without interruption. The SEZs also provide tax, tariff, and financial incentives by defining SEZs as free trade enclaves. SEZs allow investors to avoid many bureaucratic and administrative barriers as well. **Firs**t, the limits on foreign equity ownership that apply to certain sectors in India are eliminated in SEZs. **Second**, all investments in SEZs are administered through the automatic route, which empowers the Reserve Bank of India (RBI) to automatically approve the investment within a period of two weeks. **Third**, firms operating in SEZs do not need a license to import goods. Customs inspections are kept to a minimum in order to eliminate delays in product availability. Other administrative barriers have also been eliminated. In general, separate documentation is no longer required for customs and the administration of the Export-Import Policy. Firms in SEZs also have an exemption from industrial licensing requirements that is normally provided only to small scale industries. The simplification of these administrative procedures makes the investment process much simpler in SEZs compared to other areas of India.

Investment incentives have also been extended outside of SEZs. These are designed to channel FDI to specific industries, promote development of economically impoverished regions, and encourage exports. For instance, beginning March 2005, the government has allowed 100 percent FDI in infrastructure and construction development projects, as well as townships and housing projects, subject to minimum capitalisation requirements. However, outside of the SEZs, India's average tariff rates are still among the highest in the world. This makes India a much less attractive destination for export-oriented firms that depend on imported inputs.

18.6 TRENDS IN FDI/FII IN INDIA

FDI capital flows into India have increased since 1991, when India opened its economy. The inflows have particularly accelerated since 2000 (Table 18.1). Notwithstanding this, in 2005, India accounted for only around 2% of total FDI inflow ($334.3 billion) to the developing countries. In contrast, China in the same year could attract 22% of this total FDI. However, there has been an increasing trend in the FDI inflow to India since then (i.e. 2005). It touched $9 billion in a single year 2006 and the provisional figures for the year 2006-07 is nearly three times that of the inflow for the year 2005-06. The FDI inflow for 4 years from mid-2000s, is thus, consistently following an increasing trend.

FDI Inflow by Sectors of Investment: The distribution of FDI by its two components viz. mergers & acquisitions and green field investments

Table 18.1: FDI Inflows – 1991-2009

($ million US)

Sl. No.	Period [Financial Year: April-March]	Equity (through the FIPB-automatic route	Others*	Total FDI Inflows	%age growth over previous year
1	1991-2000	15,483		15,483	
2	2000-01	2,339	1,690	4,029	
3	2001-02	3,904	2,226	6,130	(+) 52%
3	2002-03	2,574	2,461	5,035	(-) 18%
4	2003-04	2,197	2,125	4,322	(-) 14%
5	2004-05	3,250	2,801	6,051	(+) 40%
6	2005-06	5,540	3,421	8,961	(+) 48%
7	2006-07 (P)	15,585	6,494	22,079	(+) 146%
8	2007-08 (P)	24,575	7,860	32,435	(+) 47%
9	2008-09 (April-Aug)	14,648	2,085	16,733	
	Cumulative Total	90,095	31,163	105,775	

* (includes equity capital from unincorporated bodies, reinvested earnings, etc.)
Source: *RBI Bulletin, October 2008: Table No. 46 – Foreign Investment Inflows.*

gives us a further idea on the specific sector into which the FDI flow is going. In respect of *Mergers & Acquisitions,* between 2002 and 2006, the value of top 15 major acquisitions of Indian companies by foreign companies has totalled $6.5 billion. They are split almost evenly between services and manufacturing, with 8 service sector transactions, 6 manufacturing deals, and 1 utility acquisition. In respect of *Green Field Investments,* the number of green field FDI projects in India rose from 247 in 2002 to 980 in 2006, increasing at an average annual rate of 41 percent. These projects were concentrated in heavy industry, electronics, property, tourism, and leisure sectors. By business function, the projects are spread among manufacturing, construction, resource extraction, and R&D.

Distribution of FDI by Cities: FDI inflows within India are heavily concentrated around two major cities, Mumbai and New Delhi (Table 18.2). Between 2002 and 2006, the two Cities accounted for nearly 50 percent of FDI investment. For statistical purposes, India's Department of Industrial Policy and Promotion (DIPP) divides the country into 16 regional offices. Of these, between 2000 and 2006, the top 6 regions (viz. Mumbai, New Delhi, Chennai, Bangalore, Hyderabad and Ahmedabad), accounted for more than two-thirds of all FDI inflows to India (70%) with the Mumbai and New Delhi regions together accounting for 48.3% of the total.

Table 18.2: FDI Equity Inflows by Region (Jan. 2000-Dec. 2006)

Rank	Region	FDI Inflows ($ million)	Percentage Share
1	Mumbai	7,486.6	24.9
2	New Delhi	7,045.0	23.4
3	Chennai	2,295.1	7.6
4	Bangalore	2,052.4	6.8
5	Hyderabad	1,572.2	3.9
6	Ahmedabad	970.3	3.7
	Others	8,999.6	30.1
	Total	**32,152.2**	**100.0**

Note: *Due to rounding, figures may not add up to the totals shown. Maharashtra region includes Dadra & Haveli, Daman and Diu. Delhi region includes U.P. and Haryana.*

FDI Inflow by Country

Data in Table 18.3 shows that Mauritius accounts for the largest share of cumulative FDI inflows to India, accounting for nearly 33 percent between 1991 and 2006. However, only four green field FDI projects (all from 2002) list Mauritius as the source country. This is because many companies based outside of India utilise Mauritian holding companies to take advantage of the India-Mauritius Double Taxation Avoidance Agreement (DTAA). The DTAA allows foreign firms to bypass Indian capital gains taxes, allowing them to route through a process known as '*round tripping*'. Round-tripping is, thus, a process by which a company operating in India registers a subsidiary in Mauritius, and then routes profits through the subsidiary to avoid paying capital gains taxes on its profits in India. Double Tax Avoiding Agreements (DTAAs) is thus a policy tool employed to promote its FDI inflow. These tax treaties provide relief from double taxation of income by offering exemptions for taxes in one of the partner countries. In other words, when an entity has income arising from both India and the partner country, the entity will be taxed under the tax laws of the country of residence. Under the DTAA, Mauritius has emerged as the most prominent beneficiary of India's bilateral tax treaties. Due to the local tax benefits it provides and its close historic and cultural ties (68 percent of Mauritius' population is of Indian descent) Mauritius has been a primary destination for entities interested in entering the Indian market. Operationally, under DTAA, companies planning to invest in India first establish a *holding company* in Mauritius, which offers zero-tax status to overseas corporate bodies (OCBs) and obtain a tax residency certificate to qualify for the tax treaty between Mauritius and India.

Table 18.3: FDI Equity Inflows by Country

Country	FDI Inflows April-December 2007 (US $ millions)	FDI Inflow 1991-2006 (US $ millions)	% to total of figures in column 3
Mauritius	4,215	16,000	33
U.S.	607	5,645	12
U.K.	1,682	3,662	8
Netherlands	488	2,482	5
Japan	52	2,176	5
Singapore	533	1,583	3
Germany	70	1,652	3
France	80	858	2
South Korea	62	814	2
Switzerland	47	683	1
Others	1,434	12,617	26
Total	**9,270**	**48,172**	

Source: *FDI Statistics, 2006, DIPP, GoI, Ministry of Commerce & Industry.*

It is important to note that trends in FDI is highly susceptible to market conditions which are themselves affected by factors of political and regional dimensions. We are presently witnessing a major global economic recession following a financial system collapse in the US and some western economies. You will read more about this in a post-script unit to the course: Unit 28. The consequence of this situation would alter the FDI flows in an inestimable manner whereas there was no hint or clue that such a situation would strike a few months back. For this kind of reason, the data presented in the section has not been discussed for many years of the past but kept confined to the recent few years of this decade. In an integrated economic system of the present type, national and international events has the potential to impact the flow of FDI greatly. This fact needs to be recognised in the context of analysing the trends in FDI in any country.

Check Your Progress 2

1. Mention the three factors identifiable for favouring the FI inflow to India. Write a line on each of these three factors indicating how it is favourable to FI inflow?

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2. What do you understand by 'paradox of growth related objectives' in case of India? Do you feel that the case for opposing FDI draws support from this paradox?

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3. What are the five factors identifiable for discouraging the FI inflow to India?

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4. In which year FI in India was as a matter of policy invited for the first time? What were the conditions imposed for this at that time?

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5. What are the specific provisions contained in the Industrial Policy of 1991 to attract FI to India ?

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6. How is the policy of SEZs helpful in encouraging the flow of FI to India? What are the three specific provisions by which the bureaucratic and administrative barriers are sought to be overcome in the SEZ Act of 2005?

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7. What are the five major sectors in which the 'green field investments' are concentrated in the FDI inflow to India during the years 2002-06? Which are the major cities into which the investments has largely flown into during this period?

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8. How is Double Taxation Avoidance Agreement helpful as a policy tool in promoting FDI inflow into a country?

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9. Do you think that the FDI inflow witnessed during the years 2004-08, would continue during 2008-12? If not, why not? Briefly explain in 50-60 words.

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18.7 ROLE OF MNCs IN PROMOTING FDI

Importance: MNCs are those which own or control income generating assets in more than one country. Before 1970s, MNCs were not viewed as healthy economic entities. With the changing times, MNCs have come to constitute a powerful force in the world economy. As per one estimate, the biggest 500 MNCs control about 10 percent of world trade, 80 percent of foreign investment and about 30 percent of global GDP.

Rationale: MNCs are companies incorporated in one country but located and carrying on their activities in any other country. Their decision to locate themselves in a different country is guided by the element of comparative advantage they perceive. This could be in the form of:

i) *lower costs* due to low-cost labour or laxity in rules of labour standards or environmental protection;

ii) *availability* of natural resources; and

iii) *access* to markets especially if the host country markets are protected by high import tariffs.

Case For and Against MNCs: The advantages for encouraging the MNCs to operate in a country flow from the following factors:

- The less developed countries (LDCs) have less investment potential due to which they cannot enjoy the benefits of technological superiority that comes with higher investment. The MNCs are expected to facilitate transfer of technology, besides investment, to the host country.

- The operations of MNCs are expected to have a favourable impact on the host country's balance of payment position. As 'global scanners' they possess a global marketing network through which they can promote the exports from the host countries.

- Employment generation being a function of 'rate of growth of investment and technology', MNCs are expected to generate employment opportunities especially to the more educated. There also could be indirect employment generated in the lower end services sector occupations thereby catering to an extent even to the less educated and unskilled persons. And where production units are established, there would be possibility for the promotion of ancillary units resulting in job creation and skill development for the workers engaged in those units.

- In a situation where the host country is in severe debt, the flow of foreign exchange owing to the operation of MNCs would help in debt servicing.

- Competition resulting from better work culture norms and higher productivity standards could also induce productivity related awareness for the units in the domestic economy (i.e. the host country's economy). In this context, the MNCs are known to serve as 'knowledge base' contributing to human resources development in general.

The advantages listed above are based on expectations from the functioning of MNCs. Parallel arguments may therefore be made for opposing the operation of MNCs in a developing country. Some of the arguments made in this connection are:

- ***Clash of objectives***: MNCs being private entrepreneurs, would have profit maximisation as their ultimate objective. They would therefore invest in capital intensive methods of production and service which would help the more educated and generate fewer jobs. The basic problems of addressing poverty and unemployment, the two crucial areas of concern for the LDCs, would thus not get addressed from this kind of investment from the MNCs. In effect, the already existing income inequality would accentuate further in the host country.

- ***Inappropriate Technology to Local Conditions***: The MNCs would not bother to adopt or develop a technology suitable to the conditions of the host country, but bring in the technology developed and suitable in their own country. The dependency on further supplies for services on the MNC would thus have to be contended with by the host country.

- ***Drain on Foreign Exchange***: The transfer of technology and capacity building of the human resource in the host country can, due to the above mentioned factor, remain unrealised. Further, expenses incurred by the MNCs like high fees, royalty and other charges might put a drain on the foreign exchange reserves of the host country. Thus, the expected benefits from an ease in the balance of payment situation might remain unrealised or narrowed down.

- ***Accentuating Regional Disparity***: The flow of FI, as we saw earlier from the data presented in 18.2, would be towards the regions or states which are well endowed in terms of infrastructure and availability of natural resources. This has the potential to accentuate regional disparity. In other words, it could create 'islands of development and prosperity in an ocean of underdevelopment'.

- ***Imbalanced Industrial Development***: Strong MNCs may make it difficult to compete for the local industries. This might therefore prove detrimental to the long term interests of the industrial development of the host country.

- ***Doubtful Long Term Benefit to Host Country***: As performance of MNCs testify, expenditure on scientific research or R&D could be negligible. In view of this, developing economies may not really benefit from their presence in a sustainable manner.

- ***Market Distortion***: Business operations by MNCs are observed to be anti-ethical as they frequently resort to methods like aggressive advertising, rigging bids, price fixing, etc. Such practices would induce market distortions. There are also instances of diverting high profit activities to their 100% owned subsidiaries from the simple majority equity stake affiliates.

- ***Promotion of Distorted (or undesirable) Consumption/Investment Pattern***: Production could get concentrated in items of popular consumption and non-essential items. From this sense, investments could be distortive.

- ***Capital Movement***: With freer mobility of capital, there could be frequent flight of profits and capital from one country to the other. This carries a market destabilisation effect. MNCs are often accused of indulging in 'transfer pricing techniques'. This technique refers to an accounting procedure used to register lower profits in high tax countries and transfer them to low-tax countries to disguise capital outflow and minimise tax liability.

The above arguments made against MNCs are argued to be old and irrelevant in the modern context. They are termed as 'value based and ideological' not supported adequately by empirical evidence. While in the face of growing capital requirement, international capital is a must, what is needed may be a regulatory body which can streamline investment to sectors and areas where they would be beneficial to the host economy. As we are aware, even domestic private entrepreneurs would need regulation in the absence of which they too show the tendency to involve in anti-ethical and people unfriendly practices. We therefore briefly note in conclusion the regulatory dimension of MNCs as this is what ultimately determines the degree of congruence (i.e. harmonious balance) between the profit maximisation motive of MNCs and the developmental objective of LDCs.

Regulating MNCs – Investment Commission: India has appointed an investment commission to interact with the industrial groups in India and large companies abroad. The interaction is aimed at facilitating the identification and flow of investment to sectors where adequate investment has not taken place so far. The commission also sets FDI targets and advices the government on the suitable course of action to be taken for regulating the flow of FDI to the country. For instance, on allowing the operation of MNCs in the retail sector, where there is a strong debate on its negative effects on local small traders, the commission in its report in 2006 suggested allowing FDI in retails with an investment cap of 49 percent. The commission has favoured promotion of special economic zones in areas like auto components, textiles, electronics and chemicals. It has also suggested the creation of a special high-level fast track mechanism for priority sector projects.

Thus, among the specific measures to regulate the operation of MNCs in India, the methods adopted include the following:

- **One**, the threat of nationalisation, though resorted to only in the extreme, is used to make the MNCs act in a disciplined manner;
- **Two**, allowing collaboration in certain selected sectors/industries/ regions where the operation of MNCs is favoured;
- **Three**, allowing specific period investment by including provision for gradual disinvestment after the expiry of the specified period;
- **Four**, laying down criteria for exports and following multi-tax system to suitably motivate the MNCs; and
- **Five**, to suggest carrying out a minimum fixed share of the MNCs overall R & D activities in India to ensure technology development and transfer.

Check Your Progress 3

1. Briefly state the importance and rationale of MNCs to indicate the desire of the government to allow and the interest of the MNCs in opting to invest in other countries.

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2. Mention the important reasons for which the operation of MNCs are favoured but at the same time feared by a developing country like India.

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3. On balance, taking the arguments both for and against the MNCs, what do you think should be the stand of a developing country like India in allowing the operation of MNCs in their country?

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18.8 LET US SUM UP

The importance of FI to an emerging economy like India is crucial to support its high growth potential. The policy of the Indian government has recognised this aspect, particularly during the last two decades, and taken measures to promote the FI inflow into the country. While there has been a spurt in the inflow of FDI to India since the year 2004, the overall inflow is still very low when compared to the relative flow of FDI to other developing countries in the world. The unit has discussed the factors which influence the flow of FI, the pitfalls that exist in this respect, the imperativeness of an institutional mechanism to regulate its flow in the desired directions, and the policy initiatives taken to promote the flow of FI to India.

18.9 KEY WORDS

Foreign Investment : Refers to investments made by the residents of one country in the capital assets of another country. More specifically, such investments is referred to as foreign direct investment (FDI).

Foreign Institutional Investment : Refers to investments in secondary markets through financial instruments like equity, bonds, mutual funds etc. Such investments are also referred to as 'portfolio investment'.

Equity Capital : Refers to investment made by the foreign institutional investors through the purchase of shares in terms of equity capital expressed as the percentage of ownership gained over the company by such purchases or investment.

Unorganised Sector : Refers to that part of the employees (or workers) whose employment contract is not governed by any social security provision to safe guard against illness or old age. They signify a large vulnerable section of the huge Indian labour force. To rectify this anomaly of all labour welfare measures being applicable only for the small organised sector employees, the government has recently passed a legislation to bring them under a minimum social security coverage. The long term goal of any developmental policy is to increase the share of organised sector workers meaning thereby that the

employment contracts should provide assured wages in addition to social security.

Labour Flexibility : Refers to the operational flexibility in hiring and terminating of employees depending on the need for the continued engagement of the persons in work. It is held that the Indian labour laws are unfavourable to employers in that the provisions for termination of employees' services is complex and legally binding.

PPP (purchasing power parity) per capita : Refers to the method of estimating the final value of goods and services produced with a reference to the cost of living in the country. Such an estimation is then used to arrive at the PPP per capita by dividing the estimate from the mid-year population in the country. The method is in contrast to the other method of arriving at the estimate of per capita income derived by taking the nominal value of GDP of a country. For India, the current PPP per capita is around $2600 where as the non-PPP indexed per capita is about $1000.

Trickle Down Theory : Refers to the hypothesis that development of even the top rung of the society, representing a small section of the population, allows the percolation of its benefits to those in the lower rungs by the multiplier effects of growth related benefits. In the matter of tackling poverty in India, the government in the 1970s, abandoned its faith in the effects of this trickle down theory and began an approach for its 'direct attack' through its various anti-poverty programmes.

Holding Company : Is a company that owns part (majority or all) of other company's outstanding stock.

18.10 REFERENCES

Reserve Bank of India, Annual Bulletin, 2008.

Report of the Steering Group on Foreign Direct Investment (2002), Planning Commission, Government of India, New Delhi, August, 2002.

Staff Research Study (30), Office of Industries, U. S. International Trade Commission, Competitive Conditions for Foreign Direct Investment in India, Publication 3931, July 2007.

18.11 ANSWERS/HINTS TO CYP EXERCISES

Check Your Progress 1

1. See Section 18.2 and answer.
2. See Section 18.2 and answer.
3. See Section 18.3 and answer.
4. See Section 18.3 and answer.
5. See Section 18.3 and answer.

Check Your Progress 2

1. See Section 18.4 (a) and answer.
2. See Section 18.4 (a) and answer.
3. See Section 18.4 (b) and answer.
4. See Section 18.5 and answer.
5. See Section 18.5 and answer.
6. See Section 18.5 and answer.
7. See Section 18.6 and answer.
8. See Section 18.6 and answer.
9. See Section 18.6 and answer.

Check Your Progress 3

1. See Section 18.7 and answer.
2. See Section 18.7 and answer.
3. See Section 18.7 and answer.

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UNIT 19 SERVICE SECTOR

Structure

19.0 Objectives
19.1 Introduction
19.2 Nature of Service Sector
19.3 Global Trend in Share of Service Sector Employment and GDP
19.4 Service Sector in India
19.5 Factors Promoting Growth of Service Sector
19.6 Service Sector as Engine of Growth
19.7 Sustainability of Service Sector Led Growth
19.8 Trade in Services
19.9 Let Us Sum Up
19.10 Key Words
19.11 References
19.12 Answers/Hints to CYP Questions

19.0 OBJECTIVES

After going through this unit you will be able to:

- describe the nature of service sector in terms of its concept & characteristics;
- outline the framework specifying the classification of the activities of the 'service sector';
- describe the trends in the share of service sector in GDP vis-à-vis those of primary and secondary sector;
- present the composition of the service sector (in terms of its share and growth profiles) for the sub-sectoral constituents of the service sector in India;
- explain the factors contributing to the growth of service sector;
- discuss the importance of focusing on the promotion of service sector with a thrust on its specific constituents like social and infrastructure sectors;
- explain the concept of 'service sector acting as engine of growth' vis-à-vis its sustainability arguments; and
- discuss the prospects identifying the critical need in promoting the 'trade in services' in India.

19.1 INTRODUCTION

In a trichotomised classification of the aggregate economy, the total economy is classified into three sectors viz. the primary sector, the secondary sector and the tertiary or the 'service sector'. The 'primary sector' refers to those activities which are based on the products derived from natural resources like land, water and animals. Thus, activities like agriculture, animal husbandry, forestry, fishery, and mining/quarrying are included in the primary sector. The 'secondary sector' refers to products derived by a process (e.g. manufacturing) on the products extracted from the primary sector. Thus, activities like processing, manufacturing, generation of electricity, gas, water, and construction are included in the secondary sector. The 'service sector', as the residual of the economy in this trichotomised classification, includes all those activities in which the products derived from the primary and secondary sectors are *distributed to various intermediate and final points of consumption (besides providing various other services to producers and consumers)*. Thus, the service sector includes various sub-sectors like transportation, communications, trade, commerce, education, health, finance, law & order, judiciary, etc. More generally, although the three broad sectors (viz. primary, secondary and tertiary sectors) encompass many sub-sectors under each, it is conventional to connote these three sectors by the activities of agriculture, industry and services respectively. The underlying rationale for this connotation comes either from the origins of resource for production or the basic source of inputs used for deriving the sector's output. Since most of the natural products we get are from agriculture, dairy, forestry, fishing, mining, etc. the primary sector is also called as the 'agriculture & allied sectors'. Since the secondary sector is associated with different kinds of industries, it is also broadly called as the 'industrial sector'. Since the activities of tertiary sector generate 'services' rather than goods, the tertiary sector is also called as the 'services sector'.

The present unit is focused on 'service sector'. It deals with, among others, the following aspects: (i) provide a distinction of the service sector activities in terms of its characteristics; (ii) present the composition (i.e. percentage shares) of each of the broad three sectors in the GDP of economies, and employment, with a reference to the 'stage of development of the economy' (iii) discuss the growth profile of the overall service sector and its constituent sub-sectors with a specific reference to its contribution in employment and capital formation in India; (iv) explain the importance of focusing on some of the crucial service sector constituents like 'education and health'; and (v) outline the role of its other constituents like transport, communications, etc. in providing a strong 'infrastructural base' to aid the process of economic development.

19.2 NATURE OF SERVICE SECTOR

Conceptual Evolution: Conceptually, the service sector, has been identified with the prefixed phrase '*goods and services*'. It was thus recognised as an entity having a subsequent role to servicing the goods produced or manufactured. In other words, the '*logical categories*' of their availability for consumption was accorded recognition (Hill, 1977). This specification also gave weightage to the factor of *physical proximity* between a service provider and service seeker. The subsequent developments on the service sector relaxed this notion of physical proximity (Bhagwati: 1984, 1985). The need for this relaxation was recognised because of two distinct situations observed – one that necessarily required the physical proximity and, the other, that did not essentially require it. Situations which essentially required the physical proximity were further *categorised into three groups* viz. (i) mobile provider and immobile user (e.g. shifting labour in construction sites), (ii) mobile user and immobile provider (e.g. hospital services) and (iii) mobile user and mobile provider (e.g. lectures). Still later, due to technological developments, services for which physical proximity was inessential were identified to be on the rise (e.g. banking and insurance). Such '*long distance services*' got revolutionised by the developments of communication technologies in the recent years.

The notion of services being completely *distinct from goods* has since been particularly recognised in the realm of trade. Services were here pointed out to fall into one of the three possible types viz. complementary, substitutive and independent. The three types may be exemplified by the following:

- Complementary to trade in goods: e.g. transport, insurance, banking, etc.
- Substitutive for trade in goods: e.g. maintenance and refurbishing services substituting for new goods, recorded CDs substituting for live musical performances, etc.
- Independent to trade in goods but significant to economic development in general e.g. health and education.

Characteristics: The basic characteristics of service sector are its (i) non-transferability; (ii) non-storability; and (iii) heterogeneity. The characteristic of *non-transferability* is obvious when we take the example of social sector services viz. health and education. These services are quite unlike the benefit or the utility derived from those of a good like vegetables or cars. We cannot transfer the benefits of health and education acquired by one individual to the other (or others) as they need to be *acquired by each individual* independently. We can relate the characteristic of non-transferability of the other service sectors like transportation, communication, etc. in a similar manner. Likewise, we

cannot store up the consultations of a doctor as in the case of a good. Further, the nature of consultancy on health given by a doctor, varies depending on the skill or competency of a doctor. This is to say that the nature of health service rendered is not only *heterogeneous* but are also characterised by *imperfect competition*.

Classification: The United Nations (UN) classification of service sector activities includes the following sub-sectoral distinctions identified under it:

- Electricity, gas and water;
- Construction;
- Wholesale and retail trade;
- Transport, storage and warehousing;
- Post and telecommunication;
- Financial institutions;
- Insurance;
- Real estate;
- Business services;
- Rental and leasing of machinery and equipment;
- Public administration and defence;
- Sanitary and social services;
- Community services including education, research, scientific institutions, medical, professional and labour associations, radio and television broadcasting, entertainment services; and
- Personal and household services.

19.3 GLOBAL TREND IN SHARE OF SERVICE SECTOR EMPLOYMENT AND GDP

Development theory identifies three stages of sectoral transition (Clark and Fourastie). The first stage is when the primary sector is the dominant sector both in respect of labour-share (i.e. employment) and contribution to GDP. The second stage is the one in which manufacturing sector assumes dominance. In the third stage, the tertiary sector takes the

lead. The three stages, particularly in respect of employment share, are theorised to follow the sequence of primary to secondary and then on to tertiary. The underlying rationale in the proposition is that the agricultural sector would initially support large labour, though with lower productivity. After a certain stage, however, owing to lower productivity of agriculture based occupations, the continued dominance of agriculture sector would become unsustainable. This is the stage in which the industrial sector would take over to provide more jobs with incomes higher than those in the agricultural sector. In the third stage, the demand for more 'services' would increase. This stage of service sector dominance is more observed to be in its contribution to GDP rather than employment. This is particularly the case in developing economies like India where the proportion of skilled workers is less. An underlying condition for the effective transfer of labour, along with the contribution of income to output (i.e. GDP) is therefore that, the labour force of the country should be more skilled. Such skills are defined to require minimum of eight years of schooling followed by some vocational skill considered 'marketable'. This is basically attributed to higher technological inputs in the modern sector jobs generated first in the industry, and then in the service sector. Economies would therefore have to plan for expanding the educational and training services (besides the health services) in the absence of which the sectoral labour transfers with the expected productivity improvements would not materialise. The evolution of sectoral shares in income and employment, over the decades of 1950s and 60s (studied by Kuznets and Chenery, among others) supported the above proposition of the income transition from the primary to the secondary followed by a service sector led growth.

Analysis of more data on development which became available for the post-1970s, however, suggested that as the economy matures, the sectoral shares of income given up by agriculture is taken up more by the service sector than by the industries. The share of industries, although would increase in the first instance, either gets stabilised or even declines in some cases. In this path of development, which is different from the Kuznets-Chenery observed path, there would be two stages of development corresponding to the level of income (per capita income) enjoyed by the economy. The economies, for the purpose of this classification, are classified into four stages viz. the low income stage, the lower middle income stage, the upper middle income stage and the high income stage. In the first stage of transition, from the 'low income' stage to the 'lower middle income stage', the share of income of both industry and services would increase. In the second stage of transition, from the upper middle income to higher income levels, the share of industries would either stabilise or even decline while that of only the services would increase. One possible explanation provided for this is

that in an integrated economic system (or globalisation), manufacture could get based wherever there is comparative advantage for setting up the production base. A popular example is the setting up of Maruti Udyog Limited as also many other BPO (business processing outsourcing) units in India known for its relatively cheap labour and good English speaking youth population. This path of development is thus one in which two trends are evidenced: (i) the industrial employment and its income contribution to GDP would first increase but then get stabilised at a certain level, and (ii) any employment generated in the services sector, when it becomes the dominant contributor to GDP, would go to the more educated workforce in the economy. The experience of India, as will be revealed by the data presented in the subsequent section, shows that the Indian economy has followed this path of sectoral transition in which although the service sector has come to dominate in terms of its contribution to GDP, no significant shift in the sectoral distribution of workforce towards the industrial and service sector has resulted. In other words, the economy continues to be dominated by a huge workforce subsisting in the low productive agricultural sector with moderate shift in industrial employment and income.

19.4 SERVICE SECTOR IN INDIA

Depending on the share of income in the GDP of a country between the three sectors of agriculture, industry and services, a broad classification of global economies is made by the World Bank and published in its World Development Report. The source classifies the economies into four segments viz. (i) low income economies; (ii) lower middle income economies; (iii) upper middle income economies; and (iv) high income economies. The benchmark adopted is the per capita GDP of the countries. For transition from the low income stage to the lower middle income stage the benchmark adopted in 2006 was $935. The per capita GDP is measured by two methods viz. (i) the nominal GDP method and (ii) the PPP (purchasing power parity) GDP method. The PPP method is considered more realistic as it is adjusted for differences in the cost of living of the countries. India's per capita GDP, for the year 2007, as per these two methods was $942 and $2,563 respectively. India thus falls in the 'lower middle income' stage of economic development irrespective of the method by which the estimated per capita GDP is considered (vide note to Table 19.1). The global average of the share in income by the 'service sector' to the GDP of a country, in the course of transition from the 'low income stage' to the 'lower middle income' stage, is 48 percent. The sectoral income share of GDP by the service sector for India crossed this stage in the late 1990s (Table 19.2). However, the sectoral share of GDP of the primary sector, till the early 2000s)

Table 19.1: Global Averages of Sectoral Shares in GDP (%)

Income Level	Broad Economic Sector			Transition Stage
	Agriculture	Industry	Service	
Low Income	24	32	45	Stage I
Lower Middle Income	12	40	48	
Upper Middle Income	7	33	60	Stage II
High Income	2	29	70	
India's sectoral distribution (early 2000s)	24.3	21.6	54.2	

***Source**: WDI (world development indicators), World Bank.*

***Note**: In 2006 (Source: WDI, 2008) , the classification was based on the following incomes range: low income countries: $935 or less; lower middle income countries: $936-$3,705; upper middle income countries: $3,706-$11,455; and high income countries: $11,456 or more.*

Table 19.2: Sectoral Share of GDP in India (%): 2000-2006

Year	Primary	Secondary	Tertiary	Share of Manufacturing in Secondary
2000	25.3	25.4	49.3	14.7
2001	24.3	25.9	49.8	15.2
2002	24.4	25.2	50.5	14.8
2003	21.9	25.9	52.2	15.2
2004	22.2	25.7	52.0	15.0
2005	22.8	26.0	51.2	15.1
2006	19.9	26.1	54.0	15.2

***Source:** CSO (Ministry of Statistics and Programme Implementation)*

was two times and that of the secondary sector nearly half of the global average. However, since then, there has been a further reduction in the primary sector's share and a marginal increase in the secondary sector's contribution to the GDP of the country (19.9 and 26.1 percent in 2006 respectively: Table 19.2). Further, although the share of primary sector employment has come down over the years, the sector still supports a

Table 19.3: Sectoral Share (UPS/CDS) in Employment in India (%): 1983-2005

Year	Primary	Secondary	Tertiary
1983	65.6 (66.1)	14.4 (14.2)	20.0 (19.7)
1988	63.3	16.1	20.6
1994	61.9 (61.8)	15.2 (15.1)	23.0 (23.1)
2000	59.1 (57.3)	16.2 (16.9)	24.7 (25.9)
2005	55.1 (52.7)	18.8 (18.8)	25.9 (28.5)

Source: *NSSO.*

Note: (i) Figures within brackets are of the CDS segment; those outside, are for the UPS segment. (ii) For a distinction of these two concepts of measuring employment, see Unit 25 of the course.

significant 55 percent of population (in 2005). The secondary sector's share of employment, on the other hand, has increased by about 4.5 percent over the last two decades. The change compares unfavourably with the corresponding changes in the other Asian economies over the period 1970-2000 [e.g. Korea, 14.5%; Thailand, 10.2%; China, 9.2%; Phillipines, 7.2%; India, 2.4%; Mazumdar, (2006)]. The magnitude of change in employment share for the service sector is higher (5.9 percent for the UPS segment, and 8.8 percent for the CDS segment: Table 19.3) than that in the secondary sector (4.4% & 4.6% respectively). However, as mentioned before, new jobs generated in industry and services are more skill intensive for which focusing on the educational sector needs of the country is crucially required. We will revert to this aspect in a subsequent section of this unit.

19.4.1 Sub-Sectoral Performance in Services

The sub-sectoral performance of service sector constituents, for the period 1981-82 to 2006-07, shows that only two sub-sectors viz. communications and banking & insurance have improved their income shares (contribution to GDP). While communications has increased its share from 1.8% in 1981-82 to 7.5% in 2006-07, banking & insurance has increased its share from 6.5% to 11.3% during this period of quarter century. Barring these two sectors all other sub-sectors (viz. trade, hotels & restaurants, railways, other transport, storage, real estate, public administration, other services) have either declined in their share or at the most maintained their levels. However, plan-wise estimates of growth rates show that the 'overall service sector' consistently grew at 7 percent during both the Eighth (1992-97) and the Ninth (1997-02) plan periods and at 7.6 percent during the Tenth Plan period (2002-07). Such a consistent overall growth for a fairly long period of 15 years speaks of the continued demand for the service sector activities (or industries) matching the trend in the increased income generation in its constituent

sectors. In particular, during the recently concluded Tenth Plan Period, the important sub-sectors which posted higher than this overall average of 7.6% growth are: communications (22.1%), transport other than railways (11.4%), trade and banking & insurance (9.3% each), hotels & restaurants (9%), real estate (8.3%) and railways (7.7%). Thus, barring the sub-sectors of storage and public administration (which grew at 5.6% and 5.2% respectively), all other sub-sectors have grown at more than the average growth of the service sector in general.

While the sub-sectoral growth rates indicated above are with respect to income (i.e. GDP share), for a labour-surplus economy like India, the employment content of growth in income is more important. This is provided by employment elasticity defined as 'the ratio of growth rate in employment to that in income/output'. During the period 1999-2000 to 2004-05, the latest periods for which data by NSSO are available at present, the sectors which have registered highest employment elasticity are: (i) financing, insurance, real estate and business services (0.94%); (ii) construction (0.88%); and (iii) trade, hotels & restaurants (0.59%). Although 'construction' is a part of secondary sector, it provides boost to many service sector industries principally 'transportation'. Further, despite the increased capital intensive methods being adopted in construction particularly in the urban side, quite an amount of unskilled labour find jobs in many public work projects in rural areas. Given that jobs in sectors like finance, banking and IT are likely to be more skill intensive, service sub-sectors like (i) transportation (through construction), (ii) real estate and business services, and (iii) trade, hotels & restaurants are more suitable for jobs to the less skilled.

Check Your Progress 1

1. Distinguish between the primary, secondary and the tertiary sectors of the economy.

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2. Mention the different characteristics of the services sector? What is the particularly significant distinction accorded to the services sector by the developments in the 'realm of trade'?

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3. In what respect the pattern of economic transition of the post-1970s differ from that suggested by Clark and Fourastie?

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4. What is the income level in which India can be placed in the global classification of economies? What position has the 'services sector' in India occupied in this respect?

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5. Mention the service sector sub-sectors which have registered higher growth in the recent years. Which of these show a higher employment content and why?

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19.5 FACTORS PROMOTING GROWTH OF SERVICE SECTOR

Factors determining or promoting service sector can be broadly classified under three heads viz. (i) demand side factors; (ii) supply side factors; and (iii) other factors.

Demand Side Factors: Under this, the following factors have an influencing effect on the growth of service sector.

- *High income elasticity of demand* for service sector oriented goods has a positive effect in boosting the demand for services. For instance, automobile industry has both forward and backward linkage for services. Outsourcing of spare parts required would generate demand linked to backward linkage while the after sales service needs would generate demand linked to the forward linkage. With a rise in income, the demand

for such goods would increase. With increased demand, the service sector related activities also would get a boost.

- As economies grow and become more specialised, firms increasingly *contract out* several functions which they were earlier carrying out themselves. The process of contracting out jobs to industries (such as in the case of automobile industry) leading to first coming up and then their further expansion over time is called '*ancillarisation*'. Likewise, jobs contracted out (e.g. security, accounting, legal services, office maintenance, housekeeping, etc.) are referred to as '*splintering*'. Splintering, by increasing the demand for services inputs in production, boosts the growth of service sector in two dimensions. **One**, by contributing to the growth of service sector faster than that of other sectors in the economy, and **two**, by increasing the share of service sector in GDP even if the GDP itself is not growing.

- Increased *trade* is another factor which can contribute to boosting the demand for service sector activities. Trade promotes the setting up of multinational companies in a free market economy. *Changes in technology* which is a feature of greater trade promotion, and which in the recent past has enabled the delivery of services across countries at a very low cost, has contributed to expansion of world trade significantly. A popular example in this respect is the outsourcing of IT related services which depends upon the demand generated through the policies in other countries.

Supply Side Factors: The supply side factors influencing the growth of service sector include the following:

- *Higher inflow of FDI* in services lead to higher demand for services. This could be by way of enhancing the scope for locally produced services deriving the benefit of *scale economies*. This could, however, be also viewed as a demand side factor contributing to the growth of services.

- *Availability of improved technology* results in reduction in costs of providing services which, in turn, boosts the share of services in GDP.

- *Availability of trained/skilled/English knowing labour force*, which is vitally required to take advantage of the emerging opportunities in the service sector.

Other Factors which can provide a boost for the growth of service sector include: (i) new activities or products emerging out of technological developments (e.g. internet services, cellular telephony, credit cards, etc.); (ii) policy changes removing impediments to the growth of the sector (e.g. increasing the FDI cap, lowering of import tariffs, etc.).

19.6 SERVICE SECTOR AS ENGINE OF GROWTH

A sector is regarded as the 'engine of growth' (or a key sector promoting growth), if it generates maximum impulses (backward and forward linkages based) for further growth in the economy. Viewed from this angle, the factors from both the demand and supply sides discussed in section 19.5, accord the service sector in India the status of the engine of growth. Further, as observed from Table 19.3, the increase in the 'current daily status' (CDS) employment of the service sector between the years 2000 and 2005 is higher (2.6%) than in the 'usual principal status' (UPS) employment (1.2%). While you will be studying the conceptual aspects of the employment measurement later in Unit 25, you may note at this stage that while the UPS employment refers to its more regular feature, that of CDS refers to its hourly employment characteristic. The trend in CDS employment growth is therefore supportive of the growth in employment suitable to the less skilled workers (many of whom subsist on hourly employment income) such as those engaged in sectors of trade and transport. Thus, in a comparative perspective of inter-sectoral shares, the service sector in India has not only come to occupy a significant share in income, but its share in employment also has increased particularly during the post-reform years (to 28.5% in 2005 from 20% in the beginning of 1990s: Table 19.3). More particularly, the increase in the CDS employment of service sector between the years 1994-2005 is higher (5.4%) than in the secondary sector (3.7%).

19.6.1 Reform Measures Needed to Boost Expansion of Employment

Notwithstanding the trends in CDS employment, there is a contention that the growth in jobs in the service sector is biased towards 'knowledge intensive jobs'. This contention is made in the context of service sector growth propelled by IT revolution. Although it is true that the Indian service sector has gained its 'engine of growth' position due to the significant contribution of IT sector (including IT exports), it is also true that less skill intensive service sector constituents have also grown significantly during the recent years (vide Section 19.4: transport other than railways, 11.4%; hotels & restaurants, 9%). Nonetheless, as of now, the workforce distribution in India continues to be heavily concentrated in the primary sector. The ability for higher absorption of the surplus workers presently dependent on the primary sector is considered higher in labour intensive manufacturing than in services. The underlying rationale for this view is that on-the-job training of the less educated is possible more in manufacturing than in services. With this in view, the *areas which are required to be focused upon* for job expansion in a manner which caters to the needs of the current labour force in India are the following.

- In the context of Indian economy, much of the growth in the service has come from the 'informal services' where the wages and productivity are often low. Six largest service sector industries which have accounted for the bulk of the service sector's contribution to GDP are: distribution services, public administration, real estate, community services, transport (other than railways) and banking. Since bulk of the Indian workforce continues to depend on primary sector activities, job creation concentrated in service industries like banking, insurance, public administration, and IT (information technology) cannot absorb the vast majority of surplus primary sector workers in the economy. This requires policy to promote faster expansion of the traditional labour intensive industries along with suitable measures to promote high end sectors like that of IT to cater to the needs of our huge educated workforce.

- Promotion of labour intensive manufacturing requires suitable measures to remove the current provisions in the laws that discourage its expansion. Under the Industrial Disputes Act (IDA) (amended in 1982), firms that employ 100 or more workers cannot layoff or retrench the workers easily. This has deterred large scale investment in labour intensive manufacturing segments in India. To circumvent this hurdle, large firms have focused on promotion of skilled-labour intensive or capital intensive sectors. Workers of such skill intensive sectors are basically white-collared who are not covered by the provisions of the IDA. To promote investment in labour intensive technology, labour flexibility measures allowing the right to retrench workers with 'reasonable severance compensation' are needed at least selectively. Increased labour flexibility norms would no doubt contribute to increased casualisation of workforce reducing the overall job security in the labour surplus economy. A policy taking into account the need for a balanced view in this regard is needed.

- Although industrial output is far more tradable than services in general, in particular, the IT services have a large tradable component. However, the share of IT and IT-enabled services account for only 0.3% of India's GDP. Given this tiny share, the IT and the IT-enabled sector has by itself made only a miniscule contribution to the growth of services in terms of its overall employment share in the economy. Notwithstanding this, a most important potential bottleneck faced by the Indian IT sector is the state of higher education in the country. Only 6% of Indian youth between the age of 18 and 24 years go to college. A tinier fraction of these emerge out with the skills necessary to perform the tasks related to software and IT-enabled services. If the growth in the IT sector is to be sustained, fundamental changes in India's higher education policy is required.

- Any expansion in the education sector reforms would bring us to the issue of government's ability to invest more. Questions that arise are: whether it is the responsibility of the government alone to invest

in education and whether or how to allow the private sector to play its part in the education sector? The fiscal deficit of more than 10%, despite the increasing savings rate beyond the 35% GDP level, is leaving very little scope for enhanced governmental investment in the education sector. Under the circumstances, the proportion of GDP spent on education has progressively declined over the last several decades. Two complementary options in this respect are: (i) allowing the entry of private universities into the market and (ii) introduction of tuition fees in public universities for those who are capable of paying. In the light of acknowledged high private returns to higher education, it is argued that there is a good case for the introduction of significant tuition fees in public universities to generate funds for the expansion and improvement of the quality of higher education in the country. Introduction of 'student loans' through banks is an important step initiated in the recent past in this regard.

- Indian industry, to compete internationally, needs better infrastructure. In labour-abundant economies such as China and India, FDI is attracted principally to industry to take advantage of lower wages. *Poor infrastructure (like power, communications, transport) not only hinders rapid industrialisation but also imply lower level of FDI inflow*. Speedier movement of goods requires construction of reliable roads, a modern trucking industry, and the removal of restrictions on interstate movement of freight carriers. It is therefore important to focus on improving the infrastructural sector in India to attract more investment.

- Lastly, along with educational sector reforms, we need to focus on improving the health determinants of our vast undernourished population. Social sector reforms, a term used to indicate the educational and the health sectors combined, are thus crucial. You will read more on this sector in Unit 24 of this course on 'Education and Health'. Thus, as mentioned in the beginning of this unit, focusing on the social and infrastructural sector reforms is very important to sustain the growth under the prevailing socio-economic circumstances in India.

Check Your Progress 2

1. What are the three factors identified from the demand and supply sides to influence the growth of service sector in India?

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2. Do you think it is justified to regard the 'service sector' as the 'engine of growth' of the Indian economy?

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3. Mention the six important areas in which reform measures are needed to accord the desired sectoral thrust for the Indian economy.

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19.7 SUSTAINABILITY OF SERVICE SECTOR LED GROWTH

The sectoral increases in income in the developed economies have always been accompanied by its simultaneous ascendancy in employment. This has given rise to the apprehension that since the industrial sector in India has lagged behind in assuming its fair share of employment and income, the present trend of 'service sector led growth in income' may possibly be reversed sometime in future. Moreover, the manufacturing sector in India is strongly dichotomised into a large and significant 'unorganised sector' (significant because it supports three-fourths of total employment in manufacturing) coexisting with a small but dominant 'organised sector' (dominant because it accounts for two-thirds of income-share in total manufacturing). The service conditions and income of the two segments are highly variant with the unorganised sector having survived entirely on its own quite often under adverse circumstances (e.g. trade, hotels & restaurants, transportation). A strong view of the planners and thinkers was that the growth in the 'organised manufacturing sector' (OMS) would sustain the growth in the 'unorganised manufacturing sector' (UMS) by virtue of their backward linkages. This growth was expected to contribute to increased employment share of service sector as manufactured goods would generate demand for services. The experience of last two decades has, however, shown that the growth of OMS has been largely 'job-less'. In the light of this, the growth of service sector witnessed in India, attributed mainly to IT sector progress, is not considered suitable to generate employment of a type needed for the large low skilled numbers in the labour force. This has given an added dimension to suspect the

sustainability of service-sector led growth in the Indian economy. Whether such a growth path is leading to higher income inequality and wealth has been among the factors for the concern on the 'sustainability proposition' of the service sector in India. In the light of these factors, it is necessary to know the arguments for and against made on the sustainability of service sector led growth in India.

19.7.1 Arguments for Sustainability

- The ability to compensate for industrial failure with services success is a strength and not a weakness. In a globalised economic system, rather than services following and supporting manufacturing, manufacturing is seen to flow to those countries where services infrastructure is well developed and efficient.

- The argument that services lack innovation and are merely consumers of innovation in manufacturing is not true. On the contrary, innovation in services have come to take the form of 'how, where and when a service can be delivered more efficiently'. Productivity enhancing investment in ICT (information and communication technology), growing tradability in services, etc. are among the factors contributing to innovation in services.

- The increased use of consumer durables is expected to increase the demand for intermediate services like servicing and repairing of household equipments. The emergence of a broad based prosperous middle class (in India) and an ageing population in developed economies has the potential to generate additional employment in the services. An example for the latter is the demand for health services due to the relative low cost of healthcare services in India.

- The externalisation of non-core activities, which is one of the contributing factors for the growth of service sector, is believed to be the engine of service sector growth. Such externalisation influences the growth of small business services leading to employment generation of the less skilled type.

- With the increased complexities of modern industrial organisations, manufacturing has become more service intensive both upstream (e.g. design and R&D) and downstream (e.g. marketing and advertising). Competitive advantage of a firm depends more on providing specialised services like after-sales facilities.

- Increasing incomes would lead to change in lifestyle inclined towards higher leisure spending. This would generate multiplier effect of employment in services by the promotion of tourism, hospitality and transport sectors.

19.7.2 Arguments Against Sustainability

- Historically, argument against sustainability of services dates back to

Adam Smith who held that 'services perish at the very instant of performance'. However, the concept and scope of the service sector of Adam Smith's time are quite different from those of today. Thus, although the view of the classical economists on the present day service sector is no longer absolutely relevant, their view nevertheless needs to be noted as in many cases they continue to be relevant even today (e.g. doctor's advice to a patient, goods transported from one place to the other, etc.).

- The simultaneous ascendancy of employment in the sectors, witnessed in the developed countries, is pointed out by Fisher and Clark as due to the low productivity characteristic of service sector. Higher productivity in industry was visualised to raise wages in services disproportionate to its own productivity level. This could lead to increased costs and prices of services relative to goods.
- Growth of income faster than employment could have serious implications for inflation and income distribution.
- The dominance of services is attributed to factors such as increasing role of government in economic planning and administration. We have to therefore separate this kind of service sector from the other categories such as banking, finance, IT and communications (ITC) sectors which are essential for sustaining high growth in the economy.

Notwithstanding the above arguments for and against the service sector led growth and its sustainability, there is a realisation that the system of estimating national income is geared more towards the measurement of goods than that of the services. There are also difficulties like: (i) difficulty in capturing the service activity or the problem of its quantification; (ii) difficulty in aggregation of service sector activities due to their characteristic of heterogeneity; (iii) non availability of market prices for some publicly provided services; (iv) difficulty of identification rendered further complicated by non-availability of appropriate deflators (which are required for making temporal assessments of change in the value of the services); and (v) poor quality of data on services as a consequence of the reasons spelt out above. Thus, all these factors have contributed to the low measured productivity particularly in many of the IT-enabled services. This situation is known as the *Solow Productivity Paradox*.

19.8 TRADE IN SERVICES

Trade in IT and IT-enabled services, the latter referring largely to BPO services, has been the main driver of growth in India's 'trade in services' in recent years. The total turnover of the industry is estimated to have increased ten-fold between 1998-99 and 2007-08, from about US $ 6 billion to nearly US $ 64 billion. Exports too have shown phenomenal growth from US $ 2.7 billion to over US $ 40 billion during this period.

Direct employment is estimated to have risen from 2,30,000 in 1998-99 to nearly 2 million in 2007-08. Of this, the export segment accounted for over 1.5 million. Projections of growth during the XI Plan indicate that the exports in the year 2011-12 will be US $ 86 billion with a direct employment potential from exports of 3.4 million. IT and BPO services revenue as a percentage of the overall GDP is estimated to have grown from about 1 percent in 1999-2000 to over 4 percent in 2007-08. Including IT hardware the percentage of revenue has increased from 1.8% to 5.5% during this period.

IT services constitute more than half of total IT exports with BPO accounting for about 27 percent. Beginning with basic data entry tasks, the BPO sector has acquired a reputation as the primary low-cost destination for voice-based customer contact/support services, finance and accounting, and a range of back-office processing activities. Among the sectors serviced by India's IT-BPO sector, those that account for the largest share of revenue are banking, financial services and insurance (40%), hi-tech/telecom (19%), manufacturing (15%), and retail (8%). Other important industries being serviced by the BPO segment are travel and hospitality, auto manufacturing and pharmaceuticals.

The IT and BPO industries have a large growth potential as only about 20 per cent of the 'potentially addressable market' had been captured in 2007. The addressable market in global offshore IT industry is estimated to be of the order of US $ 220-250 billion and in the BPO segment US $ 160-190 billion.

The estimates of critical manpower required by India to support the IT-BPO sector is placed at about 1.8 million graduates. This is more than the combined talent pool in China and Russia. However, even to enable India to maintain its current share of worldwide IT-BPO business, a gap between the demand and supply of suitable graduates is expected to be faced soon. One reason for this is the low proportion of fresh graduates who are employable in the sector. Assuming that about 25% of engineers are suitable for IT jobs, 15 % of commerce graduates for employment in BPO finance and accounting work, and 10 % general graduates for other BPO work, the industry assessment is that 100,000 additional graduates will have to be available beyond the projected supply each year. If India is to enhance its competitiveness and increase its share of worldwide IT- BPO business, the requirement will be a far larger number of graduates. This calls for expansion of relevant higher education and training facilities in the country.

Check Your Progress 3

1. What are the factors put forward to support the 'sustainability proposition' of service sector led growth in an economy?

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2. What are the factors based on which the 'sustainability proposition' of the service sector led growth is doubted in an economy?

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3. Which are the two sub-sectors that are in the fore front of driving the growth of India's 'trade in services'? What supportive or encouraging trends are evidenced from this quarter in the post-2000 years in India?

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4. Which critical area is identified to limit the growth potential of 'trade in services' in India? What education sector reforms are needed to meet this challenge?

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19.9 LET US SUM UP

The service sector in India has come to occupy increasing share of output/income in the GDP of the country touching the 55% mark. Its share in employment has also increased from about 20% in the 1980s to about 28.5% in 2005. The sector is therefore considered as the 'engine of growth' for the country. However, because of the service sector's backward linkages with manufacturing, and the large proportion of un/low-skilled workers in the Indian labour force, policies to promote both the labour-intensive manufacture and the skill intensive service

sector are vitally needed. This includes a dual approach aimed at removing the bottlenecks on the infrastructure sector front, on the one hand, and the education sector inadequacies, on the other.

19.10 KEY WORDS

Sectoral Labour : Refers to the absorption of surplus labour engaged in agriculture or primary sector activities in the more productive modern sector activities. As per the 3-sector hypothesis of Clark and Fourastie, the path of the sectoral shift is from the primary to the secondary and then on to the tertiary sector.

Marketable Skill : A concept introduced in the national sample surveys of NSSO in its 50th round. It refers to the content of vocational skills in the training or educational programmes which will assist the trainees to set up some self employment avenues. In the context of decreasing opportunities for wage employment, promotion of self-employment avenues is a preferred employment policy option in India.

Organised Sector (OS) : Refers to government and public sector organisations, and large private sector organisations, where service benefits like paid leave and other social security provisions are present. The proportion of OS employment is about 6-7 percent in India. Having a huge labour force of about 450 million, this proportion glares wickedly at the huge unorganised sector segment who do not enjoy any such benefits. The government has recently enacted a Bill to cater to the needs of the huge unorganised sector workers in India.

Solow Productivity Paradox : Refers to the problem of measuring service sector productivity correctly due to which the sector's contribution may be getting under-estimated.

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19.12 ANSWERS OR HINTS TO CYP EXERCISES

Check Your Progress 1

1. See Section 19.1 and answer.
2. See Section 19.2 and answer.
3. See Section 19.3 and answer.
4. See Section 19.4 and answer.
5. See Section 19.4.1 and answer.

Check Your Progress 2

1. See Section 19.5 and answer.
2. See Section 19.6 and answer.
3. See Section 19.6.1 and answer.

Check Your Progress 3

1. See Section 19.7.1 and answer.
2. See Section 19.7.2 and answer.
3. See Section 19.8 and answer.
4. See Section 19.8 and answer.

UNIT 20 TRADE AND DEVELOPMENT

Structure

20.0 Objectives

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20.2 Theories of Trade

20.3 Foreign Trade and Growth

- 20.3.1 Contribution of Foreign Trade to Economic Growth
- 20.3.2 Trade, Employment and Poverty
- 20.3.3 Trade and Environment

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20.9 Let Us Sum Up

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20.12 Answers or Hints to Check Your Progress Exercises

20.0 OBJECTIVES

After reading this unit you will be able to:

- state the reasons for foreign trade in terms of different theories of trade;
- explain how foreign trade promotes economic growth and its relationship with issues like unemployment, growth and environmental protection;
- distinguish between free trade and protection examining why barriers are placed on the free flow of goods, and with what consequences;
- describe the current global environment in which the developing nations have to conduct their trade operations;
- examine the different forms of trade policy and strategy underlying the rationale behind each of them; and
- explain the role of subsidies, specially agricultural subsidies, in foreign trade and why they should or should not continue.

20.1 INTRODUCTION

Foreign trade has worked as an 'engine of growth' in the past (e.g. Great Britain in the 19th Century and Japan in the 20th century, besides others). Even in more recent times, the success of the 'miracle' newly industrialised countries (NICs) of south-east Asia or of the 'miracle-in-making' economies of China and India can be attributed to a large measure to the growing integration of these economies with the global economy. Trade, both exports and imports, contribute to economic growth and welfare in different ways. Although the trading partners may enjoy different degrees of gains from the transactions, trade is positively a win-win situation for each i.e. there are no losers in this game. However, this observation can be questioned when one finds that free and unobstructed flow of goods are not permitted as a rule across the borders. In other words, trade barriers are imposed. Sovereign nations impose these barriers for their own reasons, although efforts have been made in recent years to institute arrangements that help the smooth flow of goods across borders. In this unit, we analyse these aspects and examine the evolution of trade policy and strategy over the years.

20.2 THEORIES OF TRADE

In pursuit of the question, 'Why do nations trade?' economists have come out with varied explanations. But before we visit the different theories of trade, it is useful to ask a more general question as to what are the necessary and sufficient conditions for 'two countries not to trade'? These are the following:

a) they have identical factor endowments;

b) they have identical production functions;

c) they have no scale economies;

d) they have identical demand conditions, including similar tastes and preference for their population;

e) there are no tariffs/subsidies, quotas or other governmental interventions;

f) there are no transport costs; and

g) there is no mobility of factors of production between the countries.

Thus, there is no need for inter-country trade, when the above conditions are fulfilled. However, when one or more of the conditions are not fulfilled, then there is scope for some trade to take place. The different theories of trade conform to the framework of deviations from these conditions. For instance, the Hecksher-Ohlin theory of factor endowments, is the theory based on the deviation of the first of the above assumptions on identical factor endowments. Most of the other theories of trade also could be conceived in this light. We will now take a brief look on the other theories of trade in the chronology of their development in this section.

The earliest of these trade theories is known as *mercantilism.* According to mercantilists, a nation's wealth and prosperity depended on its stock of precious metals which, in turn, depends first on international trade and thereby on 'trade surplus'. To gain trade surplus, a nation should strive to maximise exports and minimise imports.

The basic flaw of mercantilism was that trade was regarded as a zero-sum game (i.e. one nation's gain was another's loss). In other words, mercantilists took a static view of the world economy believing that the world's economic pie is of a constant size.

Adam Smith (in Wealth of Nations, 1776) and David Ricardo (in Principles of Political Economy and Taxation, 1817) took a dynamic view and postulated that trade first expands the scope of division of labour which then increases productivity and output. They thus viewed that trade is actually a positive sum game, in which all the trading nations gain.

In *Adam Smith's* view, the basis of trade was absolute cost advantage. According to his theory, trade between two countries would be mutually beneficial if the country could produce one commodity at an ***absolute advantage*** (over the other country) and the other country could, in turn, produce another commodity at an ***absolute advantage*** over the first.

David Ricardo further demonstrated that trade would be beneficial to nations if a country enjoyed ***comparative advantage***, and not necessarily absolute advantage. Ricardo's doctrine of comparative costs maintains that if trade is left free, each country, in the long run: (i) tends to

specialise in the production and export of those commodities in which it enjoys a comparative advantage in terms of real costs, (ii) obtains by import those commodities which could be produced at home at a comparative disadvantage in terms of real costs, and (iii) such specialisation works to the mutual advantage of the countries participating in trade.

The ***opportunity cost theory*** put forward by *Gottfried Ven Haberler* (The Theory of International Trade, 1933) improved upon one of the main drawbacks of the Ricardian cost theory, viz. labour cost theory of value. It gave a new life to the comparative cost theory by restating it in terms of opportunity costs. The opportunity cost of anything was defined by Haberler as the value of the alternatives or other opportunities which have to be foregone in order to obtain a particular thing. Thus, according to the opportunity cost theory, the basis of international trade is the difference between nations in the opportunity costs of production of commodities.

The factor-endowment theory, developed by *Eli Heckscher* and *Bertil Ohlin*, (in Interregional and International Trade, 1933) establishes that trade, whether national or international, takes place because of the ***differences in the factor endowments*** of the various regions. Trade is expected to eventually lead to commodity and factor prices equalisation internationally.

There is a significant portion of the international trade that is not explained by the basic Heckscher-Ohlin (H-O) model. Some theories have been propounded to explain different patterns or reasons for trade which are not explained by the basic H-O model. These theories are known as complementary trade theories or extensions of the H-O trade model.

The Stolper-Samuelson Theorem (vide 'Protection and Real Wages', Review of Economic Studies, 9, 1941) which explains the effect of change in relative product prices on factor allocation and income distribution, postulates that an increase in the relative price of a commodity raises the return on the factor used intensively in the production of that commodity. That is, if the relative price of labour intensive commodity rises, that will cause an increase in the wages. Similarly, an increase in the relative price of capital intensive product will raise the return on capital. Free trade will raise the return to the factor used intensively in the rising price industry and lower the returns to the factor used intensively in the falling price industry. This implies that free trade would raise the returns to the ***abundant factor*** and reduce the returns to the ***scarce factor***.

20.3 FOREIGN TRADE AND GROWTH

Foreign trade has been the driving force behind economic growth. For instance, in the nineteenth century, exports were the leading sector that

propelled the economies into rapid growth and development. Workers with skills and capital moved from the highly regulated areas of Europe to the mostly empty and natural-resource rich lands in the 'new world'. This, together with a very rapidly growing demand for food and raw materials, particularly from industrialising but resource-poor England, resulted in rapid and sustained export-led growth in the economies of these new lands. Thus, international trade acted as an 'engine of growth' in these new lands in the nineteenth century. Even in more recent times the 'outward-oriented growth strategy' adopted by the Newly Industrialising Economies of Asia (viz. Hong-Kong, Singapore, Taiwan, Malaysia, Thailand and South Korea), has enabled them to overcome the constraints of small, resource-poor, and less developed economies.

20.3.1 Contribution of Foreign Trade to Economic Growth

Foreign trade contributes to economic growth in a number of ways. Some of the important among these are the following:

i) The primary function of foreign trade is to explore means of procuring imports of capital goods, without which no process of development can start;

ii) Trade provides for flow of technology which allows for increases in productivity, and also result in short-term multiplier effect;

iii) Foreign trade generates pressure for dynamic change through (a) competitive pressure from imports, (b) pressure of competing export markets, and (c) a better allocation of resources;

iv) Exports allow fuller utilisation of capacity resulting in achievement of economies of scale, separates production pattern from domestic demand, and increases familiarity with absorption of new technologies;

v) Foreign trade increases most workers' welfare. It does so at least in four ways: (a) Larger exports translate into higher wages; (b) because workers are also consumers, trade brings them immediate gains through products of imports; (c) it enables workers to become more productive as the goods they produce increase in value; and (d) trade increases technology transfers from industrial to developing countries resulting in demand for more skilled labour in the recipient countries.

vi) Increased openness to trade has been strongly associated with reduction in poverty in most developing countries. As the historian Arnold Toynbee said 'civilisation' has been spread through 'mimesis' i.e. emulation or simply copying.

In short, trade promotes growth enhancing economic welfare by stimulating more efficient utilisation of factor endowments of different regions and by enabling people to obtain goods from efficient sources of supply.

20.3.2 Trade, Employment and Poverty

Notwithstanding all that has been said above, there is no unanimity among economists about the impact of trade on employment and poverty. Empirical evidence presents a mixed picture, with positive impacts on some countries and negative on some others with no clear indication in others.

Positive Side

On the positive side, theoretically, it has been established that trade liberalisation can lead to reduction of unemployment and poverty. The possible impacts of trade liberalisation on poverty are explained in terms of the following:

1. The expansion of the export sector following trade liberalisation will increase the demand for labour. Developing countries are assumed to export principally labour-intensive products. This will create new demand for labour. Unemployed labour will gain productive employment. In a situation where there is no unemployment, labour will gain by way of higher wages. Labour will also gain by way of movement from low-wage occupations to relatively high-wage occupations.

2. Expansion of the export sector will result in an increase in demand for other factor-inputs. This will result in higher prices of factor-inputs. Owners of these factor-inputs will gain by increased prices.

3. The acceleration of economic growth caused by export growth will benefit the economy in general. Southeast Asian economies bear witness to the success of export-led-growth strategy.

4. Trade liberalisation reduces the cost of living by providing access to cheaper imports of food and essential consumer goods, and by keeping domestic prices under check because of the global competition.

5. Expansion in the level of economic activity normally yields larger revenue for the government. It enables the government to undertake more social sector programmes with focus on welfare of the poor.

6. Trade can contribute to long-term poverty reduction by enhancing production and resource allocation efficiencies. It helps in the spread of economic activities in areas where greater economic gains are possible.

Negative Side

Trade in actual practice is, however, not fair but biased to serve the vested interests of the developed countries. For instance, exports of developing countries face high tariff and non-tariff barriers. Developing countries are losing market share even in traditional commodities. Their

efforts to move away from commodity dependence have generally been frustrated by restrictive trade rules/bias against agricultural commodities. Some of the other negative influences are in terms of the following:

1. Developing countries, particularly the least developed countries (LDCs), are characterised by large subsistence sector which can hardly withstand the global competition.

2. Multinational corporations (MNCs) with their marketing strategies change the consumption habits of people causing significant damage to the traditional economic activities. In due course of time, such changes also cause damage to the very wellbeing of the consumers.

3. With the secular deterioration (i.e. adverse conditions persisting over long period) in the terms of trade, more openness can lead to growth with increase in poverty for developing countries.

Hence, a more reasonable conclusion to the debate can be that while trade can help a country to reduce poverty, it can not take it out of poverty. For that to happen, more important orientation is needed in terms of government expenditure on education, health and nutrition.

20.3.3 Trade and Environment

As with the relationship between trade and poverty, no definite patterns can be observed on the effect of foreign trade on environment. There is however a fear that as a consequence of rapid growth related tendencies, massive and irreversible environmental problems can take place. This situation can be avoided provided right policies and institutions to address such trends are initiated at the right time. Three patterns that have emerged in this regard are as follows:

1. *Some environmental problems get reduced in intensity as income increases:* This is because increasing income provides the resources for public services such as sanitation and rural electricity. When individuals no longer have to worry about their day-to-day survival, they can devote resources to profitable investments in conservation. The positive relationship between economic growth and environment quality can not be underestimated.

2. *Some problems initially worsen but then improve as incomes rise:* Most forms of air and water pollution fit into this category, as do some types of deforestation and encroachment on natural habitats. These is however nothing automatic about this improvement as such improvements occur only when governments deliberately introduce policies to ensure that additional resources are devoted to dealing with environmental problems.

3. *Some indicators of environmental stress worsen as incomes increase:* Emissions of carbon and nitrogen oxides and municipal wastes are examples for this. In these cases, abatement is relatively expensive and the costs associated with the emissions and wastes are not yet perceived as high - often because they are borne by someone else. The key, once again, is policy and institutions. More generally, individuals and firms have few incentives to cut back on wastes and emissions, and until such incentives are put in place - through regulation, charges, or other means - damage will continue to increase. The experience with the turnarounds achieved in some other forms of pollution, however, shows that once a policy commitment is made results can be achieved albeit slowly.

A recent study on the subject puts forward a practical and persuasive set of arguments to conclude that it is the economic growth that will help set up a sustainable ecosystem. Considerable economic growth has been accompanied by a substantial decline in a number of pollutants in the developed countries.

Environmental protection is an international issue and needs global intervention. The existing formal international agreement, known as Kyoto Protocol, came into force in 2005. The protocol has set legally binding targets for member-nations to reduce their greenhouse gas emission. The Protocol is due to expire in 2012. A new set of principles signed by 190 countries in 2007, known as the 'Bali Roadmap', is expected to become operational for the post-2012 years.

Check Your Progress 1

1. State in brief the central idea behind each of the theories of foreign trade.

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2. How does foreign trade contribute to economic growth? Outline in 50 words.

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3. Does foreign trade help to reduce unemployment and poverty? Briefly outline in 50-60 words.

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20.4 FREE TRADE AND PROTECTION

Free trade refers to trade that is free from all artificial barriers to trade like tariffs, quantitative restrictions, exchange controls, etc. Protection, on the other hand, refers to the government policy of providing protection to the domestic industries from foreign competition.

20.4.1 Case for Free Trade

The principal arguments in favour of free trade can be briefly stated as follows:

1. Free trade leads to the most economic utilisation of the productive resources of the world. Under free trade, each country will specialise in the production of those goods for which it is best suited, and will import from other countries those goods which can only be produced domestically at a comparative disadvantage.

2. Free trade results in international division of labour, leading to greater specialisation, efficiency and economy in production.

3. Under the pressure of competition, inefficient producers are forced either to improve their productivity or close down.

4. Free trade helps to break domestic monopolies benefiting the consumers from exploitation.

5. Free trade makes available large varieties of goods to the consumers. Free trade, thus, benefits the consumers by enabling the consumers to obtain goods from the cheapest source.

However, free trade does not mean that the gains from trade would be equitably distributed among trading nations. The distribution of gains from trade is largely influenced by the terms of trade that each nation gets to face. The determination of terms of trade, in turn, depends on the elasticity of demand and supply for tradable goods, both in the domestic and foreign markets.

But the prevailing market conditions may be viewed as unfavourable by a country. It may therefore seek to put barriers in the way of foreign trade, i.e. it may put restrictions on trade. This type of policy is known as ‘protection’.

20.4.2 Case for Protection

The main arguments in support of protection can be briefly summarised as follows:

i) *The Infant Industry Argument:* There are many industries in a country that are in their infancy, but have a potential to grow. In the short term, these industries may be too small to gain economies of scale. Without protection, these infant industries will not survive competition from abroad. Protection will allow such industries to grow and become more efficient. Once they have achieved a comparative advantage, the protection can be removed to enable them to compete from a level playing field.

ii) Protection is required to prevent dumping and other unfair trade practices by foreign producers.

iii) Protection is required to prevent the establishment of a foreign-based monopoly so as to prevent mis-utilisation of resources.

iv) Protection helps to reduce reliance on goods with little dynamic potential. Many countries have traditionally exported primary commodities. The world demand for these commodities is income inelastic and thus grows relatively slowly. In such cases, free trade is not an engine of growth.

v) Protection is required to spread the risks of fluctuating markets. Greater diversity and greater self-sufficiency can reduce these risks.

vi) Trade restrictions are imposed to reduce the influence of trade on consumer tastes. Some restrictions on trade may be justified in order to reduce 'producer sovereignty' of the MNCs.

vii) Restrictions are required to prevent the import of harmful goods.

viii) Protection is required to take account of externalities. Free trade tends to reflect private costs ignoring the associated externalities. Trade restrictions could be designed to deflect these externalities.

ix) Trade restrictions also help a country to improve its terms of trade by exploiting its market power.

20.4.3 Case Against Protection

Protection, however, imposes costs on a nation. This may be outlined as follows.

i) Protection to achieve some objective may be at a very high opportunity cost. Other things being equal, there will be a net loss in welfare from restricting trade. Due to this reason, any gain in government revenue or profits to firms would be outweighed by a loss in consumer's surplus.

ii) Restricting trade is unlikely to be a first-best solution to the problem, since it involves costs of side-effect.

iii) Restricting trade may have adverse world multiplier effects.

iv) Protection may encourage retaliation.

v) Protection may allow inefficient firms to remain inefficient.

vi) Restrictions may involve considerable bureaucracy and possibly even corruption.

20.4.4 Methods of Protection

The policy of protection can be employed through the use of various methods. A few of these are as follows:

1. ***Tariffs (custom duties)***: These are taxes on imports. These are usually ad-valorem i.e. these are levied as a percentage of the price of the import. Other features of tariff are:

   - Tariffs that are used to restrict imports will be most effective if demand is elastic.

   - Tariffs can also be used as a means of raising revenue. They will be more effective if demand is inelastic.

   - Tariffs can also be used to raise the price of imported goods to prevent 'unfair' competition for domestic producers.

2. ***Quotas***: It implies fixing of a maximum limit on the quantity of a good that can be imported.

3. ***Exchange Controls***: These include limits on the amount of foreign exchange made available to the residents for effecting transactions with rest of the world.

4. ***Import Licensing***: Importers may be required to obtain prior permission from the government in the form of a license which may state the quantity of a good that can be imported.

5. ***Embargoes***: This is a measure used by the government to completely ban certain imports or exports to certain countries.

6. ***Export Taxes***: These can be used to increase the price of exports when the country has monopoly power in their supply.

7. ***Subsidies***: These can take two forms. **One**, subsidies can be given to domestic goods to prevent competition from otherwise lower-priced imports. Two, subsidies on exportable goods are expected to increase the competitiveness of the subsidised exports in the international markets.

8. ***Administrative Barriers***: Regulations may be designed in such a way as to target imports. Taxes may be exempted for local products or ingredients favouring domestic production.

9. ***Procurement Policies***: This refers to government purchases to favour domestic producers.

10. ***Support for Investment***: Domestic production and investments may be encouraged through different measures like lower interest rates, export credit facilities and import credit facilities, etc.

20.4.5 International Protectionism

After the Second World War, there had been a progressive liberalisation of trade by the developed countries. This gets reflected in successive cuts in tariffs effected by almost all the countries. Average tariffs on trade in manufactured goods used to be about 40 percent in 1947. These were down to only about 3 percent in 2008.

Even though the process of elimination of the tariff barriers continued, around the mid-1970s, the liberalisation trend in developed countries was replaced by growing protectionism. A number of problems like the currency crisis, oil crisis, debt crisis, recession and high rate of unemployment created an atmosphere all over the world in which demands for protection increased dramatically. Added to these there was growing competition from newly industrialising countries. As a response to this, the developed countries have been increasingly resorting to non-tariff barriers (NTBs), although tariffs have been systematically lowered.

Types of NTBs: Some of the important forms of NTBs are as follows: (i) health and safety provisions, (ii) ban on the use of certain chemicals in select manufactured goods, (iii) insistence on appreciation of currency of the supplying country (which creates automatic market constraint due to loss of competitiveness), (iv) insistence on special information with reference to certain items in addition to normal information supplied in the customs invoice, (v) insistence on satisfying special specifications, (vi) insistence on shipment through designated vessels, (vii) insistence on inspection of products by designated agencies, (viii) insistence on the use of local materials up to a specified percentage, (ix) fixation of minimum floor prices, (x) restrictions on import of inflammable products (xi) insistence on use of specific materials and also ban on the use of certain specific materials etc.

The NTBs can be classified into two categories: (a) technical and (b) non-technical. Technical NTBs include such measures as a higher standard of processed food industry products, food safety, non-use of certain chemicals and child labour. Non-technical NTBs include anti-dumping duties and pre-shipment inspection. The non-technical NTBs can be contested at the WTO.

20.5 TRADE ENVIRONMENT FOR DEVELOPING COUNTRIES

Current trade environment has features that are favourable for developing countries. However, it also poses some constraints.

20.5.1 Conditions Favourable for Trade

In the present juncture of the twenty-first century, we can identify the following conditions as favourable for developing countries in employing foreign trade as an instrument in promoting their economic growth.

i) Increasing spread of globalisation translates into larger movement of goods and services across the nations.

ii) Continuing reallocation of manufacturing activities from industrial economies to developing economies offers ample opportunities to expand trade not only in goods, but also in services, which are becoming increasingly tradable.

iii) Trade is intertwined with another element of globalisation i.e. the spread of international production networks.

iv) Growth of trade is firmly supported by international institutions. In particular, the world trade organisation (WTO) has aimed at creating an environment conducive to the multilateral exchange of goods and services.

v) Recent years have seen substantial changes in trade policy and in the barriers inhibiting developing country participation in world trade. Lower trade barriers have contributed to a perceptible shift in the pattern of developing country trade shifting them away from dependence on commodity exports to reliance on manufactures and services. In addition, exports to other developing countries have assumed importance.

vi) Information infrastructure plays a crucial role in promoting trade.

20.5.2 Constraints

Most of the non-oil producing developing countries including India are finding themselves facing a number of difficulties in benefiting from foreign trade as an engine of growth. Among these we may specifically mention the following:

1. *Slow Growth of Demand for Primary Commodities (PCs)*: The demand for PCs which form the principal exports of a developing country has not helped in keeping pace with the growth of world trade or with income levels in different countries. The world trade in PCs has been declining for the last five decades. Four possible factors can explain this.

a) The increasing tendency of the market economies to protect their agriculture by imposing tariffs and non-tariff barriers.

b) An inadequate increase in the demand for PCs in the developed market economies in the wake of industrialisation.

c) Development of synthetic substitutes.

d) In real terms, prices of PCs are presently at their lowest compared to the last century and a half. Growth rates are now at or near the replacement level so that little expansion can be expected from this source.

2. *Slow Growth of Exports from Developing Countries*: Exports of developing countries as a group have been slow to develop. As a result, the share of developing countries in the total world trade has maintained a downward trend. The decline has been caused by factors like the emergence of trade blocs, restrictive commercial policies and the growth of monopolies. These trends are indicative of the fact that the UDCs have to face foreign trade with barriers, to overcome which they have to strive hard.

3. *Deteriorating Terms of Trade*: The declining demand for primary commodities in the developed markets has given rise to the problem of worsening terms of trade for developing countries. Whereas prices of manufactured goods, especially capital goods, have been rising in the world markets, there has been a gradual decline in the prices of primary goods.

4. *Increasing Concentration of Foreign Trade*: With international trade in agricultural commodities becoming more concentrated, fewer companies increasingly control commodity supply chains, including activities ranging from production, grading, processing and distribution to retail. Small producers are edged out of high income activity for not being able to compete or meet the certification requirements of buyers.

5. *WTO and Trade Policies of Developed Countries*: These have the following effects:

i) Protectionist trade policies adopted by industrialised countries affect prospects for developing countries' export of manufactures.

ii) When developed countries indulge in dumping of their commodities, price environment for the importing countries is adversely affected for the domestic producers.

iii) Increased emphasis in recent years on 'fair' trade by industrialised countries is a development which has made it more difficult for developing countries to depend on international trade and foreign investment.

In short, developing countries face many difficulties in their foreign trade operations. Although numerous multilateral initiatives have been mounted to tackle these problems, they have left them largely unresolved. Therefore, in the given circumstances, the developing countries have to evolve a suitable trade policy-mix that create export outlets while also assuring supplies of essential imports.

Check Your Progress 2

1. Briefly state the arguments for and against free trade.

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2. State the arguments in brief for and against protection.

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3. Mention the principal features of the global environment in which developing countries have to operate.

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20.6 TRADE POLICY AND STRATEGY

The term 'trade policy' refers to all the policies that have either direct or indirect bearing on the trade behaviour of a country. The details of these policies depend upon the broad trade strategy adopted, which in turn, depends upon the developmental strategy adopted by the countries.

20.6.1 Inward-Orientation and Outward-Orientation

In a broader framework, inward-looking strategy refers to policies which discourage reliance on foreign resources. Under this, in its extreme

form, no foreign aid is permissible, no movement of factors of production to or from outside is allowed, multinational corporations are not allowed to function, and freedom in international communications too is not entertained. In the present world economy, such an extreme form of inward orientation hardly exists in any economy.

The opposite of this extreme form of inward orientation is the extreme form of outward-orientation. In this, free movement of capital, labour, goods, multinational enterprises and open communication are permitted.

Arguments for outward-orientation: Advocates of outward-orientation argue that openness is useful to bring about good educational effects, new ideas and new techniques, growth of new forms of organisation, etc. They believe that free trade encourages learning and makes possible achievements of dynamic transformation of the economy yielding higher standards of living. Free trade is thus considered a win-win situation, in which all the trading partners stand to gain through productivity improvements, notwithstanding diversities in their domestic institutions and policies.

Quotas and other quantitative restrictions, on the other hand, interfere with the price mechanism, involve allocative and X-inefficiencies (i.e. failure to minimise costs), create distortions and impede the progress of competitive firms and industries.

Arguments for inward-orientation: As against the above arguments, the advocates of inward-orientation argue that inward-looking policies encourage indigenous talent by learning to do things by one self, domestic technological development with suitable range of products, avoid the ill-effects of demonstration from the outside world, etc. Given the gaps of development between the developing and developed countries, inward-orientation is advocated as an inevitable policy.

Effects of these two types of strategies on growth of output, employment, income generation and income inequalities could also be of diverse nature, and no general inference can be drawn in this context.

20.7 TRADE POLICY AND STRATEGY IN INDIA

Two important elements of trade policy and strategy pursued in India have been: (i) import substitution, and (ii) export promotion.

20.7.1 Import Substitution

Import substitution implies indigenous production of raw materials, intermediate goods and final consumer and capital goods. Import substitution was the major plank of India's foreign trade policy during the early years of economic planning. Later, however, it was realised that large imports of capital goods and equipment would help the country

build up domestic production capacity and help meet the domestic requirements. The presumption was in-built in the Mahalanobis strategy of heavy-industry-led growth. A further assumption of the strategy was that once the production capacity within the country was built up, it would be possible to give up imports to a large extent. Working on this assumption, our plans provided for the required imports, financed largely by external assistance.

The progress of import substitution in the country was quite satisfactory. For instance, in the sphere of consumer goods, we acquired the capacity to produce exportable surplus in which we are competing effectively in the international markets. Likewise, indigenous production of capital goods also expanded fast with the country gradually becoming self-sufficient in their production too.

But all this does not mean that the country's requirements of imports have decreased or show signs of falling. On the contrary, India's imports have been mounting. As a percentage of national income they are about 22.3 percent presently, thus falsifying the Mahalanobis assumption that these would fall after a certain stage of development.

The approach of 'import and adapt', continuously fell short of global advancement in technology. More importantly, imports keep our industry on its toes in terms of price, quality and technology. Hence, our policies and efforts should be geared to develop ways and means with which to finance the rising needs of imports in the country. That takes us to the sphere of export promotion.

20.7.2 Export Promotion

The terms 'export promotion', 'outward-orientation', and 'export-led growth' have all been used interchangeably to describe the policies adopted in the successful developing countries. Note that import substitution and export promotion are not competitive, but each requires a different set of policies to be pursued. Three distinct phases can be seen in India's approach and policy towards exports.

a) The early phase, which lasted up to about 1972-73, was one of extreme export pessimism with a fear that exports are subject to low growth in demand, high fluctuations in prices and lead to economic dependency.

b) The second phase began in 1973 after the first oil crisis and lasted for about ten years. In this phase, although it was not explicitly stated, it was recognised that policies of import substitution by themselves could not bring about viability in India's BOP.

c) In the third and more recent phase, exports are being seen as an integral part of industrial and development policy. The anti-export bias of the policy has paved way for pro-export policy.

The policy has emphasised technological up-gradation, increase in the size of plants, freer imports and domestic and international competition for the entire industrial sector as being essential for export promotion.

Import Liberalisation and Export Promotion: The 'import substitution' strategy of industrialisation relied on encouraging domestic production to cater to the domestic market. This was sought to be realised by high tariffs and a high degree of protection granted to the domestic industry. The major drawback of this strategy was that it led to an inefficient and high cost industrial structure, which also adversely affected the prospects for export growth. Thus, it worked as a 'bias' against exports.

The argument for import liberalisation rests on the need to reduce the protection granted to the domestic industry for domestic production, thereby reducing the 'bias' against exports.

20.7.3 Recent Reform Measures

In the wake of shift in strategy, changes have been gradually introduced in the foreign trade sector. These include transition to a market determined exchange rate regime, removal of quantitative restrictions (QRs), tariffication (i.e. replacing QRs by tariffs), substantial reduction in the tariff rates, removal of negative list of exports and imports, substantially reducing licensing, introduction of current account convertibility, liberalisation of capital inflows, simplification of procedures, broadening the reach of export incentives, extending the benefits of various export-promotion schemes to a large number of non-traditional and non-manufactured exports, strengthening the export promotion base, etc.

Simultaneously, while removing QRs, the Government has taken several safeguard measures (e.g. adjustment of tariffs, imposition of temporary QRs, safeguard duties, anti-dumping duties, restricting the import of certain agricultural products, etc.) in order to guard against any surge in imports on account of dumping.

The import duty levels have been substantially reduced. The peak rate of duty on non-agricultural imports has been gradually reduced from as high as 150 percent in 1991-92 to 10 percent in 2008-09. However, the weighted average import duties on various goods, even though reduced from the high levels prevailing earlier, are still higher than that of some of the East Asian countries. The Government is committed to reduce tariffs to levels compatible with those prevailing in most East Asian countries.

It is expected that these measures will make domestic industry cost-efficient by enhancing efficiency in resource use. Under international competition, this is expected to lead to a better export performance in the long-run. Consumer welfare is expected to improve because of the availability of better quality products at globally competitive prices and

by providing greater freedom of choice to residents to undertake current transactions on a global scale.

Check Your Progress 3

1. What is meant by import substitution? Briefly indicate with rationale.

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2. What is the rationale for export promotion? Outline briefly.

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20.8 EXPORT SUBSIDIES AND WTO

As a part of export promotion strategy, besides various other measures, various types of export incentives have been evolved. These have been altered and modified from time to time to meet varying conditions. Broadly, these incentives can be classified into three categories, viz. (i) fiscal incentives, (ii) financial incentives, and (iii) special incentive schemes.

i) **Fiscal Incentives**: Under fiscal incentives, the important measures that have been in vogue are income tax concessions, customs draw-backs, refund of excise duty, exemption from sales tax, provision for export undertaken, and facility for manufacture under bond.

ii) **Financial Incentives**: These incentives refer to the provision of cash assistance for specified export promotional efforts and export facilities.

iii) **Special Incentive Schemes**: Besides the recent reforms in the export incentive structure, export profitability was sought to be improved through a variety of fiscal concessions, and explicit and implicit subsidies. These measures were considered necessary to neutralise the negative financial impact of high administered prices of inputs and differential tax incidence that exporters suffer vis-a-vis 'across the border' competitors.

Advance license, export promotion of capital goods (EPCG) scheme,

duty exemption pass book (DEPB), duty free import authorisation scheme and the draw-back scheme are a few important schemes currently in operation.

These schemes were attractive when the customs duty levels were high, but they are losing their attraction in view of the continuous reduction in import duty. In the light of this, the current policy reforms have initiated corrective steps towards making the export-incentive mechanism more market-determined, as mandated by the WTO Agreement on Subsidies and Countervailing Measures (SCM)

20.8.1 WTO Agreement on Subsidies and Countervailing Measures (SCM)

The SCM Agreement applies to non-agricultural products. It follows the traffic lights approach and classifies subsidies in three categories.

- **Red:** Subsidies with high trade-distorting effects, such as export subsidies, and those that favour the use of domestic over imported goods are prohibited. Developing countries with a per capita income of less than $1,000 have been exempted from this prohibition on export subsidies.
- **Green:** Subsidies that are not specific to an enterprise or industry or a group of enterprises or industries are non-actionable.
- **Amber:** Subsidies that are neither red nor green belong to the amber category. They are actionable by the trading partners if their interests are adversely hit. The affected country can seek remedy through the dispute-settlement procedures or go for countervailing duties.

20.8.2 Issues of Agricultural Subsidies

Agriculture is subsidised in all countries, developed or developing. The US reportedly provides $30 billion of annual subsidies to its farmers, i.e. about Rs. 1,50,000 crore. India budgeted Rs. 63,676 crore as subsidies on food and fertilisers during 2008-09. The subsidy per european cow is $750 per year. In recent years, the US exported cotton at 53 percent, wheat at 72 percent and rice at 84 percent of their cost of production. The EU's export prices were 34 percent for dairy products and 75 percent for sugar.

Agriculture is far more heavily subsidised in rich developed countries than in poor developing countries for two reasons:

a) Rich countries can afford larger amounts in subsidies.

b) Agriculture typically ceases to be competitive as a country industrialises. This has been the case in much of Europe and the US.

In developing countries, subsidies are provided simply to ensure self-

reliance and self-sufficiency. In India, agricultural inputs like fertilisers, water and electricity are subsidised. The issue of these subsidies has come in for much debate in more recent times. This has happened essentially because of two reasons:

a) The rising burden of these subsidies has been questioned by policy makers trying to correct fiscal imbalance.

b) The issue of agricultural subsidies was brought to the centre stage with the establishment of WTO.

Rationale for Subsidies

The rationale for subsidising agricultural inputs is to be traced to the role that these subsidies play in stimulating development of any country through increased agricultural production, employment and investment. However, there are arguments being advanced on both the sides.

Arguments in Favour of Subsidisation

1. Subsidised inputs sell at lower prices. When subsidies are withdrawn their prices would rise. This would affect their sale and use of agricultural inputs resulting in lower agricultural production, particularly food production. This would compel the country to import food-grains. Importing fertilisers and subsidising their use has proved cheaper than buying and importing food-grains from abroad.

2. The subsidisation of inputs and credit has influenced (and does influence) the acceptance of new technology.

3. Subsidies, particularly in developing countries, must be construed more as an instrument for protecting the risk-taking function of the farmers than anything else.

4. Input subsidisation also prevents rising of food and raw material prices, thus avoiding the plausible adverse effects of growing industrial sector on large mass of poor living in the developing countries. This has come to be known as the 'cheap-input–cheap-output' policy.

5. Value added by subsidised inputs far exceeds the cost of subsidy.

Arguments Against the Continuation of Subsidies

a) Fertiliser and irrigation subsidies have widened regional disparities to some extent.

b) The maximum benefit of subsidisation of inputs is reaped by large and medium farmers, who possess the capacity to buy inputs at higher prices.

c) Input subsidies tax the budgetary capacity of the government. Fiscal imbalance pave the way for macroeconomic imbalances that create inflation, lower growth and increases inability to finance imports. Growth, in order to be sustainable, has to be efficient, and subsidies of the kind that Indian agriculture has been used to make for enormous wastage of power, water, fertiliser and pesticides.

d) Heavy fiscal burden of subsidy on inputs is also responsible for stagnation, if not decline, in public investment in agriculture.

e) Subsidy on irrigation through electricity and canal water causes distortion in cropping pattern in favour of water-intensive crops like paddy in Punjab and sugarcane in Maharashtra. These practices have led to a sharp decline in underground water resources.

f) Where the prices of inputs do not reflect their scarcity value, there is very little incentive for farmers to adopt methods which could make more efficient use of scarce resources. A rise in subsidies where prices do not reflect the scarcity value will increase their inefficiencies. This inhibits the growth of water-saving or energy-saving devices, discouraging investment in those industries which could manufacture these input-saving devices.

g) Provision of subsidised inputs results in their inefficient and unbalanced use. This, in turn, affects productivity adversely.

What is the Way Out?

The limits or constraints of the present subsidies, either from the financial, social, nutritional or environmental point of view, are well-recognised. But it is not possible to replace the present system by any other mechanism of incentives and redistribution. At least the following three things are clear:

1. Any fiscal approach to this problem is destined to fail as one cannot politically or reasonably ask a sector that is poorer than others to make bigger sacrifices.

2. Any reforms that are introduced should be presented as an effort to better utilise subsidies for the greater benefit of farming communities.

3. The fact at 2 above calls for the active involvement and participation of the concerned communities.

The sequencing of reforms in the agricultural subsidies must start from liberalising the output markets, opening them to exports and thereafter involving farmers in carrying out reforms in input markets particularly for non-tradable inputs like canal water, electricity and rural credit. It is only through such a comprehensive package of reforms that transformation towards accelerated and sustainable growth of Indian agriculture can be achieved.

WTO and Agricultural Subsidies

In the WTO Agreement on Agriculture (AOA) the approach adopted has been to encourage gradual reduction of trade distorting subsidies. The AOA specifically deals with (i) providing market access, (ii) containing of export subsidies, and (iii) regulating domestic support (also see unit 23 for more details).

Under the AOA, an index known as 'Aggregate Measurement of Support' (AMS) has been introduced. The AMS consists of two parts: (i) product specific support, and (ii) non-product specific support. The product specific support is the difference between domestic support prices (procurement prices in India) and external reference prices times (i.e. multiplied by) the quantity of production which gets such support. Non-product specific support is the sum total of subsidies on inputs like power, irrigation, fertiliser and credit.

The AMS provides an overall permitted measure of subsidies allowed as a percentage of gross agricultural production. Under the agreement, product specific and non-product specific supports as measured by the AMS, would have to be reduced if they exceed 5% of the value of production. For developing countries, this percentage is 10%. However, the following are exempted:

a) Government measures which encourage agricultural and rural development like subsidies for low income producers in developing countries.

b) Government service programmes like research, pest and disease control, training, extension and advisory services, inspection, marketing and promotion of infrastructural services.

India and AOA

In India, quantitative restrictions on agricultural imports imposed for BOP considerations have been removed and these imports are placed in the open general licence (OGL) list. In order to provide adequate protection to domestic producers in case of a surge in imports, India can raise the tariffs within the bound ceilings.

India can take suitable measures under WTO Agreement on Safeguards if there is a serious injury to domestic producers due to surge in imports or if there is any such threat.

India's domestic support to agriculture is well below the limit of 10 percent of the value of agricultural produce and therefore India is not required to make any reduction in it at present. The subsidies given for PDS are basically the consumer subsidies and are exempt from WTO discipline. India's system of minimum support price (MSP) as also the provision of input subsidies to agriculture are not constrained by the agreement. Thus, the agricultural sector schemes can be continued under AOA.

India in many cases, in fact, has actually been taxing her farmers by not allowing them to export their produce freely at international prices which are higher than the domestic prices. So when the likes of the US and the EU reduce support levels, the international prices will increase. India whose prices will then become competitive, will stand to gain out of the provision that the countries with BOP problems are not required to provide minimum market access.

But by the same logic, large subsidies given to cotton, sugarcane and oilseeds will have to be reduced. This is because the aggregate measurement support (AMS) given by the government by way of high procurement prices for these products is above the limit of 10 percent permitted for the developing countries under the WTO-AOA.

Assessment

Experience during the last decade and a half or so has shown that WTO has no visible agenda for the resource poor farming families. It is clear that rich nations are not prepared to phase out trade distorting subsidies and provide increased market access to predominantly agricultural developing nations. For this to happen, we may suggest as follows:

1. All boxes may be abolished; the do's and don'ts with reference to trade distortion and unfair trade practices may be spelt out in more clear and unambiguous terms.

2. As an alternative, a fourth box relating to sustainable livelihoods (livelihood security box) may be introduced. This should empower developing nations facing the challenge of providing livelihoods to their poor rural population. By this, restrictions on agricultural imports should be imposed whenever there is convincing evidence that they erode the job/livelihood opportunities of poor in their countries.

3. A range of domestic support measures like those relating to infrastructure development, and many other forms of public provisioning, are non-trade distorting and hence non-actionable. Support for sustainable farming and rural livelihoods, on the other hand, merits subsidy. This concern of developing economies should be duly recognised by the international institutions. The approach adopted in classifying actionable and the non-actionable types of activities should take due cognisance of this in the interest of financial help needed by the large number of small farmers/producers in the developing economies.

20.9 LET US SUM UP

Foreign trade is a win-win situation for all trading partners as it promotes economic welfare. Based on comparative advantage theory, foreign trade promotes global specialisation, efficiency and better use of resources.

However, very often, the free flow of goods across borders is restrained due to other considerations, among which, the most important is to protect domestic industry from foreign competition. Protection is an international phenomenon in which all nations, big and small, rich and poor, impose barriers on free flows of goods. These barriers may be tariff barriers or non-tariff barriers. The height and strength of these barriers is determined by the growth, and the corresponding trade strategy pursued by a nation. Those nations which pursue import-substitution strategy raise higher barriers. Nations pursuing outward-oriented strategy of growth normally place only nominal barriers. Nations, including India, also provide incentives and other subsidies to their producers, both agricultural and non-agricultural. Subsidies amount to interference with the free operation of market forces. The WTO has put in place international arrangements that regulate them.

20.10 KEY WORDS

Opportunity cost : The value of the alternatives or other opportunities which have to be foregone in order to obtain a particular thing.

Free trade : refers to trade that is free from all artificial barriers to trade like tariffs, quantitative restrictions, exchange controls, etc.

Protection : refers to the government policy of providing protection to the domestic industries from foreign competition.

Inward-looking strategy : refers to policies which discourage reliance on foreign resources.

Outward-orientation or Outward-looking strategy : Refers to an environment in which free movement of capital, labour, goods, multinational enterprises, open communication, etc. are permitted.

Agreement on Agriculture (AOA) : Refers to the approach adopted to encourage gradual reduction of trade distorting subsidies.

20.11 SOME USEFULL BOOKS

1. Asian Development Bank, Trade Policy, Industrial Performance, and Private Sector Development in India, Oxford University Press (OUP), New Delhi, 2009.

2. Kaushik Basu (ed.), The Oxford Companion to Economics in India, OUP, New Delhi, 2008.

3. Ashok Gulati and Tim Kelley, Trade Liberalisation and Indian Agriculture, OUP, New Delhi, 2007.

4. Deepak Nayyar, Trade and Liberalisation, OUP, New Delhi, 2008.

20.12 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See Section 20.2 and answer.

2. See Section 20.3 and answer.

3. See Section 20.3.2 and answer.

Check Your Progress 2

1. See Section 20.4.1 and answer.

2. See Section 20.4.2 and answer.

3. See Section 20.5 and answer.

Check Your Progress 3

1. See Section 20.7.1 and answer.

2. See Section 20.7.2 and answer.

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UNIT 21 EMPIRICAL ASPECTS OF TRADE AND BALANCE OF PAYMENTS

Structure

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21.0 OBJECTIVES

After reading this unit you will be able to:

- outline the empirical dimensions of India's foreign trade;
- explain the changes in the different aspects of the structure of India's foreign trade in terms of volume, composition and direction;
- describe the concept and significance of balance of payments;
- discuss the role of balance of payment deficits in the growth process;
- explain the trends in India's balance of payments since the early 1950s;
- outline the importance of different exchange rate regimes and the broad changes in the exchange rate management system; and
- describe the meaning and implications of the full convertibility of rupee.

21.1 INTRODUCTION

As stated in Unit 20, foreign trade worked as an engine of growth in UK (18th & 19th centuries), Japan, South Korea, Taiwan and other East Asian Countries (20th century), and more recently, in China, by generating impulses that had strong forward and backward linkages with many sectors of the economy. These countries also gained by opening up their economies to foreign capital and enterprise. Since the 1990s, India too has adopted similar policies. Liberalisation of trade and opening up of the economy has dramatically transformed the profile of India's foreign trade and balance of payments scenario. The present unit discusses the principal features of India's foreign trade and balance of payment profiles.

21.2 EMPIRICAL DIMENSIONS OF FOREIGN TRADE

An analysis of a country's foreign trade can be made in terms of its

three main profiles: (i) volume, (ii) composition, and (iii) direction.

21.2.1 Volume of Trade

It relates to the size of international transactions. Since a large number of commodities enter in international transactions, the volume of trade can be measured only in terms of money value. The trends in the value of trade over time help us to identify the basic forces that may be operating at different periods in the economy.

However, mere absolute changes in the value of trade is not a satisfactory guide. Hence, it is necessary to find the changes in the value of trade by relating them to two variables, viz.

- Share of exports/imports in GDP, and
- Share of exports/imports in world trade.

The share of exports/imports in GDP indicates the degree of outward-orientation or openness of an economy in regard to its trade. This, in a broad way also reflects the nature of trade strategies adopted in the country. The ratio of exports to GDP could also be interpreted to reflect the average supply capability of the economy in terms of its exports. It can therefore be called as ***average propensity to export***. A similar ratio between imports and GDP gives the ***average propensity to import***. However, the relative share of exports in output under an efficient allocation of resources will be less in bigger economies than in smaller economies. This is in the sense of developed economies being more self-contained as compared to the situation of the developing economies. Such economies have to also import, sometimes in large numbers, all types of goods and services required in the process of development e.g. capital goods, intermediate goods, consumer goods, etc. To finance such imports, these economies have to focus on exports to establish balance of trade.

The share of exports in the world trade indicates the importance of the country as a nation in the world economy. It reflects the market thrust that the country is able to realise in the presence of the various competitors in the world market. Changes in this ratio, thus, indicate the shift in the position of the comparative advantage of the country.

Further, changes in the value of exports may be compared to the changes in the value of imports. It is the relationship between these two variables which is known as the *terms of trade (TT),* i.e. the terms at which exports exchange for imports. Terms of trade can be defined in respect of (i) net barter terms of trade, (ii) gross barter terms of trade, and (iii) income terms of trade.

i) **Net Barter Terms of Trade**: Also called as the commodity terms of trade, this measures the relative changes in the import and export prices. This is expressed as:

$$N = P_x / P_m$$

Where P_x and P_m are price index numbers of exports and imports respectively. A rise in N indicates that a larger volume of imports could be received in exchange for a given volume of exports. However, the net barter terms are relevant only when nothing enters into the trade between countries except sales and purchases of merchandise.

ii) **Gross Barter Terms of Trade**: This is the ratio of the physical quantity of imports to physical quantity of exports. This is expressed as:

$$G_t = Q_m / Q_x$$

where Q_m and Q_x are the quantity or volume index numbers of imports and exports respectively. A rise in G_t is regarded as a favourable change in the sense that more imports are received for a given volume of exports (in the ith year than in the base year).

iii) **Income Terms of Trade**: This is expressed as:

$$I = P_x \cdot Q_x / P_m$$

A rise in I indicates that the nation's capacity to import, based on exports, has increased i.e. it can obtain a larger volume of imports from the sale of its exports.

21.2.2 Composition of Trade

It is indicative of the structure and level of development of an economy. For instance, most of the underdeveloped countries (UDCs) [a term not used any longer having since been replaced by the term developing countries for long] depend for their export earnings on a few primary commodities (PCs). These countries export raw materials of agricultural origin and import manufactured industrial products, thus, denying themselves the benefits of value added. As an economy develops, its trade gets diversified. It no more remains dependant on a few primary commodities for its exports as it begins to export more of manufactured industrial goods importing industrial raw materials, capital equipment and technical know-how.

Manufactured exports create greater value addition than the PCs as they go through more stages of processing. The manufacturing sector has greater linkages with the rest of the economy and, hence, the downstream effect on exports from these sectors are likely to be greater than primary exports.

The commodities entering trade could also be classified by various other criteria such as value added per unit of output, productivity of labour, capital intensity in production, the strength of backward and forward linkages, etc. The shifts in the commodity composition of trade in

these categories would bring out the nature of structural changes in regard to income generation, employment effect and overall industrialisation through linkage effects, etc. The following questions need to be analysed in this regard:

- What is the degree of concentration in the composition of exports/ imports? Has there been any change in the degree of concentration over time?
- Is there any shift in the shares of the primary products and manufactured products in the total export or import traded?

21.2.3 Direction of Trade

The direction of trade is indicative of the structure and level of economic development. As a country develops and its trade gets diversified, it has to seek new outlets for its exports. Its horizon of choice in terms of imports also gets widened. The country begins to trade with an increasingly large number of countries. One could therefore ask whether there has been a concentration or a dispersion of the markets for exports and sources of supply for imports.

It is in terms of these components that we have to study the trends in India's foreign trade during the course of economic planning.

21.3 VOLUME OF INDIA'S FOREIGN TRADE

As envisaged in our development strategy, the volume of merchandise trade has been on the rise; the trade to GDP ratio has gone up from 13 percent in the 1980 to about 25 percent presently. The increase has been shared both by exports and imports.

21.3.1 Exports

India's total exports have increased manifold, from Rs. 606 crores in 1950-51 to over Rs. 6,25,064 crores in 2007-08. However, the increase has not been uniform over the years. Whereas the exports hardly showed any variation during the first decade and a half of our getting independence, i.e. between 1950-51 and 1965-66, it multiplied manifold during the next four decades, i.e. between 1966-67 and 2007-08. We can, therefore, conveniently divide the whole period into two sub-periods, with 1965-66 serving as the year of divide. We shall now identify the trends and the forces that have been at work during each of these sub-periods.

Before 1965-66

India's exports were slow to grow during the first fifteen years of economic planning, notwithstanding the fact that this period has been described as the *Golden Era* for world exports.

This fact can be established with the help of two comparisons, viz.

- A comparison with the growth in total world exports.
- A comparison with the growth of net national product (NNP).

The total exports formed as much as 6.8 percent of the NNP in 1950-51 and 8.0 percent in 1951-52. This share fell to 3.9 percent in 1965-66 indicating that the growth in the *exports sector lagged behind the growth in other sectors of the economy.*

India's share in the total world exports was 2.2 percent in 1951. It came down steeply to 1.3 percent in 1958, and further to 1.1 percent in 1965.

After 1965-66

In 1966, the Indian rupee was devalued to bring domestic prices in alignment with external prices. After this devaluation, initially, exports were slow to pick up. But in 1972-73, a real breakthrough in exports occurred. This was mainly due to a substantial growth in the exports of sugar, iron and steel, fruits and vegetables and food products. A considerable growth was also recorded by engineering goods, leather goods, apparel, handloom cloth, chemicals and allied products, and various handicrafts, especially gems and jewellery.

A second major change in the trend in exports occurred in 1986-87, and has continued since, with evidence of a new dynamism of India's export performance brought about by a more supportive domestic industrial policy. This policy emphasised on competition, efficiency, scale economies and technological up-gradation. Further, a more liberal import policy ensured greater and easier access to imported inputs of raw materials and components as also technology. The pursuit of a realistic exchange rate also helped in preserving a competitive edge in exports. As a result, exports increased at an annual average rate of more than 25 percent in rupee terms.

In view of these factors, over the last twenty years i.e. 1987-2007, the upward trend in exports has been consistently maintained, except for some occasional dips. Currently, the export sector is poised for a major break-through, notwithstanding the serious uncertainties and instabilities caused by financial turmoil in the developed world. This shows that Indian exporters are successfully exploiting the scope of productivity gains that exist today. For instance, major emphasis is laid on improving the infrastructure in the country. Falling interest rates have also helped considerably to maintain competitiveness. This trend should strengthen India as it progressively gets greater market access, especially in services within the framework of WTO.

Relative Position

As already stated, changes in the value of trade may not be much useful

in assessing the export performance. *We must study the relative position*. We can employ, presently, three types of comparisons for this purpose.

i) **Comparison with the First Decade and a-half of Planning:** As to this, the conclusion is obvious i.e. India's exports have picked up and continued to maintain an upward trend.

ii) **Comparison with the Growth of GDP:** The share of exports in GDP too has increased over the years. Whereas it was a mere 3.1 percent in 1965-66, it was 13.0 percent in 2007-08. The aggregate exports of all high-income countries combined are 15 percent of their aggregate GDP whereas the average for all low-income economies (including China) is 18 percent.

iii) **Comparison with the Growth of World Exports:** India's exports, as compared to the world exports, have been slow to grow. Consequently, India's share in the world exports fell to a low of 0.42 percent in 1980-81. This is in spite of the country's comparative advantages like: low wages, educated workforce, etc. During the 1980s and the 1990s, there has been some improvement in this ratio, varying between 0.50 and 1.00 percent, indicating improvement in the export sector.

In short, India's exports shows a mixed trend. Whereas the rate of growth as measured in terms of past performance (or in terms of its share of national income) shows a rise, its performance when measured in terms of the share in world exports is very low.

21.3.2 Imports

India's total imports have increased from Rs. 608 crores in 1950-51 to an estimated Rs. 9,49,134 crores in 2007-08. It is estimated that 1 percent increase in national income requires imports to grow by 1.2 percent. This would mean that to achieve the targeted 9.0 percent per annum rate of growth, the import bill would rise by about 10.8 percent per annum. The overall trend of imports has been that of an increase right since 1954-55, with some dips now and then. While exports have been mainly dependent on world demand and availability of exportable surpluses, imports have been largely a matter of government policy.

Till 1980s, the government had adopted an import control policy. This included measures like licensing, quotas, bans, etc. of imports and tariff measures for providing protection to domestic units. The degree of control varied depending on the circumstances obtaining in the economy. Initially, the objective of the import trade control was to save foreign exchange. Over the years, the import trade control acquired a more positive and wider role in the economic development and industrial growth of the economy. It sought to facilitate the availability of such imported inputs crucially needed to broaden the base of industrial production and growth, especially for promoting exports.

21.4 COMPOSITION OF INDIA'S FOREIGN TRADE

21.4.1 Exports

The picture that emerges from the aggregate behaviour of export values, volumes and prices gets reflected in the performance of individual commodities. There are two marked features of the composition of exports as they have emerged during the last five and a-half decades.

Till 1965-66

During the first decade and a-half, i.e. till 1965-66, India's export efforts leaned heavily on three principal commodities, viz. tea, jute and cotton goods. These three commodities among themselves commanded between 45 and 50 percent of the total export earnings. Other principal items of export during this period were manufactured tobacco, cashew kernels, leather and iron ore.

Since 1965-66

Since 1965-66, the commodity composition of India's exports has undergone a total transformation, which, in turn, has also contributed to a rapid expansion of India's exports during this period. The diversification in exports largely reflects the growth and industrialisation of the economy. It is also indicative of India's resolve to realise the goal of self-reliance. Important new commodities that have been added to the export basket and have acquired considerable significance in terms of their export value realisations are engineering goods, leather manufactures, cotton apparels, pearls and precious stones, chemicals and allied products, woollen carpets, iron and steel, etc.

Economic Reforms and Stimulus to Exports

The on-going economic reforms characterised by trade liberalisation (brought about by the reduction of tariff and non-tariff barriers) is expected to bring about following effects:

- It will stimulate production of labour intensive items and bring about more efficient use of resources as country specialises in production of goods where it has a comparative cost advantage.
- The growth in output will allow the buoyant sectors to reap the advantages of large-scale production.
- Competitive pressures will induce firms to raise production achieving more efficient plant sizes and lower per unit costs. Firms will also become quality-conscious.
- The termination of multi-fibre agreement (MFA) is expected to offer

opportunities for larger exports of textiles, although the competitive pressures from other competing developing countries' low-cost producers may rise.

21.4.2 Imports

Imports, as already mentioned, have been largely governed by the import trade control policy of the government although the composition of imports has been changing in response to the needs of the economy.

India's imports can be classified into three parts viz. (i) consumer goods, (ii) raw materials and intermediates, and (iii) capital goods. While the import of consumer goods have been totally restricted, permitted only when required to meet domestic shortages, imports of raw materials, intermediate goods and capital goods have increased.

Consumer Goods

The import of consumer goods, as already stated, have been allowed only when they are required to meet domestic shortages. Among these, the more important have been cereals, especially wheat and pulses. Hence, these imports do not show any systematic pattern. They have been usually high in the year succeeding the bad crop year. Since 1976-77, these imports have been negligible primarily because of large food-grains production during the period 1976-2008.

Capital Goods

The import of capital goods (e.g. machinery and other industrial equipment) shot up rapidly between 1955-56 and 1965-66, which correspond to the period covered by the Second and Third Plans.

Subsequently, there was a significant slow-down in imports of capital goods whereby domestic investment activity had slowed down. Imports of capital goods which formed as much as 29.5% of total imports during 1960-61 came down to only 15.0% in 1990-91.

With the on-set of the economic reforms programme, technological improvement and efficiency became the keywords for industrial survival in the emerging competitive environment.

Import of capital goods increased during the decade of 1990s and after. This increase could be attributed to the following three reasons:

- Indian manufactures introduced advanced technology to meet international competition.
- Import duties were reduced and regulations on import of capital goods were relaxed.
- Inflow of FDI rose. When joint venture companies are set up, they are likely to result in the import of capital goods from the partner countries.

Intermediate Goods

The group of commodities which has been growing in importance over the years consists of raw materials and intermediate goods most of which are in the nature of 'maintenance imports'. As the growth process moved, shortages and scarcities of different types of raw materials and intermediate goods began to be felt. These shortages would adversely affect the utilisation of capital goods, but for the import of required intermediate goods. Hence, the large imports of these commodities have been allowed. Among these imports, the most significant have been crude oil and petroleum products, fibres, fertilisers, chemical products, iron and steel, and non-ferrous metals. In short, the product profile of India's imports shows a strong push towards modernisation of Indian industry.

The composition of India's foreign trade reflects the structural changes that the Indian economy has undergone over the period of last five decades. It is no longer an exporter of primary commodities and an importer of manufactured goods. It exports manufactured goods and imports raw materials, intermediate goods and capital goods.

21.5 DIRECTION OF INDIA'S FOREIGN TRADE

21.5.1 Exports

The relative importance of the U.K. and the U.S.A. as outlets for our exports has declined over the years. Whereas in 1950-51, these countries together accounted for more than 40 percent of India's exports, this share came down in 2007-08 to less than 23 percent. The U.S.A., all the same, continues to be our principal buyer. It has, however, to contend with EU member-nations who as a group offer us a very rich market. The economic conditions in industrial countries significantly determine the demand for India's exports.

More Recent Development

Over the last decades, in wake of Look East Policy, India's exports to Asia and Oceania markets, with which ethnically, culturally and economically India is closer, have shown a sharp jump. In fact, the current boom in exports is sustained largely by what officials see as an unexpected and healthy rise in exports to the Asia and Oceania countries, which include the ESCAP countries like Australia, Iran, Japan, Korea, Malaysia, Singapore, Thailand, Hong-Kong, Bangladesh and Nepal. The shift in favour of these countries implies that Indian exporters have begun concentrating in markets closer home to capitalise on the advantages from lower freight cost. It is also an evidence of the outward orientation being imparted to the economy by reforms.

However, the expansion of trade within Asia is inevitably going to be constrained by the fact that many countries, particularly the fastest growing ones, have similar resource endowments. For instance, they are commonly competitive in labour-intensive products. And as they will find it difficult to sell these goods in each others' markets, their aim is to compete for a share in the American and European markets.

21.5.2 Imports

The direction of imports has been largely influenced by the development of the economy. In the initial stages of growth, a large part of the development process was financed through foreign aid, which was primarily in the form of tied aid. As a result, a large part of imports originated from the aid-giving counties.

- In 1965-66, more than 35 percent of India's total imports came from the U.S.A. Since then the share of the U.S.A. has declined although it continues to be our largest supplier, accounting for about 8 percent of our total imports.

- The share of the U.K. in India's imports has also sharply declined although it continues to be a principal supplier. Among the other major countries that have made inroads into our import trade are Belgium, Canada, France, Germany and Japan. The EU as a group accounts for about 24 percent of our imports.

- A more significant development has been the emergence of oil-producing countries as a significant purchasing centre for us. Sharp increase in the unit value of petroleum and its products have led to higher oil import bill. The OPEC accounts for about 22 percent of our total imports.

- Since the liberalisation in more recent years a glut of imports has been taking place from China and East Asian countries. These imports, presently, are limited to low-price consumer goods.

Diversification or Concentration?

Nine countries, viz. the U.S., the U.K., Germany, the erstwhile USSR, Japan, Iran, Iraq, Australia and Canada had a lion's share ranging between 51 to 62 percent of our exports and 56 to 75 percent of imports during the three decades from 1951-52 to 1979-80. In 1990-91, their share of exports was as high as 56.7 percent while their share in imports had declined to 47.6 percent. More recently, in 2004-05, 51.7 percent of our total exports had their destination in the EU, the USA and the UAE. Likewise, about 40.5 percent of our total imports originated from the EU, the USA and Japan. It is therefore clear that India's foreign trade is not diversified. By implication this means that India would have to explore new sources of imports and new markets for its products in a fast globalising world.

To sum up, during the last five decades, significant changes have been observed in the volume, composition and direction of India's foreign trade. Although most of these changes have been in consonance with the development needs of the economy, following problems need immediate attention.

- Problems of deficits in the balance of trade. Growing trade deficits had posed problems of resource mobilisation for the Indian planners till the recent past. This, therefore, needs to be monitored continuously.
- Our share in world trade (which is presently less than 1 percent) needs to be increased if India is to play its rightful role in the international division of labour.
- The expansion of trade within Asia is inevitably going to be constrained by the fact that many countries, particularly the fastest ones, have similar resource endowments. To go beyond mere diversification and act as a genuine engine of growth, Asian trade will have to be driven by forces similar to those in Europe. Gains can come from increasing efficiencies as production relocates across borders to take advantage of scale economies and other factors.

Check Your Progress 1

1. What major changes have taken place in the volume of India's foreign trade during the last three decades?

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2. How has the composition of India's exports been affected by economic reforms?

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3. Highlight the important changes in the direction of India's foreign trade in recent times

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21.6 BALANCE OF PAYMENTS AND PROBLEM OF DEFICITS

The principal tool for the analysis of the monetary aspects of international trade is the balance of international payments settlement. This statement, also simply known as the 'balance of payments' (BOP), is a systematic record of all international economic transactions, visible and invisible, of a country during a given period, usually a year. In other words, the statement is a device for recording all the economic transactions within a given period between the residents of a country and the residents of other countries. The BOP of each of the individual countries, technically speaking, always *'balances'*. Such equality in the debit and credit sides of the BOP, known as equilibrium, has no economic significance. It simply results from the double entry bookkeeping procedure, which is used to record the transactions.

The analysis of the BOP can be done in terms of its two major sub-divisions: (a) Current Account, and (b) Capital Account.

21.6.1 Current Account

The *Current Account* can be broken down into two parts, viz. (i) balance of trade and (ii) balance on invisibles. The *Balance of Trade* (BOT) deals only with exports and imports of merchandise (i.e. visible items). The *Balance on Invisibles* (BOI) shows net receipts on account of invisibles. These include the remittances, net service payments, etc. It is not necessary that the BOT should always balance; more often than not, it will show either a surplus or a deficit. Similarly, the BOI will always show either a surplus or a deficit. A surplus on BOT may be matched with a surplus or deficit on BOI. If the surplus on BOI equals the deficit on BOT, the current account will show a net balance. However, there is no reason why these two balances should always be equal; as a matter of fact, the balance on current account always shows a deficit or a surplus. A surplus on current account leads to an acquisition of assets or repayment of debts previously contracted, and a deficit involves withdrawal of previously accumulated assets or is met by borrowings.

21.6.2 Capital Account

The *Capital Account* presents transfers of money and other capital items and changes in the country's foreign assets and liabilities resulting from the transactions recorded in the current account. The deficit on the current account and on account of capital transactions can be financed by external assistance (e.g. loans and grants drawn from the International Monetary Fund) and allocation of the Special Drawing Rights.

The BOP accounts provide a link between the increase in gross external debt and the portfolio and spending decisions of the economy.

Thus, increase in gross external debt = Current account deficit (CAD)

– direct and long-term portfolio capital inflows

+ official reserve increase

+ other private capital outflows

21.6.3 Balance of Payments and Developing Economies

It is well known in development economics that UDCs invariably start of as debtor economies. In the process of development itself, these economies have to import a great deal of capital goods, food and raw materials and spares and components. They also have to import new technologies. Hence, the total exchange outgo cannot be matched by export earning. It is, however, expected that in a decade or two, as the new capital goods and technologies become effective with their products directed towards exports, the volume of exports expand and, in due course, overtake imports. A developing economy at that stage moves on from being a debtor economy to a more balanced one in terms of BOP and, finally, becomes a creditor economy, when its exports are more than its imports. Thus, from being a net debtor in the beginning, it becomes a net creditor in the end and, in fact, begins to invest abroad rather than have others lending to and investing in it.

21.6.4 Current Account Deficit (CAD)

A current account deficit, as seen from the above, is nothing but a measure of a country's savings gap, i.e. the excess of investment over savings. It represents the net transfer of resources from the rest of the world to the country running the deficit. Therefore, in a developing country, with huge needs for funds for investment, a CAD is unavoidable as it represents investment which would otherwise be beyond its potential to finance from its own savings. In view of this, CADs are best when financed by foreign capital inflows.

The right CAD for any country, therefore, depends on its ability to absorb and service the capital inflows. If these resources can be deployed productively and in ways that enhance its ability to repay, a high CAD to GDP ratio is nothing to worry about. But if they cannot, then it is inviting trouble. Too high a ratio can prove unsustainable in the long run as it did in East Asian economies in 1998 and in Mexico earlier. To that extent low CAD to GDP ratio has its advantages. However, a very low ratio carries with it an opportunity cost - of not being able to benefit from resources that could be drawn from outside.

21.7 TRENDS IN INDIA'S BALANCE OF PAYMENTS

India has faced pressures on BOP from time to time either due to certain domestic compulsions or due to external factors. In this context, the whole period, covering nearly five decades, can be divided into five sub-periods, depending on: (i) the nature of the BOP problem, (ii) the overall macro-economic environment, and (iii) the external situation.

Period I (up to 1975-76): A Period of Deterioration

The period was very difficult for India's BOP, partly because of slow growth of exports in relation to import requirements and partly because of adverse external factors. Despite tight import controls (through quantitative restrictions) and foreign exchange regulations, the CAD was 1.8 percent of the GDP. Foreign exchange reserves were at a low level, generally less than necessary to cover three months' imports. Almost the entire CAD (92 percent) was financed by inflows of external assistance on highly concessional terms.

Period II (1976-77 to 1979-80): A Period of Transition and Improvement

These few years stand out as the golden years for India's BOP. India had a small current account surplus (0.6 percent of the GDP on an average) and foreign exchange reserves equivalent to about seven months' imports. Export growth was good but the primary reason for the improvement in BOP was the dramatic improvement in net invisibles (by way of large remittances from the middle east from Indian emigrants). Net invisibles increased from Rs. 193 crores in 1974-75 to Rs. 2,486 crores in 1979-80.

Period III (1980-81 to 1989-90): Emergence and Persistence of Structural Imbalances

This period corresponds to the Sixth and the Seventh Plan periods. The Sixth Plan was launched when the economy was faced with severe BOP difficulties. In 1981, India entered into an arrangement with the IMF for a loan of *SDR 5 billion* under the Extended Fund Facility. The amount was to be disbursed over a three-year period. India, however, drew only SDR 3.9 billion and the arrangement was terminated in early 1984 at India's request because of the improvement in the BOP position in 1983-84.

The deficit on external trade and payments suddenly jumped from the first year of the Seventh Plan and was particularly acute during the last two years of the plan. The CAD more than trebled over the plan period as a whole. The deficit was as high as 2.2 percent of the GDP, as compared to 1.3 percent during the Sixth Plan.

Period IV (1990-91 to 1995-96): Stabilisation and Strengthening

The BOP crisis reached its climax during 1990-91 - CAD reached a high of 3.3 percent of the GDP during this year.

A comprehensive strategy to deal with the BOP situation was put in practice. The principal elements of the BOP strategy were as follows:

- **Preference to Non-Debt Creating Capital Flows:** The most important element of strategy has been the paradigm shift in the attitude towards inflow of capital from abroad. Capital inflow from abroad was earlier treated more generally as a device to finance CAD. Now non-debt creating capital inflows, especially FDI, is being encouraged on account of their positive impact both in terms of technology and the stabilising role in external sustainability. The policy has, therefore, been to gradually liberalise capital account.

- Recognising that liberalisation of capital account needs to be treated as a continuous process, the approach is being based on a careful and continuous monitoring of certain preconditions/signposts such as monetary and fiscal discipline, exchange rates, structural reforms, etc.

- Stabilisation and strengthening of strict fiscal and monetary discipline to control aggregate demand in place of monetary policy aimed at slowing down the growth of money supply.

- **Exchange Rate Policy:** The exchange rate policy was progressively liberalised in the successive union budgets of early 1990s. For instance:

  - A dual exchange rate system, called liberalised exchange rate management system (LERMS), was introduced in the union budget of 1992-93. Under this system, 40 percent of foreign exchange earnings were to be surrendered at the official exchange rate. Remaining 60 percent could be converted at a market-determined rate.

  - The budget for 1993-94 introduced another scheme viz. the unified exchange rate system (UERS) in which rupee was convertible at a unified market determined rate of exchange. Under this, all payments and receipts of foreign exchange were to be converted in rupees at market-determined rate of exchange.

  - The budget for 1994-95 introduced full convertibility on current account making many trade transactions relatively more free of controls.

Further, import restrictions on capital goods, raw materials and components were virtually removed. With this, excess import-demand

would be reflected in a higher market exchange rate with which a self-correcting mechanism was expected to operate keeping the trade deficit in check.

Period V (1996 to 2008)

Over the last decade or so, two prominent features on the BOP front can be indicated as follows:

1. On the current account front:

   i) **Firstly**, trade deficits have been widening. Both exports and imports have multiplied fast, but imports have risen at a faster rate than exports. Expanding exports, in turn, reflect (a) the impact of liberalisation measures, and (b) increasing manufacturing activity in the domestic economy.

   ii) **Second,** there has been a phenomenal increase in the net surplus on account of invisibles. This, in turn, is principally due to (a) buoyancy in private transfers (i.e. inward remittances), and (b) fast expansion in exports of services, especially software. India is unique among emerging economies to have a sizeable invisible surplus that substantially offsets the merchandise trade deficit. As a result, although India has been running a current account deficit (except during 2002-04 when India experienced a current account surplus), the deficit has been conveniently managed, largely because of huge surplus on capital account as the following point clarifies.

2. On the capital account front, India has been running a big surplus. The size of the surplus has been much more than what is required to finance the current account deficit. As a result, India has been rapidly building up its foreign exchange surplus. The capital account demonstrates features like:

   i) Increased inflows and outflows of capital especially since 2003.

   ii) The composition of capital flows has undergone change by way of:

      a) Official external assistance gradually losing out its significance;

      b) FDI and portfolio investment have surged, with the FDI inflows being much more than portfolio investment; and

      c) Easing of controls resulting in external commercial borrowings in a prominent manner.

Overall, therefore, India's balance of payments (both current account and capital account) has been in surplus, resulting in rapid build-up of foreign exchange reserves. However, it should also be noted that the acceleration in India's growth momentum since 2003 owes partly to the

exceptionally easy global liquidity conditions. This has increased the scope for risk-taking contributing to an increase in the volume of capital inflows into India.

21.7.1 Long-run Perspective

Our long term strategy should aim at enhancing the economy's absorptive capacity to achieve higher levels of real investment. At the same time, we must ensure that we do not become dependent on external capital, for if it dries up, our currency loses its value. Speculators anticipate this by betting against the currency, which puts pressure on it. When this happens, the value of investments drop. The flight of capital increases the pressure on the currency, and such a situation might warrant the assistance of the central bank. Therefore, no country must let its CAD go beyond 3 to 4 percent of GDP which in India's case works out to about $ 45 billion. Also, the composition of its reserves and the vulnerability of its capital inflows to short-term uncertainties must be minimised. This implies that as the economy grows up, outside influences will increasingly impact and constrain policy-making along with domestic imperatives. This requires that imports must be constantly monitored for its composition, and capital goods imports must be encouraged as compared to consumer goods. Exports should always be a priority and to the maximum extent possible, the trade deficit should be narrowed. With a large service sector and huge stock of service professionals, a big push in multiple directions is required for exploiting the market potential in this area. Short-term debts should not be allowed to reach a level where its refinancing could create a crunch. Direct investments are more important than portfolio investments in that they represent more stable and committed flows.

Check Your Progress 2

1. What is meant by balance of payments? Distinguish between current account and capital account.

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2. Outline the significance of balance of payments in a developing economy in about 50 words.

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3. Do current account deficits need to be avoided in all situations?

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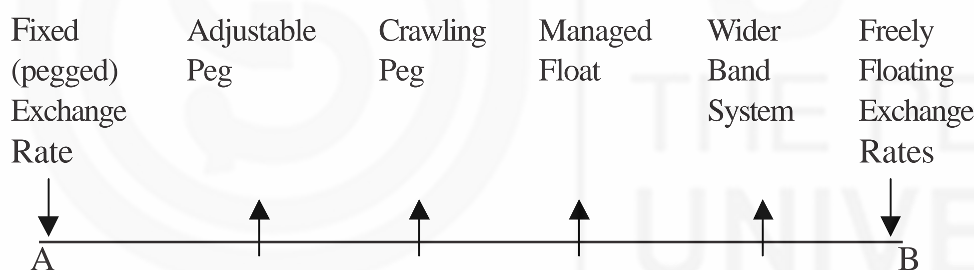
21.8 EXCHANGE RATE REGIME

Exchange rate regime refers to the way in which a country manages its currency is respect of other foreign currencies and the foregin exchange market. Between the two limits of fixed and freely floating exchange regimes, there can be several other types of regimes as shown in Fig. 21.1. In their operational objective, it is closely related to monetary policy of the country with both depending on common factors of influence and impact. Exchange rate regime has a big impact on world trade and financial flows. The volume of such transactions and the speed at which they are growing make the exchange rate regime a central piece of any national economic policy framework.

Figure 21.1: Types of Exchange Rate Regime



In Fig. 21.1, as one moves from point A on the left to point B on the right, both the frequency of intervention by domestic monetary authorities and required level of international reserves tend to be lower. Under a pure fixed-exchange-rate regime (point A), authorities intervene so that the value of the domestic currency vis-à-vis the currency of another country, say the US dollar, is maintained at a constant rate. Under a freely floating exchange-rate regime, authorities do not intervene in the market for foreign exchange and there is minimal need for international reserves.

21.8.1 Exchange Rate System in India

India was among the original members of the IMF when it started functioning in 1946. As such, India was obliged to adopt the Bretton Woods system of exchange rate determination. This system is known as the par value system or pegged exchange rate system. Under this system, each member country of the IMF was required to define the value of its

currency in terms of gold or the US dollar and maintain (or peg) the market value of its currency within ± percent of the defined (par) value.

The Bretton Woods system collapsed in 1971. Consequently, the rupee was pegged to pound sterling for four years after which (since September 1975) it was initially linked to the basket of 14 currencies but later reduced to 5 currencies of India's major trading partners. This system continued through the 1980s; though the exchange rate was allowed to fluctuate in a wider margin and to depreciate modestly with a view to maintaining competitiveness. However, the need for adjusting exchange rate became precipitous in the face of the external payments crisis of 1991. As a part of the overall macro-economic stabilisation programme, the exchange rate of the rupee was devalued in two stages by 18 percent in terms of the US dollar in July 1991. With that, India entered into a new phase of exchange rate management.

21.8.2 Objectives of Exchange Rate Management

The main objectives of India's exchange rate policy is to ensure that the economic fundamentals are truly reflected in the external value of the rupee. Subject to this predominant objective, the conduct of exchange policy is guided by the following:

1. Reduce volatility in exchange rates, ensuring that the market correction of exchange rates is effected in an orderly and calibrated manner;

2. Help maintain an adequate level of foreign exchange reserves;

3. Prevent the emergence of destabilisation by speculative activities; and

4. Help eliminate market constraints so as to assist the development of a healthy foreign exchange market.

Exchange Rate Reforms

Exchange rate reforms have proceeded gradually beginning with a two-stage cumulative devaluation of rupee by about 20 percent effected in July 1991. Subsequently, as mentioned earlier, the Liberalised Exchange Rate Management System (LERMS) was introduced in 1992 which was later replaced by the Unified Exchange Rate System (UERS) in 1993. The net result was an effective devaluation of the rupee by around 35 percent in nominal terms and 25 percent in real terms between July 1991 and March 1993.

21.8.3 Features of the Current Regime

The principal features of the current exchange rate regime in India can be briefly stated as follows:

1. The rates of exchange are determined in the market.

2. The freely floating exchange rate regime continues to operate within the framework of exchange control.

3. Current receipts are surrendered (or deposited) to the banking system, which in turn, meets the demand for foreign exchange.

4. RBI can intervene in the market to modulate the volatility and sharp depreciation of the rupee. It effects transactions at a rate of exchange which could change within a margin of 5 percent of the prevailing market rate.

5. The US dollar is the principal currency for the RBI transactions.

6. The RBI also announces a Reference Rate based on the quotations of select banks in Bombay at twelve noon every day. The Reference Rate is applicable to SDR transactions and transactions routed through the Asian Clearing Union.

In short, the Indian rupee has matured to a regime of the floating exchange rate from the earlier versions of a 'managed float'.

21.8.4 Convertibility on Current Account

The current regime of exchange rate has been accompanied by full convertibility on current account with effect from August 20, 1994. Accordingly, several provisions like remittances for services, education, basic travel, gift remittances, donation, and provisions of the Exchange Earners' Foreign Currency Account (EEFCA) were relaxed. In a further move, announced in 1997, the RBI liberalised the existing regulations in regard to payments for various kinds of feasibility studies, legal services, postal imports and purchases of designs and drawings. With this, India acquired a status called as the IMF Article VIII Status. By attaining the Article VIII status, India has reached a position by which it can instil confidence among the international investor community, paving the way for further inflow of foreign capital. Further, India is also committed to allowing free outflow of current account payments (like interest) even if there is a serious foreign exchange crisis.

Notwithstanding the above, the government still retains many controls on current account. Among these, the following may be specifically mentioned:

i) Repatriation of export proceeds within six months;

ii) Caps on the amounts spent on the purchase of services abroad;

iii) Restrictions on the repatriation of interest on rupee debt;

iv) Dividend-balancing for FDI in some consumer goods industries;

v) Restrictions on the repatriation of interest on NRI deposits;

vi) Rupee is not allowed to be officially used as international means of payment. Indian banks are not permitted to offer two-way quotes to NRIs or non-resident banks.

With the help of these controls the governments can significantly alter the flow of foreign exchange and the exchange rate of rupee. Additionally, the RBI can influence the exchange rate through direct purchase and sale of foreign exchange in the market.

21.8.5 Convertibility on Capital Account

Drawing on the experience of the past decade and a half, the extent and timing of capital account liberalisation is sequenced with other reforms like strengthening of banking systems, fiscal consolidation, market development and integration, trade liberalisation, etc. all of which are in tune with the changing domestic and external economic environment. A hierarchy is thus established in the sources and types of capital flows. The priority has been to liberalise inflows relative to outflows, but all outflows associated with inflows have been totally freed. Among the types of inflows, FDI is preferred for its stability, while short-term external debt is avoided. A differentiation is made between corporates, individuals and banks.

For outflows, the hierarchy for liberalisation has corporates at the top, followed by financial intermediaries and individuals. Restrictions have been eased for corporates seeking investments and acquisitions abroad which strengthen their global presence. Banks and financial intermediaries are considered a source of greater volatility as their assets are relatively illiquid and their liabilities are demandable. They are thus susceptible to self-fulfilling crisis of confidence leading to a contagion effect. In view of this, liberalisation for outflows in this sector has been tied to financial sector reforms. For individuals, residents are treated differently from non-residents, and non-resident Indians are accorded a well-defined intermediate status between residents and non-residents.

21.8.6 Intervention By RBI

In the current exchange rate regime, introduced in 1993, the RBI has been actively intervening in the foreign exchange market with the objective of maintaining the real effective exchange rate (REER) stable. The RBI uses two types of intervention in this regard:

1. **Direct Intervention**: It refers to purchases and sales in international currency (i.e. US dollars and euro) both on-spot and also in forward markets.

2. **Indirect Intervention**: It refers to the use of reserve requirements and interest rate flexibility to smoothen temporary mismatches between demand and supply of foreign currency.

Intervention by the RBI has raised a question as to whether or not there should be an exchange rate band within which the central bank should allow the currency to fluctuate. The Tarapore Committee in its report on Capital Account Convertibility had, while suggesting transparency in the exchange rate policy of the central bank, recommended a band within which it would allow the currency to move. The RBI has been, in contrast, saying that there cannot be such rigidities in exchange rate policy, and, therefore, the bank should have the right to intervene at its discretion. Such interventions are considered necessary till the rupee is made fully convertible.

21.9 FULL CONVERTIBILITY OF RUPEE

Meaning of a Convertible Currency

A convertible currency is one, which can be converted into foreign currencies and can be used freely for payment of goods and services, including travel, without any constraints or limitations imposed on it. This is to be contrasted with a controlled currency, which cannot be converted into foreign currencies without prior authorisation because of exchange controls imposed in that country.

The convertibility can be for current account transactions (with restrictions on capital flows) or capital account transactions or for both the current and the capital accounts. Each has its benefits while posing certain risks and challenges to the economy.

Convertibility requires an appropriate and credible economic environment. In the absence of such environment providing the much required confidence in macro-economic stability and the competitiveness of domestic enterprises, establishment of capital account convertibility entails the risks of capital flight and greater volatility in exchange rates. It is because of this that many countries have maintained various restrictions on different types of capital flows until their economies are well advanced.

21.9.1 Changeover to Full Convertibility

Indian rupee was made fully convertible on current account in 1994. Following this, several provisions relating to flows of foreign exchange were relaxed. Further, as stated before, in 1997, the RBI liberalised the existing regulations in regard to payments in foreign exchange thereby according India the status of IMF Article VIII.

On the capital account, liberalisation measures has kept in tune with other reforms. The extent and timing of capital account liberalisation is sequenced with other reforms and the changing domestic and external economic environments. As such, rupee is not fully convertible on capital account.

Having made rupee convertible on current account and partially convertible on capital account, full convertibility of rupee should be the next logical step. There are, however, reasons to weigh both the pros and cons before this step is undertaken.

21.9.2 Gains From Full Convertibility

Capital account convertibility can yield many efficiency gains. These are:

i) By setting the prices right, it enables the aggregate savings and investment to be optimised, giving both allocative efficiency and competitive discipline to the economy.

ii) By providing the opportunity of using the world markets for achieving diversification, it permits both savers and investors to protect the real value of their assets.

iii) By exposing the financial sector to global competition, capital account convertibility stimulates efficiency, stabilisation and innovation.

iv) By symbolising the economy's openness and freedom, it will not only attract foreign capital but also encourage foreigners to take large and more permanent ownership positions in domestic enterprises, and persuade them to be less inhibited about sharing technologies, management practices and markets. A free forex regime thus acts as a strong magnet to the riches of the world.

v) Once the capital account is freed, the Indian stock market, foreign exchange, bond and commodity markets will become more linked to the global markets and the Indian markets will be truly part of an international economy. Interest rates in India will then be more closely aligned with global rates assuring our industry and agriculture adequate credit at reasonable rates.

vi) Under a free forex and full convertibility atmosphere, asset switching possibilities will bring about a greater degree of efficiency; just like 'arbitrage' possibilities of an insular market will disappear.

vii) Capital account convertibility provides resident Indians with investment opportunities overseas.

viii) A non-convertible rupee insulates the Indian economy from global crises, but keeps its poor.

21.9.3 Costs of Full Convertibility

There are no free lunches in real life for macroeconomic management. Among the important costs associated with capital account convertibility the following are important:

i) Convertible rupee would encourage capital flight.

ii) The capital outflows would have to be neutralised, at least by an equal volume of inflows in the form of investments by foreigners or a matching increase in export earnings. The former would require their confidence, not just in economy's potential but also in the government that it would not panic and reintroduce capital controls. The latter is an uphill task. In other words, both will take time.

iii) Total capital decontrol in the present situation is premature, as trade sector reforms are not yet complete. A trade sector that is still in the process of adjustment emits faulty signals about the relative profitability of various sectors. Capital will more likely flow into sectors that will not eventually survive international competition. The differing speeds with which asset and goods markets adjust can make a crucial difference in this regard.

iv) Fiscal consolidation, which is basic to our reform strategy, can be eroded by premature capital decontrol. In the event of net inflows, the fiscal costs of monetising them can be heavy. Further, because of volatile exchange rate movements, it could be uncertain too. Likewise, in the event of outflows, the domestic tax base will shrink, with its obvious fiscal repercussions. In either case, RBI will lose control over the money base and the monetary policy will become largely ineffective in inflation management.

v) If immediate full convertibility also means full-scale trade convertibility, it would play havoc with the Indian industry and stock markets. The slowdown in domestic industrial growth under the impact of greater foreign competition would bring adverse influence on the corporate profitability sending the stock market into a tailspin. Under these circumstances, it would be impossible to have a vibrant, attractive and lucrative capital market.

vi) From the point of view of attracting foreign capital, we would be sending less positive signals by premature capital account convertibility than by robust macroeconomic adjustment . In other words, the advantages of capital account convertibility cannot be derived until fiscal consolidation is complete.

One may not fully agree with Prof. Jagdish Bhagwati, the internationally acknowledged champion of free trade, when he says that 'he will avoid full convertibility like plague'. This may appear a harsh judgement, but not wrong. It finds support from Paul Krugmen when he remarks that 'it is an extremely dangerous world out there. The risks of getting caught in the pinball game are too high'.

21.9.4 Adjustment Measures

Before the decision on full convertibility is finally taken, it must be

preceded by a number of adjustment measures. To recapitulate, these measure are:

- Fiscal consolidation of a stable and robust order;
- Achieving a strong and sustainable BOP adjusted position;
- Achievement of low and stable level of inflation;
- Completion of the trade and financial sector reforms;
- Establishment of globally competitive interest rates; and
- Establishment of efficient infrastructure and streamlined production procedures for achieving high productivity and quality consciousness.

In short, controls over outward capital movements and foreign borrowing should ge retained until at least the domestic financial system has been strengthened and economic conditions are so stable that the movement of money from India to the United States matters as little as its movement from Mumbai to Delhi. We should not show any haste. There are lessons in patience we can emulate. The first country to industrialise, the United Kingdom, lifted controls as recently as in 1979. Most developed countries have removed capital controls only in the last two decades. South Korea, the success story of the twentieth century, still maintains extensive capital controls. So are the vast majority of developing countries who continue to impose capital controls. No country that has gone in haste for total convertibility has managed to sustain itself when faced with continued fiscal deficits and structural disequilibrium. The issue of full convertibility therefore relates more to the right sequencing of reforms than to their speed.

21.10 LET US SUM UP

The unit presents a profile of India's foreign trade and balance of payments. During the early phase of economic planning, the foreign trade sector was relegated to the background with import substitution, rather than export promotion, forming the core of development strategy pursued in India. The balance of payments difficulties made it imperative to bring about changes in this strategy and adopt export promotion as an independent goal of growth strategy. The ensuing opening up of the economy and liberalisation resulted in dramatic changes in the structure of India's foreign trade. Balance of payments situation improved with large inflows of foreign capital. In this fast changing situation, rate of exchange has come to play an important role. There is a need to pursue a growth-friendly exchange rate regime. A diligent sequencing and focused pursuit of reform measures is called for.

21.11 KEY WORDS

Terms of Trade : Refers to the relationship between exports and imports. It is the relative price of country's exports to imports.

Multi-Fibre Agreement : Also known as Agreement on Textile and Clothing (ATC), MFA governed the world trade in textiles and garments from 1974 to 2004 i.e. till it expired in 2005. It imposed quotas on the amount 'developing countries' could export to 'developed countries'.

Balance of Payment (BoP) : It is a systematic record of all international economic transactions (both visible and invisible) of a country during a given period like a year.

Special Drawing Rights (SDRs) : Created to replace gold, SDRs are used as a unit of account by the IMF. They are potential claims on the freely usable currencies of IMF members.

Arbitrage : Refers to the simultaneous buying and selling of assets in different markets or in derivative forms taking advantage of the differing prices.

21.12 SOME USEFUL BOOKS

Asian Development Bank, *Trade Policy, Industrial Performance and Private Sector Development in India*, Oxford University Press (OUP), New Delhi, 2009.

Kaushik Basu (ed.), *The Oxford Companion to Economics in India*, OUP, New Delhi, 2008.

Suparna Karmakar, Rajiv Kumar and Bibek Debroy (eds.), *India's Liberalisation Experience*, Sage, New Delhi, 2008.

Deepak Nayyar, *Liberalisation and Development*, OUP, New Delhi, 2008.

Arvind Panagariya, *India: The Emerging Giant*, OUP, New Delhi, 2008.

Ishwar C. Dhingra, *The Indian Economy, Environment and Policy*, Sultan Chand, New Delhi, 2009.

21.13 ANSWERS OR HINTS TO CHECK YOUR PROGRESS

Check Your Progress 1

1. See Section 21.3
2. See Section 21.4
3. See Section 21.5

Check Your Progress 2

1. See Section 21.6
2. See Sub-section 21.6.3
3. See Sub-section 21.6.4

UNIT 22 REGIONAL TRADING ARRANGEMENTS

Structure

22.0 Objectives

22.1 Introduction

22.2 Regional Trading Arrangements (RTAs)

- 22.2.1 Features of RTAs
- 22.2.2 Benefits of RTAs
- 22.2.3 Limitations of RTAs

22.3 Regional Trading Arrangements (RTAs) and WTO

22.4 RTAs and Developing Countries

- 22.4.1 Options for Developing Countries

22.5 India's Look East Policy

- 22.5.1 Rationale

22.6 Association of South East Asian Nations (ASEAN)

- 22.6.1 Objectives of ASEAN
- 22.6.2 ASEAN Free Trade Area (AFTA)
- 22.6.3 Asia Pacific Economic Co-operation (APEC) Forum
- 22.6.4 India and ASEAN: Towards a Free Trade Agreement (FTA)

22.7 South Asian Association for Regional Co-operation (SAARC)

- 22.7.1 Objectives of SAARC
- 22.7.2 SAARC Preferential Trading Agreement (SAPTA)
- 22.7.3 SAPTA to SAFTA

22.8 India and FTAs

22.9 India and China

- 22.9.1 Free Trade Area Between India and China
- 22.9.2 Preparing for an FTA

22.10 Let Us Sum Up

22.11 Key Words

22.12 Some Useful Books

22.13 Answers or Hints to Check Your Progress Exercises

22.0 OBJECTIVES

After reading this unit you will be able to:

- explain the recent trends in global trading environment;
- analyse the factors underlying the growing tendency towards regionalism;
- state the nature of regional trading arrangements and their significance;
- describe the need for RTAs for developing countries;
- explain the contours and rationale of India's Look East Policy;
- outline the bilateral arrangements such as ASEAN and SAARC; and
- identify India's position with regard to FTAs, and analyse the prospects of FTAs with countries like China.

22.1 INTRODUCTION

Efforts at reaching agreements through multilateral trade negotiations and those towards region-centric initiatives are two major developments in the global trading environment witnessed in the past two decades. Both these developments are interrelated in a substantive sense. The former aims at integrating national markets through the process of globalisation. It is intended to improve efficiency by removing barriers and thus promoting a competitive environment. This thrust has motivated countries to take greater interest in regional groupings that facilitate larger market access, which in turn, enables them to enjoy scale economies and thus provide a competitive edge in the global market.

The above developments, would have far-reaching implications on economic ties between countries. The former would result in a larger world trade while the latter would enhance the role of trading blocks in it. This implies that prominent trading blocs and their member states would play an increasingly important role in the emerging global economic order. This would pose many challenges to the developing countries, particularly those which are outside the major blocs, necessitating changes in their policies and perceptions.

It is in this background that the present unit focuses on providing a discussion on the regional trading arrangements in terms of their contours, directions and implications.

22.2 REGIONAL TRADING ARRANGEMENTS (RTAs)

The global trading system has always been a witness to some form of economic integration between countries, across continents or within a region. The different forms of such economic integration are known as regional trading arrangements (RTAs). There are different degrees or

levels of economic integration. Five different levels can be visualised as follows.

Free Trade Area	Free trade among members				
Common Market	Free trade among members	Common external commercial policy			
Customs Union	Free trade among members	Common external commercial policy	Free factor mobility within the market		
Economic Community	Free trade among members	Common external commercial policy	Free factor mobility within the market	Harmonised economic policies	
Economic Union	Free trade among members	Common external commercial policy	Free factor mobility within the market	Harmonised economic policies	Super-national organisa-tional structure

It would be seen that at each succeeding stage, members surrender a greater measure of their national sovereignty.

With globalisation, regionalism is on the rise. This is in fact ironical and inconsistent with the spirit of multilateralism. Hence, initially, the DG of WTO was opposed to the proliferation of regional arrangements, after WTO was launched in 1995. The number of regional trading agreements (RTAs) notified to the WTO stands at about 200. An estimated 70 percent of the world trade is now covered by RTAs. For instance, the Americas - North and South, all of Europe, including the transition economies of the eastern part, most of Africa, Asia, Australia and New Zealand are signatories to free trade areas, customs unions and partial scope agreements. The new trends in regionalism, however, can be accepted as a supplement to globalisation.

22.2.1 Features of RTAs

The major features of the RTAs are as follows:

1. Almost all RTAs show an inherent dynamism towards greater liberalisation and open market. For instance:

   - The best example is the European Union (EU) where a single market and a common currency have been introduced to strengthen internal

competition and external competitiveness. The origins of the EU are usually traced to the European Coal and Steel Community (1952). Heavy regulated coal and steel industries of Germany and France were to be administered by a supranational authority. The 1957 Treaty of Rome created the European Economic Community (EEC). The EEC abolished internal tariffs and quotas and established a customs union. The treaty made provisions for the eventual liberalisation of movement of labour, services and capital. In 1986, growing global competition caused the signing of the Single European Act (SAC) and the creation of the European Common Market (ECM). The SEA liberalised restrictions on merchandise transport, government movement and movement of services, capital and labour. The ECM gradually developed into the European Union (EU). On January 1, 1999, eleven members of the EU replaced their national currencies with a single currency, the EURO. The monetary policies of the Eurozone members then ceased to be autonomous and are now set by the European Central Bank (ECB). Another European project involves adoption of the European Constitution. The ratification of the constitution is uncertain, in part because of its rejection in the French and Dutch referenda.

- In the Americas, trade has increased significantly between the USA, Mexico and Canada under NAFTA (North American Free Trade Agreement). Negotiations to create the free trade zone for the Americas aim at progressively eliminating barriers to trade in goods, services and investment.

- The four members of the MERCOSUR (South American Free Trade Area comprising Brazil, Argentina, Uruguay, and Paraguay) have decided to introduce a common external tariff.

- In Asia, members of the Association of South-East Asian Nations (ASEAN) are accelerating trade liberalisation within the ASEAN Free Trade Area (AFTA). They have agreed to set up a full economic community by 2015.

- Nearer home, the greater Mekong Sub-region (consisting of China, Myanmar, Thailand, Vietnam, Laos and Cambodia) has set an example in regional co-operation.

- The targets of Asia Pacific Economic Co-operation (APEC) to open their markets in trade and investments are very ambitious.

- The initiatives of the South African Customs Union (SACU), the common market for Eastern and Southern Africa (COMESA) and the progress towards regional integration in the West African Economic Monetary Union (WAEMU) show the growing significance of regional co-operation.

2. The new regionalism brings with it an increase in the size of regional groupings. Once again, the best example of the enlargement dynamics can be seen in the European Union (EU). EU started off as a coal and steel community in 1952. The European Common Market (ECM) initially consisted of six countries and European Free Trade Area (EFTA) consisted of seven countries. They were hence known as inner six and outer seven. The composition of EU initially encompassed Spain, Portugal, France, Belgium, Netherlands, Luxembourg, Germany, Denmark, Sweden, Austria, Italy, Greece, Finland, Ireland, U.K. It was subsequently expanded to include ten more countries in 2007. These are Poland, The Czech Republic, Hungary, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Malta and Cyprus, Romania and Bulgaria. As an yet another major block a group of 34 countries, called the Western Hemisphere countries, have agreed to set up a Free Trade Zone from Arctic to Argentina.

3. There is emergence of overlapping regionalism. Countries belong to more than one RTA. There is an inherent scope that these RTAs may turn the world trade system into what Jagdish Bhagwati calls a 'noodle blow' of overlapping and potentially inconsistent and unmanageable RTAs.

4. In the current practice, regionalism covers many issues beyond the removal of barriers to trade in goods and services, such as social policy, environmental policy and competition policy.

5. RTAs thus exist in all regions of the world. They follow a strategy that combines internal liberalisation with external agreements.

Thus, in general, currently regionalism is a benign and dynamic initiative compatible with the overall aims of the multilateral trade order.

22.2.2 Benefits of RTAs

The motivation for forming regional trading blocs differs from region to region, and even from country to country within a bloc, but a few factors play a key role. These are:

i) members see economic benefits from a more efficient production structure by exploiting economies of scale. In addition to spreading fixed costs over larger regional markets, it enhances economic growth from foreign direct investment, and research and development.

ii) members value non-economic benefits such as strengthening political ties and managing migration blocs.

iii) smaller countries seek increased security of market access by forming regional trading blocs and joining with associations of larger countries.

iv) countries may want to lock-in unilateral domestic policy reforms.

v) Members' bargaining power in multilateral trade negotiations is improved where they can more effectively express in pursuance of their regional interests.

vi) Members can promote industries that are not viable without a protected regional market – e.g. regional infant industries – the idea being that they would be internationally competitive if given sufficient time and scope to develop.

vii) open regionalism – i.e. agreements with low external trade barriers, service markets and a dominant focus on reducing transaction costs at borders, help get around the complexity of the international trading system.

22.2.3 Limitations of RTAs

Formation of regional blocs invariably implies that the constituent members are keen on promoting their economies. However, quite often what is good for individual nations may not be good for the global economy. Most economists agree that the emergence of regional blocks diverts trade to less efficient producers, thereby preventing the global economy from growing as fast as it can. Nonetheless, when seen from a purely national perspective, it would suit a country to create and protect a regional market. There has thus been a clear movement towards the regionalisation of trade.

Check Your Progress 1

1. What do you mean by regional trading arrangements (RTAs)?

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2 Enumerate the benefits of regional trading agreements?.

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3. State in brief the limitations of regional trade agreements.

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22.3 REGIONAL TRADING ARRANGEMENTS (RTAs) AND WTO

Increased emphasis on regionalism is a prominent feature of international economics since the mid-1990s. Currently, there are more than 200 active Regional Trade Agreements in force and majority of these agreements are north-south RTAs or RTAs between developed and developing countries.

RTAs represent an important exception to the WTO's principle of non-discrimination through the most-favoured nation (MFN) rule. According to the MFN rules, WTO members must extend the same market access conditions to all WTO members. However, as an exception to MFN, WTO allows countries with a RTA (i.e. members of a RTA) to trade among themselves using *preferential tariffs* and easier market access conditions than what is applicable to other WTO member countries. Such RTAs are, however, permitted under WTO only when they have a clause to move towards global Free Trade Area without discrimination, in a time bound manner. The advantage to the RTA members thus come from the preference margins i.e. the gap between MFN rates and preferential tariff rates. As a result, WTO member countries that are not a part of the RTA lose out in these markets. Also, trading within the regional trading blocks does not come under the purview of WTO.

22.4 RTAs AND DEVELOPING COUNTRIES

The basic principles embodied in the GATT/WTO, viz. open markets, non-discrimination and global competition are unexceptionable. These are designed to foster a non-discriminatory, competitive and unified world market. Developing countries have, however, attempted to integrate their national economies with the world economy at a varying pace.

In the process of integration, developing countries have encountered several adverse consequences. For instance, easy market access, liberalised merger and acquisition laws, permitting majority to full foreign ownership and liberalised foreign exchange regulations, financial liberalisation etc. that come in the course of integration process have facilitated large scale entry of global economic players into developing countries. This has led to many local entrepreneurs surrendering their ventures to the global giants or assuming a position of joint partnership, if at all, in the re-structured collaborative ventures. In the face of such threat to their survival, particularly for the small-scale sector, local

entrepreneurs in developing countries have started demanding a level playing field and protection.

Another adverse consequence of globalisation is that the emerging order would provide significant growth opportunities to only a few of the developing countries while for others it could result in several risky exposures. Some studies have brought out that many of the developing countries would be worse off as a result of WTO agreements. This is expected to widen inter-country disparities, as visualised by the centre-periphery doctrine of Samir Amin and Andre Gunder Frank: developing countries, except a few, would be placed in a disadvantageous position (on periphery) while the system would work well for a few mighty developed countries and fast growing developing countries.

22.4.1 Options for Developing Countries

Basically, there are two options for the developing countries:

- to join one or the other prominent bloc so as to remain within the mainstream of RTAs, or
- to strengthen economic ties among developing countries themselves on bilateral basis so as to provide a cushion to export growth.

The problem with regard to the first option is that membership of regional trading blocs is not easily available. There are usually too many restrictive qualifying criteria. For instance, India was denied membership of ASEAN for not being a south-east Asian nation.

These problems have motivated developing countries to come together and form a bloc of their own. In fact, developing countries from Asia, Africa and Latin America have made several attempts at bloc formation. In Asia, for instance, five south-east Asian countries established the ASEAN in 1967; to which five more countries joined subsequently. Likewise, seven south Asian countries formed South Asian Association of Regional Co-operation (SAARC) in 1985. Again, two of the ASEAN states (viz. Thailand and Myanmar) and three SAARC states (viz. India, Bangladesh and Sri Lanka) came together in 1997 to promote economic co-operation under the name of Bangladesh, India, Myanmar, Sri Lanka and Thailand Co-operation (BIMST-EC).

While the role of a bloc in promoting economic ties is widely recognised, attempts at bloc formation by developing countries have rarely met with big success. ASEAN is one rare example of a successful attempt of bloc formation by the developing countries. In contrast, SAARC, of which India is a founding member, is a classic case to demonstrate how difficult it is to promote effective co-operation even after more than two decades of its existence.

Following the spirit of regionalism, some of the south and south-east

Asian countries introduced schemes of sub-regional co-operation, primarily to strengthen economic relations based on complimentarities among the geographically/economically/historically/culturally adjoining nations, but administratively detached sub-regions. In south-east Asia, they are also viewed as inter-governmental efforts to accelerate private sector led economic growth in less developed pockets.

In addition, developing countries have also taken interest in acting together for their mutual benefits. There are many examples of such initiatives. The Non-Aligned movement (1961) and G-77 (1964) aimed at promoting common interests of developing countries through collective actions. The scheme of global system of trade preferences (GSTP) of 1987 provided a 10 percent across–the–board tariff concession on intra-developing country trade flows.

Also, developing countries took specific initiatives to strengthen bilateral economic ties. India's Look East Policy is a good example of such initiatives.

Check Your Progress 2

1. How are regional arrangements treated by WTO?

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2. Write a note on the significance of RTAs for developing countries

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3. Write a note on options for developing countries under the new global trade environment.

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22.5 INDIA'S LOOK EAST POLICY

In the process of globalisation, India has attempted to strengthen trade and investment relationship with the rest of the world. It has laid a special emphasis on strengthening ties with the south-east and north-east Asian countries within the framework of Asianisation of its economy. India's policy of strengthening economic ties with this part of the world is commonly known as Look-East policy. As part of this policy, it has targeted member states of the Association of South East Asian Nations (ASEAN) as a priority region for promoting co-operation and taken several initiatives to establish close ties with them.

The Look-East policy was officially launched in 1992. It was expected to: (i) contribute significantly to India's efforts towards globalisation and integration with the world economy, (ii) fill the void caused by the collapse of the Soviet Union, its major trading partner, and (iii) help the country in overcoming its isolation from world-wide phenomenon of joining regionalism.

22.5.1 Rationale

The rationale for Look-East policy can be seen in the following:

One, India has made serious efforts for getting an entry into the trading blocs of the region, notably the ASEAN and the Asia Pacific Economic Co-operation (APEC) forum. Stronger economic ties with ASEAN states would stand in good stead in view of all ASEAN states being members of APEC.

Two, the economic dynamism that south-east and east Asian economies have displayed since the 1970, partly from their outward oriented development strategies. Their growth performance has been far higher than that in most developed regions, including USA, European Union, other European countries and Japan. In some of the East Asian countries, share of value added manufacturing in GDP has surpassed the level found in USA and Europe. Most of the so-called 'miracle' economies are concentrated in this part of the world.

Three, India enjoys a geographical proximity with this region though it does not belong to it. Its bilateral relationship with these countries would benefit from low transport costs and shorter delivery schedules. This is particularly important in the case of Indian exporters, since longer delivery schedules of Indian exporters in view of severe and wide-ranging domestic supply constraints, have been considered as one of the major hindrances by the European importers.

Four, it also makes an important geographical sense, since the south-east Asian countries are situated in the main inter-continental routes between Europe, America, East Asia and Australia thus providing scope to act as important stopovers for Indian exporters.

Five, a sizeable population of Indian origin, which played an important role in the industrialisation and trade-promotion of these countries, can act as a vital link in developing mutually beneficial commercial ties between India and south-east Asian countries. The new class of Indian migrants that include software engineers, financial analysts, management professionals could play an more important role in promoting Indo-ASEAN economic relations. The age-old cultural ties between India and these countries are thus viewed as a favourable factor in strengthening the bilateral economic relations.

Six, India may also derive benefits from the growing ASEAN economic co-operation, more specifically the ASEAN Free Trade Area (AFTA). Given the considerable outward orientation of these economies, the AFTA is expected to be substantially outward oriented. It would, therefore, provide ample scope for mixing ASEAN and Indian materials and labour to produce competitive consumables and exportables. This may also offer opportunities for relocating some of the labour intensive activities from the ASEAN states to India enabling them to maintain their competitive edge, which are otherwise getting phased out in several lines of production owing to rising wages.

22.6 ASSOCIATION OF SOUTH EAST ASIAN NATIONS (ASEAN)

The ten-member ASEAN was formed in 1967 by five south-east Asian countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand), to begin with, but were joined later by the other five viz. Brunei (1984), Vietnam (1995), Laos and Myanmar (1997); and Cambodia (1999). As a result, the ASEAN has become an organisation of about 500 million people with $950 billion of income of which an estimated $900 billion are out of external trade. Apparently, the reach of the association in economic co-operation is very wide.

22.6.1 Objectives of ASEAN

Objectives of the ASEAN include acceleration of economic growth, social progress, and cultural development as well as regional peace and stability through joint endeavours in the spirit of equality and partnership.

ASEAN was initially slow to take off the ground. It was in the second half of the 1980s, following the liberalisation policies in Indonesia, Malaysia, Thailand and the Philippines, that much bolder steps were initiated towards strengthening economic co-operation. ASEAN investment area co-operation in services and intellectual property, industrial co-operation, etc. were introduced in the 1990s.

22.6.2 ASEAN Free Trade Area (AFTA)

The framework of agreement on enhancing economic co-operation (1992)

made a decisive move towards economic co-operation by proposing AFTA to increase ASEAN's competitive advantage as a single production unit in the world market. With this, greater economic efficiency, productivity, and competitiveness were expected to emerge out of the elimination of tariff and non-tariff barriers. Towards this objective, foreign firms were allowed to team up with the local firms by using as much as 60 percent of the imported materials from outside the ASEAN world.

A scheme of trade liberalisation, called as the common effective preferential tariff (CEPT) Scheme, was adopted to effect a lower targeted tariff level (in the range of zero to five percent) to be achieved within a short time-framework of ten years i.e. by January 1, 2003. New ASEAN members were, allowed longer time to meet this deadline e.g. Vietnam up to 2006, Laos and Myanmar up to 2008, and Cambodia up to 2010. The CEPT also provides for the elimination of non-tariff barriers in five years' time. The implementation of CEPT is expected to facilitate: (i) harmonisation of standards, (ii) reciprocal recognition of tests and certification procedures, (iii) removal of barriers to foreign investments, (iv) macroeconomic consultations, (v) promotion of venture capital, etc.

22.6.3 Asia-Pacific Economic Cooperation (APEC) Forum

The Asia-pacific economic co-operation (APEC) forum was launched in 1989. With almost two-fifths of the world population, more than half of the world GDP and more than two-fifths of global international reserves, the APEC forum has all the potentials of emerging as one of the most powerful regional blocs in the world.

22.6.4 India and ASEAN: Towards a Free Trade Agreement (FTA)

Since the Look East policy adopted in the early 1990s, India's engagement with ASEAN has been on the rise. In 1992, India became a sectoral dialogue partner of ASEAN and in 1996 it became a member of the ASEAN regional forum. In 2003, India and ASEAN signed the bilateral framework agreement, which spelt out the broad parameters of an agreement on trade in goods. On 28th August 2008, India and ASEAN concluded a Trade in Goods (TIG) which will operationalise the free trade agreement (FTA). Implementation of the agreement will begin from 1 April, 2009 and will be completed by 2018.

The TIG agreement forms an important milestone in India's economic relationship with ASEAN. It is notable that among the ASEAN members, India has preferential trade agreements with Thailand, Myanmar and Singapore. India, Myanmar and Thailand are also part of the Bay of Bengal initiative for multi-sectoral technical and economic co-operation trade group. India and Singapore have also separately signed a

comprehensive economic co-operation agreement (CECA) few years back.

The major features of the proposed FTA are as follows:

- Reduce tariff to zero percent in over 4,000 out of 5,000 goods that are traded, in a phased manner over a period of six years;
- Effect partial reduction in import tariffs on highly sensitive farm goods;
- Effect partial duty cuts for 606 items in a list of goods called 'sensitive list of goods'; and
- Have also a 'negative list' with no duty cuts.

22.7 SOUTH ASIAN ASSOCIATION FOR REGIONAL COOPERATION (SAARC)

The SAARC, is an economic and political organisation of eight countries in southern Asia. In terms of population, its sphere of influence is the largest of any regional organisation: almost 1.5 billion combined population of its member states. It was established on December 8, 1985 by India, Pakistan, Bangladesh, Sri Lanka, Nepal, Maldives and Bhutan. In April 2007, Afghanistan became its eighth member.

22.7.1 Objectives of SAARC

The objectives of SAARC, as defined in its charter, are as follows:

- promote the welfare of the peoples of South Asia and improve their quality of life;
- accelerate economic growth, social progress and cultural development in the region by providing all individuals the opportunity to live in dignity and realise their full potential;
- promote and strengthen collective self-reliance among the countries of South Asia;
- contribute to mutual trust, understanding and appreciation of one another's problems;
- promote active collaboration and mutual assistance in the economic, social, cultural, technical and scientific fields;
- strengthen co-operation with other developing countries;
- strengthen co-operation among themselves in international forums on matters of common interest; and

- co-operate with international and regional organisations with similar aims and purposes.

22.7.2 SAARC Preferential Trading Agreement (SAPTA)

SAPTA which came into operation in 1995 heralds a new chapter of economic co-operation among the SAARC countries. It concretises the first step towards creation of a trade bloc in the South Asian Region. Under the SAPTA mechanism, the SAARC countries, to begin with, have identified 226 items for exchange on tariff concessions ranging from 10 percent to 100 percent. India has agreed to extend tariff concessions on 106 items, while Bangladesh has agreed to offer tariff concession on 12 items, Maldives on 17, Nepal 14, Pakistan 35, Sri Lanka 31 and Bhutan 11. Out of 106 items offered by India for tariff concessions, 62 items would be for the least developed countries in the SAARC.

22.7.3 SAPTA TO SAFTA

The South Asia Free Trade Area (SAFTA) agreement came into force from July 1, 2006. With this, the earlier SAPTA established in 1995 has paved the way to SAFTA. The South Asian developed countries are well-endowed with labour and natural resources. Further, with growing openness among themselves, higher production and expansion of labour, intensive exports, increased employment, increased wages and thereby helping in reducing poverty, the region is poised to play an important role in the growing international trade relations.

22.8 INDIA AND FTAs

India has signed FTAs with many countries including SAARC nations. A brief account of these is presented in Table 22.1. This is followed by a set of points indicating the factors that needs to be taken into account while signing any FTA with a country.

Table 22.1: Map of India's RTAs

Operational	Sri Lankan FTA, SAFTA, Singapore CECA, Thailand-Bhutan Treaty, Indo-Nepal Treaty, Asia Pacific Trade Agreement, Global system of Trade Preferences, Indo-Afghanistan PTA, Indo-China PTA
Advanced Negotiation Stage	ASEAN, Korea, BIMSTEC, Thailand, Sri Lanka CECA, Mauritius CECPA
Early Negotiation Stage	EU, Japan
Negotiation likely to start	Indonesia, Russia, Israel, Malaysia, India – Brazil – South Africa, India – MEROSUR – SACU

While negotiating/signing an FTA, India needs to take due care of the following factors:

a) ensure that the FTA permits only those items that are wholly manufactured in the concerned country;

b) discourage items that are highly subsidised;

c) discourage items that badly hurt the Indian industry and farmers while drawing up 'the agreed list' for FTAs;

d) ensure that any such agreement does not violate the WTO guidelines;

e) undertake detailed analysis of the positive effects of FTA on sectors and economy as a whole prior to signing an agreement;

f) address all trade facilitation concerns, including mutual recognition agreements on standards, customs collaboration agreements, and expansion of transport links so as to remove all NTBs with each other;

g) reflect services prominently in all agreements so as to feature India's dynamic comparative advantage in services;

h) ensure high-level political attention to induce institutional improvements, such as commitments to tariff reduction, customs co-operation, etc.

Check Your Progress 3

1. What is India's 'Look East Policy'?

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2. Explain in brief the rationale for India's 'Look East Policy'.

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3. State in brief the composition of ASEAN.

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4. Mention in brief the objectives of ASEAN.

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5. What is SAARC? What are its objectives?

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22.9 INDIA AND CHINA

The global economy has been growing strong at about 5 percent per annum over the last few years. The growth has been led by two major Asian countries, China and India. In more recent years, China has been growing at over 9 percent per year, while India's economic growth has been at a little over 8 percent per annum. The rise of India and China may be seen (as articulated by Dr. Manmohan Singh) as 'global public good' which will benefit the whole world.

India and China, both, cover a large landmass, both have more than a billion people, and both are engaged in the reform process and moving towards a market-oriented economy, in the firm belief that this would enable them to confront the challenges of a globally integrating world. On present trends, in 20 years, their collective share of the global economy will match their percentage of the global population, which is roughly where they were in the 18th century, before Europeans engulfed them.

These two nations share some common features but also differ in some respects. Both are large countries and, coincidentally, underwent substantial political and economic changes at about the same time. India gained its independence in 1947 and initiated the experiment of planned economic development with the First Five Year Plan in 1951. Following the 1949 communist revolution, China embarked on a new economic development path at the beginning of the 1950s. Thus, both countries

experienced profound political and economic reforms in the past 60 years.

There are, however, at least three crucial differences that need to be recognised. **One**, following independence, India adopted a mixed economic system characterised by the presence of both the public and private sectors. China, on the other hand, embarked on an economic development path with a socialist economic framework characterising, at least until recently, control over the agricultural and industrial resources by the state.

Two, compared to India, China has been functioning with a reasonable degree of control in terms of raising and allocating financial resources for public investments.

Three, China initiated the process of economic development with greater equality than India in terms of people's access to income sources and social needs.

All these similarities and dissimilarities have had different impacts on the patterns of government spending, and therefore, have led to different growth paths and poverty reduction programmes

22.9.1 Free Trade Area Between India and China

An FTA between India and China had been a subject of intense debate in recent years in both academic and policy-formation groups. We can approach the issue from the perspective of both China and India.

For China, an FTA focused on trade in goods would enable them to best leverage their comparative advantage. **For India**, on the other hand, an agreement restricted to or focused on merely free movement of goods across borders would not be advantageous. While it would give Chinese manufacturers ready access to Indian markets, India has less to gain from such an FTA. This is because Chinese tariffs are already lower in most areas as China was forced to lower them in return for its late entry into the WTO. FTAs, however, need not be restricted to goods alone; it could extend to services as well. But, as the historical experience globally has shown, genuinely free trade in services is rather more difficult to achieve than free movement of goods. The experience after the dismantling of quantitative restrictions on imports suggests that fears about Chinese goods swamping India were exaggerated. But Indian industry continues to be wary of taking on China's manufacturing prowess in a no-holds-barred contest. The government, of course has to factor this while responding to China's overtures on the FTA.

In the circumstances, it is better that we set our house in proper order by increasing the competitiveness of our manufacturing, instead of rushing headlong into an FTA with China at this juncture.

22.9.2 Preparing For an FTA

A move towards an FTA with China should be preceded by a number of preparatory stages. These can hardly be bypassed.

The **first** step towards this would be for India to diversify its trade basket. If we examine the two-way trade flows, the most obvious characteristic of trade pattern is that our exports to China are basically raw material, ores and steel (accounting for 57% of exports) while China's exports to India are primarily manufactured goods (like electric machinery, electronic and audio-video equipment). Since manufactured goods have a much higher level of duty compared to raw materials, free trade will mean we give away our advantages more than gaining from them. Besides, unless our exports become more diversified, trade will not be sustainable in the long-term.

Second, the two countries must resolve to scrap a whole range of barriers to free trade. These have been identified in which NTBs are a major hindrance to trade. It has been emphasised that the rules of origin should be examined and reframed so that these do not have 'any restricting, distorting or disruptive effects on bilateral trade.' Yet another area which calls for immediate attention is the need for harmonisation of the standards, certification and regulatory practices of the two countries. In this context, both India and China should work towards mutual recognition agreements to achieve this.

Thus, it is only when these two areas have been duly sorted out, and when the trade flow path is smoothened, should we look into the prospects of an economic co-operation agreement. Economic co-operation envisages not only trade, but also investment and collaboration in various areas, like energy security, development of small and medium enterprises, water resources management, space research, remote-sensing techniques, urban management, city development and disaster management.

Underlying all these, is the mutual promotion of investment. China is emerging as a major overseas investor. India can profit from its investment in areas like white goods. Similarly, Indian firms are also investing increasing amounts overseas and some parts of it could go into providing Chinese facilities.

22.10 LET US SUM UP

With the setting up of the WTO in 1995, multilateralism reached its zenith. One difficulty with the WTO system has been the problem of maintaining and extending the liberal world trading system in recent years. Recent negotiations, such as the Doha Development Round, have run into problems and their ultimate success is uncertain. Many countries have turned away from the multilateral process toward bilateral or regional trade agreements. The advantage of such regional trade agreements is

that they promote greater trade among the parties to the agreements. However, by excluding certain countries, these agreements may shift the composition of trade from low-cost countries that are not a party to the agreement to high-cost countries which are. Regional arrangements may also undermine and supplant, instead of supporting and complementing, the multilateral WTO approach. Whatever the arguments, nations of the world, both developed and developing, are seeking safe sanctuaries in regional arrangements. India too has been no exception to this global trend. India needs to remodel its trade policy and strategy to get the benefits of regional trading arrangements.

22.11 KEY WORDS

Regional Trade Arrangements (RTAs) : Agreement between any two or more of sovereign nation of geographical proximity for the purpose of economic and trade promotion.

BIMST-EC : A RTA of economic cooperation covering the countries of Bangladesh, India, Myanmar, Sri Lanka and Thailand.

Global System of Trading Preferences (GSTP) : A scheme launched in 1987 providing a 10 percent across-the-board tariff concession on intra-developing country trade flows.

Look East Policy : A policy of India to strengthen its ties with the South-East and North-East Asian countries in which its trade ties with the ASEAN countries are targeted for improvement.

Association of South East Asian Nations (ASEAN) : A 10-country association comprising of Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar and Cambodia. India is a member of the ASEAN regional forum since 1996.

Asia Pacific Economic Cooperation (APEC) Forum : A significant forum in the sense that it covers two-fifths of world's population and global international reserves. Also covers more than half of world's GDP.

South Asian Association for Regional Cooperation (SAARC) : Established in 1985, it is an economic and political organisation of 8 countries in the South Asia region. Its members are: India, Pakistan, Bangladesh, Sri Lanka, Nepal, Maldives, Bhutan and Afghanistan.

South Asian Preferential Trading Agreement (SAPTA)	:	An agreement of economic cooperation among the SAARC countries launched in 1995.
South Asia Free Trade Area (SAFTA)	:	An agreement which came into effect in 2006, replacing the SAPTA of 1995.

22.12 SOME USEFUL BOOKS

Kaushik Basu and Ravi Kanbur (eds.), *Arguments for a Better World*, Oxford University Press (OUP), New Delhi, 2009.

Sunanda Sen, *Globalisation and Development,* NBT, New Delhi, 2008.

Kaushik Basu (ed.), *The Oxford Companion to Economics in India OUP*, New Delhi, 2008.

Adityta Bhattacharya and Sugata Marjit (eds.), *Globalisation and the Developing Economies: Theory and Evidence*, Manohar, New Delhi, 2004.

Ramesh Chand, *Free Trade Area in Asia,* Academic, New Delhi, 2005.

Ashok Gulati and Shenggen Fan (eds.), *The Dragon and the Elephant*, John Hopkins University, 2007.

22.13 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See sub-section 22.2 and answer.
2. See sub-section 22.2.2 and answer.
3. See sub-section 22.2.3 and answer.

Check Your Progress 2

1. See section 22.3 and answer.
2. See Section 22.4 and answer.
3. See sub-section 22.4.1 and answer.

Check Your Progress 3

1. See section 22.5 and answer.
2. See sub-section 22.5.1 and answer.
3. See section 22.6 and answer.
4. See sub-section 22.6.1 and answer.
5. See section 22.7 and answer.

UNIT 23 WTO AND CHALLENGES OF NEW TRADING AND FINANCIAL SYSTEMS

Structure

23.0 Objectives

23.1 Introduction

23.2 World Trade Organisation (WTO)

- 23.2.1 Objectives of the WTO
- 23.2.2 Principles of the WTO
- 23.2.3 Functions of the WTO
- 23.2.4 Structure of the WTO
- 23.2.5 WTO Agreements

23.3 Dispute Settlement Mechanism (DSM) of WTO

23.4 Evaluation of WTO

- 23.4.1 Achievements of WTO
- 23.4.2 Limitations of WTO

23.5 Doha Round of Negotiations

- 23.5.1 India's Response

23.6 New International Financial Architecture

- 23.6.1 Need for a New International Financial Architecture
- 23.6.2 Suggestions for a New International Financial Architecture

23.7 Let Us Sum Up

23.8 Key Words

23.9 Some Useful Books

23.10 Answers or Hints to Check Your Progress Exercises

23.0 OBJECTIVES

After reading this unit you will be able to:

- explain the different international economic institutions that have moulded international economic relations during the last six decades since 1950;
- outline the background in which the World Trade Organisation came to be set up;
- state the objectives, principles and functions of the WTO;

- describe the principal agreements in trade in goods, services etc. that the WTO administers;
- review the functions of WTO as it has evolved over the last fourteen years;
- identify the factors due to which a new international financial institution capable of responding to the changing international economic environment is needed; and
- suggest a new international financial architecture.

23.1 INTRODUCTION

In the wake of the unprecedented destruction caused to the global economic structure by the Second World War, and the accompanying instabilities and uncertainties that arose in the economies world over, a group of nations met at Bretton-woods for a conference in 1944. Their principal objective was to prepare a framework for economic co-operation and co-ordination between sovereign nations having the right to pursue independent policies. The Bretton-woods conference, as it has since come to be known as, addressed itself to three broad issues of interest in international economic relations, viz. (i) trade in goods, (ii) flow of capital for development, and (iii) stability of exchange rates and provision for assistance to members who get confronted with short-term imbalance in their balance of payments. In seeking to find a solution to the problems arising out of these, the Bretton-woods conference reached an agreement to set up three multilateral institutions, viz. (a) International Monetary Fund, (b) International Bank for Reconstruction and Development (IBRD), and (c) International Trade Organisation (ITO).

The two institutions, IMF and the IBRD which were set up and started functioning since 1946 came to be identified as Bretton-woods twins. While the IMF was entrusted with the task of ensuring exchange rate stability and providing short term financial assistance to member countries faced with balance of payments difficulties, the IBRD was to arrange long-term finance for developmental programmes in member nations. The agreement relating to the setting up of the ITO was not ratified by the US and hence the ITO could not be established. Instead, the US, UK and a few other countries, set up in 1947 an interim organisation called General Agreement on Tariffs and Trade (GATT). The GATT, in its functioning, was biased in favour of the developed countries and hence began to be informally dubbed as the ‘rich men’s club’.

Owing to the persistent insistence of the developing countries for setting up the ITO, which move was continually opposed by the US, the United Nations (UN) appointed a committee in 1963 to resolve the issue. The committee recommended the alternative of setting up a United Nations Conference on Trade and Development (UNCTAD). The UNCTAD was thus set up in 1964 with its principal functions outlined as follows:

- promote international trade with a view to accelerate economic development;
- formulate principles and policies on international trade and related problems of economic development;
- assist developing countries in the negotiations in the international fora and facilitate market access for the goods of developing countries and encourage technology transfer to them;
- assist developing countries to improve their terms of trade vis-à-vis the developed countries;
- negotiate multilateral trade agreements; and
- make proposals for putting its principles and policies into effect.

The UNCTAD could manage to get some concessions for the developing countries, more important among which was the General System of Preferences (GSP). GSP provided for preferential access to markets in the developed countries for the manufacturing goods originating from the developing countries. Having functioned for many years in its originally charted out functions as outlined above, the vision and structure of UNCTAD began experiencing the need for a significant change in the 1990s. This was triggered mainly, once again, by the decision of the developed world to de-link the UNCTAD from the discussions of the Uruguay round of negotiations on GATT. The Uruguay round thus became controversial as it sought to expand the scope of GATT by including under its purview areas like services, investment and intellectual property rights (IPR). The Uruguay round proposals were accepted by all the members of the GATT in December 1993 at the official level and in March 1994 at the ministerial level. This set the ground for the setting up of what came to be later known as the World Trade Organisation (WTO).

23.2 WORLD TRADE ORGANISATION (WTO)

The Uruguay round of agreement provided for the setting up of an international trade organisation by the name of World Trade Organisation (WTO). The WTO started functioning from January 1, 1995. At present, the WTO has 153 countries as its members.

23.2.1 Objectives of the WTO

The agreement establishing WTO reiterated the objectives of the GATT. More specifically, the WTO outlined its objectives to include the following under its scope.

a) Raise standard of living and incomes by ensuring: (i) full employment, (ii) expanding production and trade, and (iii) optimal use of world's resources;

b) Adopt the idea of sustainable development in relation to the optimal use of world's resources i.e. reinforce the need to protect and preserve the environment in a manner consistent with the various levels of national economic development; and

c) Recognise the need for positive efforts to ensure that developing countries secure a better share of growth in international trade.

23.2.2 Principles of the WTO

In its broad perspective, the WTO was to strive at creating a liberal and open trading environment by which business enterprises could trade under conditions of fair and undistorted competition. Towards the achievement of this, the four principles that were laid down to guide the trading rules of its members are as follows:

1. **Most Favoured Nation (MFN) Treatment:** The principle of MFN treatment laid that tariffs and regulations must be applied to imports or exports without discrimination among members. In other words, no member country was to be accorded a treatment of 'a favoured nation';

2. **National Treatment:** It prevents discrimination between imported products and equivalent domestically produced goods, especially in levying internal taxes and domestic regulations;

3. **Protection Through Tariffs:** While advocating liberal trade, the WTO recognises that some members may need to protect their domestic production against foreign competition. The underlying principle was, however, that such protections through tariffs must be kept at low levels in what was called as 'bound tariff framework';

4. **Bound Tariffs:** The principle of 'bound tariff' advises the member countries to reduce and gradually eliminate protection to domestic production. By seeking to reduce tariffs and eliminating non-tariff barriers, the principle requires the member countries to commit in their respective national schedules against further increase of tariff levels at later points of time. In other words, the reduction and ultimate phase-outs of tariffs was meant to provide the cushion time required for gaining competitive strength and the tariffs were to be phased out firmly in a committed time frame.

23.2.3 Functions of the WTO

The WTO is meant to perform the following functions:

1. Administer through various councils and committees, the 29 agreements contained in the final Act of the Uruguay round of world trade talks, plus a number of plurilateral agreements, including those on government procurement;

2. Oversee the implementation of the significant tariff cuts (average 40 percent) and reduction of non-tariff measures agreed to in the trade negotiations;

3. Act as a watchdog of international trade by regularly examining the trade regimes of individual members;

4. Ensure that members notify in detail various trade measures and statistics, which are to be maintained by the WTO in a large database;

5. Provide several conciliatory mechanisms for arriving at an amicable solution to trade conflicts among members;

6. Resolve trade disputes that cannot be solved through bilateral talks by adjudication in the WTO dispute settlement court;

7. Act as a management consultant for world trade by having its economists keep a close watch on the pulse of the global economy and provide inputs to WTO by studies conducted on the main issues of the day; and

8. Assist developing countries through its secretariat to implement the Uruguay round agreements through a newly-established development division and a technical co-operation and training division.

The WTO is, thus, a forum where countries continuously negotiate the exchange of trade concessions and trade restrictions all over the world. The WTO has a substantial agenda for further negotiations in many areas, notably certain services sectors.

23.2.4 Structure of the WTO

The WTO secretariat is headed by a Director General with a three-tier system of decision making. The decisions are made at three levels: (i) Ministerial Conference, (ii) General Council and other councils, and (iii) Heads of Delegations. The principal decision-making body is thus the ministerial conference which can take decisions on all matters under any of the multilateral trade agreements. It meets once in two years.

In the intervening period, the General Council of the WTO, together with the other councils for Trade in Goods, Trade in Services and Intellectual Property, performs the WTO functions. These councils are responsible for overseeing the implementation of the WTO agreements in their respective areas of specialisation.

The third-tier of decision-making, at the Heads of Delegation level, is most effective in overcoming inherent impediments for reaching consensus on a trade-related issue. This level is usually represented by different sets of people depending on the need of the hour with the required expertise and experience. The usual process is to hold a meeting in which select countries are interested in participating in a particular issue. Such meetings are termed as ***Green Room meetings***.

23.2.5 WTO Agreements

WTO administers a set of agreements, among which the more important are the following:

1. GATT 1994

The cornerstone of trade relations is the area of goods. Differential and most favoured treatment (MFT) to UDCs and LDCs is permitted under the 1979 enabling clause with respect to tariffs and non-tariff measures. This is notwithstanding the MFN treatment principle which prohibits such favoured treatment to any country as a rule.

2. Agreement on Agriculture (AOA)

The approach adopted here is to encourage gradual reduction of trade distorting subsidies. The AOA specifically deals with: (i) providing market access, (ii) containing of export subsidies, and (iii) regulating domestic support.

i) **Market Access:** The AOA requires tariffication of all NTBs, and a reduction of those tariffs by an average of 36 percent for developed countries and 24 percent for UDCs. Developed countries were given 6 years to bring about these reductions, while developing countries are given 10 years. The time counting has begun from 1995.

ii) **Export Subsidies :** Export subsidies have to be reduced by 36 percent in budgetary terms and 21 percent in volume over a six-year period. The developing countries have been given lower reduction targets of 24 and 14 percent respectively over a longer period of 10 years.

iii) **Domestic Support:** A distinction has been made between subsidies that did not distort trade and those that do. Only the trade distorting subsidies have to be reduced, if they are above the permissible level. The following have been exempted from this provision.

- **Green Box:** Subsidies with no, or minimally trade distorting, effect have been put in this box. These are not subject to any reduction commitments. It includes all government service programmes.

- **Blue Box:** It contains those subsidies whose continuation is subject to a limitation on production.

- **White Box:** It includes such subsidy practices in developing countries like investment subsidies, agricultural input subsidies available to low-income or resource-poor farmers and measures to encourage diversification from growing illicit narcotic crops.

All other domestic support measures are subject to reduction commitment.

3. Agreement on Sanitary and Phyto-Sanitary (SPS) Measures

SPS measures are those applied to protect human, animal or plant life from certain risks. These risks are those arising from the entry, establishment or spread of pests, diseases and disease-carrying or diseases causing organisms. The risks also include risks arising from additives, contaminants or toxins. Disease causing organisms in food, beverages and foodstuffs and from risks arising from diseases carried by animals, plants and products are also covered under this agreement.

SPS measures include all relevant laws, decrees, regulations, requirements and procedures, including end-product criteria, processes and production methods, testing, inspection, certification and approval procedures, quarantine treatments, provisions on relevant statistical methods, sampling procedures and methods of risk assessment, packaging and labelling requirements directly related to food safety.

SPS measures must be based on international standards, guidelines or recommendations where they exist. It is open to a country to adopt a level of SPS protection higher than that of the relevant international standards, if there is a scientific justification or if it is needed by the appropriate level of SPS protection in that country.

Members are allowed to provisionally adopt such SPS measures which, on the basis of available pertinent information and relevant scientific evidence are the best possible measures at the current juncture, although they fall short of the standards set by the WTO. Such provisional measures need to be reviewed within 'a reasonable period of time'.

4. Agreement on Anti-Dumping (ADA)

The objective of this agreement is to provide the right to the contracting parties to apply anti-dumping measures. These are measures against imports of a product if such imports cause injury to a domestic industry in the territory of the contracting party.

The ADA allows member-nations to apply anti-dumping measures on a unilateral basis after elaborate investigations. The anti-dumping investigation determines whether:

- an imported product has been dumped;
- it has caused material injury to the domestic industry of a like product; and
- there is a causal link between dumped imports and the injury.

If the investigations establish these three factors, the government is allowed to levy anti-dumping duty on imports. This duty could be levied on imports either from a specific country or a group of countries.

The ADA provides that all countervailing duties should be terminated within five years of their imposition unless a review determines otherwise.

5. Agreement on Technical Barriers to Trade (TBT)

The objective of this agreement is to ensure that mandatory product standards should not be so applied to countries as to cause 'unnecessary obstacles to international trade'. It visualises that mandatory product standards do not create such barriers if based on internationally agreed standards. It also recognises that countries have a right to establish protection, at levels they consider appropriate (concerning the human, animal or plant life or health of the environment), and that countries should not be prevented from taking such measures as are necessary to ensure that those levels of protection are met.

Technical regulations and standards cover product characteristics, process and production characteristics, terminology and symbols and packaging and labelling requirements as they apply to the products.

The TBT encourages countries to use international standards where appropriate, but does not require change in the level of protection as a result of standardisation.

It recognises right of member countries to adopt technical regulations and standards as well as conformity assessment procedures for the purpose of: (i) national security requirements, (ii) prevention of deceptive practices, (iii) protection of human health or safety, animal or plant life or health of the environment.

6. Agreement on Trade-Related Investment Measures (TRIMs)

Beginning 1995, GATT's inconsistent agreement on TRIMs were required to be notified and eliminated within a transition period of two years (for developed countries), five years (for developing countries) or seven years (for least-developed countries). A further extension may be requested by developing and least-developed countries. The agreement on safeguards prohibits the use of 'grey-area measures' such as voluntary restrains or orderly marketing arrangements, and requires that such measures are both notified and eliminated within a time frame.

7. Agreement on Textiles and Clothing

This provides for the eventual elimination of the multi-fibre arrangement (MFA) after a ten-year transition period. In place since 1973, The MFA has since been terminated with effect from January 1, 2005.

8. General Agreement on Trade in Services (GATS)

It is the first multilateral agreement on trade that has as its objective the progressive liberalisation of trade in services. The GATS covers trade

in all service sectors and the supply of service in all forms. Every member is bound to open up its service sector, with exceptions only in (i) non-commercial services like health-care and education, (ii) measures affecting air-traffic rights and services, and (iii) other services for which a country has sought partial or full exemption before signing the treaty (for example, India sought exemptions for legal and accounting services).

9. Agreement on Trade-Related Intellectual Property Rights (TRIPs)

The main features of this agreement are as follows:

- minimum standards of protection to be provided by each member;
- domestic procedures and remedies for the enforcement of intellectual property rights to be evolved and put in place;
- dispute settlement mechanisms for the WTO member countries to be instituted.

TRIPs agreements cover the following areas: copyright and related rights, trademarks including service marks, geographical indications including appellations of origin, industrial designs, patents including the protection of new varieties of plants, the lay-out designs of integrated circuits and undisclosed knowledge including trade secrets and test dates.

10. Agreement on Government Procurement (GPA)

The GPA provides a vehicle for the progressive opening of markets to international competition through legally enforceable provisions of non-discrimination which apply to procurements 'covered' by the agreement. In addition, various provisions of the agreement relating to the provision of information to potential suppliers, contract awards, qualification of suppliers and other elements of the procurement process aim at ensuring transparency and non-discriminatory conditions of competition among suppliers. India, as yet is not a signatory to GPA, although other major developing countries such as China and Saudi Arabia have made commitments to eventually seek accession to it.

Check Your Progress 1

1. State in brief the objectives of the WTO.

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2. What are the principles on which the WTO has been set up?

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3. State in brief the functions of the WTO.

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4. Outline in brief the structure of the WTO.

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5. State in brief the features of the WTO agreement on agriculture.

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6. What are TRIPs and TRIMs ?

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7. State in brief the features of GATS.

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23.3 DISPUTE SETTLEMENT MECHANISM (DSM) OF WTO

The Dispute Settlement Mechanism (DSM) of the WTO is a central element in providing security and predictability to the multilateral trading system. WTO members have committed themselves not to take unilateral actions against perceived violations of the trade rules. In fact, they have pledged to take recourse to the DSM, and abide by its rules and procedures.

Under the WTO, there is a dispute settlement body (DSB) which is the custodian of the DSM. The DSB has been empowered to establish panels which are bodies set up for a specific investigation. The DSB is also empowered to constitute appellate bodies and exercise surveillance for compliance of rules and recommendations. It can also authorise retaliatory measures in cases of non-implementation of recommendations.

Stages in Dispute Settlement

The settlement of disputes passes through different stages as follows:

The **first** stage of settling disputes is the holding of consultations between the members concerned. Such consultations aim at evolving a solution of the dispute in a mutually acceptable manner.

If no solution is found, in the **second** stage, the complainant can ask the DSB to establish a panel. The panel is set up by the DSB in consultation with the disputing parties. The panel examines the complaint. Its report contains findings and recommendations. The DSB adopts the panel report after its submission.

In the **third** stage, any party to the dispute can appeal a panel's decision to the WTO appellate body. A standing appellate body (SAB) is set up by the DSB to hear all appeals. Prompt compliance with recommendations or ruling of the DSB is essential in order to ensure effective resolution of disputes to the benefit of all members. Members are given time to implement the recommendations but if a member fails to act, it is obliged to enter into compensation negotiations with the complainant. If no satisfactory compensation is agreed, the complainant may request authorisation from the DSB to suspend concessions or obligations against the other party. The suspension of concession is thus the last resort which an aggrieved member can call upon in retaliation.

WTO and GATT

DSM of the WTO is a significant improvement over GATT. Under GATT, dispute settlement was fragmented between the council and various committees. Under the WTO, there is one DSB which has the sole authority to establish panels and appellate bodies.

Besides, under the WTO, there has to be consensus against the establishment of panels or for the adoption of panel reports, whereas the opposite was true for the GATT. Thus, parties to the dispute in the present system can no longer block these decisions. Another new feature is the possibility of appeal against panel decisions to a SAB. And in line with the integrated nature of the WTO mechanism, complainants may take retaliatory action as a last resort against a nation which has not implemented the adopted panel recommendations.

23.4 EVALUATION OF WTO

WTO has been in operation for about a decade and a half now. During this short time, the WTO has proved that it is very different from its predecessor, GATT. For instance:

- While GATT was toothless, WTO with its DSM is able to bring to book even the mighty US in several cases.
- GATT's negotiating rounds took place once in a decade or so. But, at Singapore, just two years after the conclusion of the Uruguay round, the WTO virtually concluded an Information Technology Agreement, and launched studies on investment, competition policy, transparency in government procurement and trade facilitation. There is enormous pressure to compress into next five years what used to take decades to complete before.
- WTO is democratic in the sense that one country-one vote principle is adopted;
- For enforcing trade liberalisation, WTO has brought into its framework, many new areas, such as agriculture, textiles, technology and investment; and
- Induction of services, in the agenda of liberalisation, has been an extremely important feature of WTO.

23.4.1 Achievements of WTO

In the short period the WTO has been in existence it is being credited with the following achievements:

i) Greater market orientation has become the general rule;

ii) Tariff-based protection has become the norm rather than the exception;

iii) Use of restrictive measures for BOP problems has declined markedly;

iv) Services trade has been brought into the multilateral system and many countries, as in goods, are opening their markets for trade and investment either unilaterally or through regional or multilateral negotiations;

v) Many UDCs have undertaken radical trade, exchange and domestic reforms which have improved the efficiency of resource use, opened up new investment opportunities, and, thus, promoted economic growth;

vi) Bilateralism has been, to a great extent, placed under control by the extension of WTO provisions to services, TRIPs and TRIMs. Further, under the unified DSM, the possibility of any country unilaterally blocking the adoption of panel decisions no longer exists;

vii) The trade policy review mechanism has created a process of continuous monitoring of trade policy developments. Also, by promoting greater transparency, it has assisted the process of liberalisation and reform;

viii) It has been agreed to reduce import tariffs on industrial goods, based on Swiss Formula. A Swiss formula is a non-linear formula where tariff-cuts are proportionally higher for tariff which are initially higher. For instance, a country which has an initial tariff of 30% on a product will have to undertake proportionally higher cuts than a country which has an initial tariff of 20% on the same product.

23.4.2 Limitations of WTO

The WTO, however, has still to make any progress or become more sensitive on the following issues:

i) The trade reform process is incomplete in many countries. For instance, some high tariffs still remain on which negotiations are still proceeding at various levels, notably in the areas of basic telecommunications and financial services;

ii) There appears to have been at least some reversals in the overall liberalisation process in some developing countries. Examples are of increasing anti-dumping measures, selective tariff increases and investment related measures. The developed countries are also blocking the process of liberalisation by adopting many neo-protectionist measures;

iii) Concerns have been raised that the combination of globalisation

and technological change creates a premium on high-skill as against low-skill with growing social divisions;

iv) The major share of the benefits of the WTO has gone to the countries of the North. The WTO has opened up the world economy more rapidly in areas that benefit the developed world. Where the benefits of free trade accrue primarily to the UDCs, progress has been much slower;

v) The WTO has also not been sensitive enough to the development of non-tariff barriers to imports from the UDCs, such as anti-dumping duties;

vi) The multilateral trade rules are increasingly becoming a codification of the policies, perceptions, laws and regulations of the industrialised countries. The policies and rules appropriate or advantageous to the industrialised world are getting established as common rules to be obeyed by the developing world as well. As a result a 'one size fits all' approach is increasingly getting embedded in the WTO rules and disciplines;

vii) The interests of international trade, which are primarily the intrests of transnational corporations, take precedence over local concerns and policies even if such a course exposes the local population to serious health and security risks;

viii) The implementation-related issues are becoming a source of serious concern. These issues cover a whole range of demand to correct while asymmetries in TRIPS, TRIMS, anti-dumping, movement of people, etc. remain. Other issues requiring WTO attention relate to agriculture, textiles, industrial tariffs including peak tariffs, and services. In addition, there are what are described as Singapore issues. These relate to: (i) rules to protect investments, (ii) competition policy, (iii) transparency in government procurement, and (iv) trade facilitation.

WTO has now become a forum for perpetual negotiations on newer and newer subjects and for using trade rules to establish standards and enforce compliance even in non-trade areas. Everything now seems to require the hand of WTO, be it foreign investment, environmental or labour standards, child labour, good governance, or human rights.

However, a word of caution need to be sounded. WTO should not be expanded into a sort of world government, covering every economic subject under the sun, and then using the threat of trade sanctions to bring about a new world order.

23.5 DOHA ROUND OF NEGOTIATIONS

At the ministerial meeting at Doha (Qatar, UAE), in November 2001,

the WTO held a new round of trade negotiations. This round has been temporarily named as the Doha Development Round. This round began in January 2002 and was expected to end by January 1, 2007. It has, however, not concluded till January, 2009.

The Doha round of trade negotiations mandated negotiations on agriculture, industrial products, services, intellectual property, WTO rules, trade and environment. The negotiations at WTO reached a dead-end in July 2006 and were temporarily suspended. Since then, some attempts have been made to revive them, but these have not been successful.

Due to unrelenting pressure by the developed countries, the Doha negotiations veered from their proclaimed 'development-orientation' towards a 'market access' direction in which developing countries are pressurised to open up their agricultural, industrial and service sectors. In short, developed countries are out to seek exclusive benefits for themselves, alone. This goes against the spirit of bilateralism. The demise of multi-lateralism will set in a two-pronged movement towards increased bilateralism and regionalism. This will mean short-term gains for the vested interests, and medium and long-term welfare losses for everyone.

23.5.1 India's Response

India has a strong interest in a successful conclusion of the Doha round and should aim at the successful ending of negotiations even if the impasse may need to be prolonged to accomplish such an outcome. India should not be deterred by the fear that the trend towards regional arrangements would strengthen and trade conflicts would intensify. The geographical dynamics which drives regional arrangements will remain unaltered as it is. There is no doubt a distinct possibility of increased trade disputes, especially in agriculture after the demise of the peace clause, remains. But, India should not be daunted as the major subsidising countries are likely to face disputes and trade friction which could eventually prove to be a tonic for the trading system. In other words, it might help create a sense of urgency among the major players and a required political will to emerge effecting deep reforms in agriculture.

Check Your Progress 2

1. Enumerate in brief the major achievements of the WTO.

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2. Enumerate in brief the major limitations of the WTO.

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3. What is Doha round of negotiations?

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23.6 NEW INTERNATIONAL FINANCIAL ARCHITECTURE

The global economy has entered a new phase during the first decade of the twenty-first century. Momentous changes have been taking place, whose pace and force have both been unprecedented. Among these changes, a few important ones can be enumerated as follows:

1. **Emergence of China, etc.:** Emergence of China, India and others as economic powers has been a major factor of the present international economic dispensation. The global economy had witnessed the all-powerful hold of US and Europe for preceding close to two centuries or so. These economies served as the locomotive for the global economy. Twenty-first century is a witness to a tilt in this power-balance. Growth rate in China have been stupendous; India and other Asian nations have been fast catching up with this trend. This cannot leave the global economy unaffected. Already China is being touted as the locomotive economy for the world.

2. **Groups of Developing Economies:** Fast emerging developing economies have already tasted the flavour of their strength and ability to dictate their demands to the developed world. They have successfully stopped the developed world in their mission at Doha round of negotiations. They have presented a voice of unity in the form of groups of nations, like G20. India and other fast emerging economies have provided leadership to such efforts.

3. **Capital Flows:** Unprecedented capital flows, in different forms of investment, has taken place throughout the globe. Aided by advances in technology, both the developed and developing nations have gained from these flows.

4. **Growing Uncertainties and Instabilities:** While mushrooming foreign capital flows lubricated the growth engine throughout the

globe, it suffered from in built weaknesses of growing uncertainties and instabilities. These flows have been fickle and have demonstrated keenness to take flight at the first sign of trouble.

That these instabilities can cause trouble throughout the world, and there is no system in place to check and regulate them, became clear when the whole of the globe got engulfed in what came to be known as the '***sub-prime crisis***' that originated in US (see Unit 28 on this). Even earlier, the Latin American Crisis of 1987-88 and the East Asian and South East Asian Crisis had sounded the warning bubbles which were not adequately heeded. In wake of sub-prime crisis, however, the all-powerful, steel-strengthened, highly robust and the energetic financial structure of the US came down like a house of cards, putting the whole economy in a state of recession. This turmoil soon spread throughout the globe, bringing distress and misery for the masses.

23.6.1 Need for a New International Financial Architecture

The world now (2009) needs a new international financial architecture, including a new global economic institution for several reasons. These are:

One, the existing international financial institutions have been inefficient in dealing with the present economic crisis. They were set up in a different political and economic context from what prevails today. The IMF was set up with a view to maintaining an international monetary system that would promote exchange rate stability. The World Bank was set up to help build war ravaged nations. The prevailing global economic conditions have little or no similarity to the conditions at that time.

Two, prospects for enhancing the effectiveness of the existing international financial institutions are bleak. There is little or no indication thus far that these institutions have been able to gear themselves adequately for the magnitude of the task that the world economy currently faces, be it in the developed or the developing world. On the contrary, there have been indications of delays and failures, not to talk of the role with respect to 'surveillance' that the IMF is mandated to perform.

Three, in the wake of the international financial crisis in 2008, at the G-20 Summit towards the end of 2008, an Action Plan has been formulated to meet the situation. The plan consists of both short-term and medium term measures. It, however, appears unlikely that either the IMF or the World Bank is geared to perform this task.

Four, a new international financial architecture, including a new global economic institution is required to enable the global economy to become more fair and equitable, and thereby also more sustainable. Present day globalisation has created tremendous potential for creating prosperity and for reducing global inequalities with growth rates of developing countries far outpacing those of the developed world. However,

globalisation has been accompanied by accentuation of income inequalities across nations and within nations. This has happened because globalisation, as reflected in flows of finance, investment, capital, and knowledge between nations, has taken place across a less than level playing field, thereby enabling the already prosperous nations to get greater benefits, and become even more prosperous, while others have been partly or totally left out of the growth process.

In short, action to build a fair and inclusive globalisation through a new financial architecture is urgently required.

23.6.2 Suggestions for a New International Financial Architecture

As stated above, it is imperative to design a new international financial architecture. For this purpose, a few suggestions can be advanced as follows.

1. **The process and institutional design that the new architecture develops must be inclusive:** The new institution should give adequate attention and support to both industrial and developing countries, and to both large and small countries. Its governance system must be based on representative institutions, not on any adhoc grouping of countries (e.g. a G-8, a G-13 or a G-20). There is a need for a deeper involvement of the United Nations (UN) in any reform process, as it is the most representative of global institutions.

2. **The regulatory deficit of global finance must be corrected:** The crisis in the international financial system is closely associated with inadequate regulation and supervision of financial activities. Since the Asian crisis of the 1990s, it became an established criterion that financial liberalisation must be accompanied by stronger prudential regulation and supervision. This principle has been applied in many parts of the developing world but was entirely disregarded in the US, where further liberalisation was accompanied by deregulation and weak supervision of financial inter-mediation.

It is important, in this context, to follow the following **basic regulatory principles**.

One, regulations must be comprehensive, to avoid the massive loopholes through non-banking inter-mediation that led to the 2008 turmoil. This will include regulating the types of transactions that led to this crisis, particularly securitisation and derivatives, and force all the markets to be open and transparent thus limiting the over-the-counter operations.

Two, regulations should have strong counter-cyclical focus which would avoid excessive indebtedness and force the accumulation of increasing capital and provisions during booms.

Three, when pricing assets according to their market value to maintain transparency, the system must have mechanisms to avoid asset price bubbles from feeding into the credit expansion, and asset price busts from feeding into the credit squeeze.

Four, reliance on the internal models of financial institutions should be discarded. It has already shown how perilous it can be, and how the use of similar risk models by financial institutions can lead to greater instability. The new models should focus on: restricting monopoly power, encouraging diversification and avoiding unsafe financial products.

Five, any system that is designed in this area should be based on a well-functioning network of national and regional authorities and include truly international supervision of financial institutions with a global reach. The IMF should not be at the centre of the regulatory system. The Bank of International Settlements and the Basle Committee are better placed, but this will require a fundamental reform to broaden their membership and avoid the two major problems that the Basle Committee faced in recent years viz. (i) the lack of representation of developing countries, and (ii) excessive influence over regulation by large international banks. Alternatively, building on these institutions, a new 'Global Financial Regulatory Authority' could be considered.

3. **The IMF should be revamped:** Four essential reforms of the IMF should be part of the reform agenda.

   The **first** is the creation of a meaningful and truly global reserve currency, which could be based on the IMF special drawing rights. This would overcome both the inequities and the instability that is inherent in a global reserve system based on a national currency.

   The **second** issue is the need to place the IMF at the centre of global macroeconomic co-ordination, not the G-7 or in fact any group. This is the only way to give developing countries a voice on the issue.

   The **third** issue is the need for the IMF to lend during BOP crisis rapidly and without overburdening conditionalities, particularly when the sources of the crisis are a rapid reversal of capital flows and a sharp deterioration in the terms of trade. This means putting in place a preventive credit line for capital account crises and making active use of the Compensatory Financing Facility and of the Poverty Reduction and Growth Facility to manage the adverse terms of trade shocks faced by low income countries. This implies that the IMF would act more like a central bank, providing liquidity in an agile way, the way central banks have actually been providing funds in industrial countries on a massive scale in recent months.

   As a **fourth** issue, the IMF should encourage and advice countries on what regulations to impose under given circumstances. Indeed, the regulatory structure that must be developed to manage financial

stability in the global era should include provisions that apply to cross-border capital movements such as: generalised reserve requirements on cross-border flows, minimum stay periods, and prohibitions to lend in foreign currencies to economic agents that do not have revenues in those currencies.

4. **A co-ordinated global macro-economic policy package must be urgently adopted:** Both developed and developing countries should form part of such an effort.

5. **An international debt count must be created:** The lack of a regulatory institutional framework to manage debt (i.e. a court similar to those created to manage bankruptcies in national economies, the decisions of which are legally binding) is one of the major deficiencies of the current international financial architecture. The system has relied in the past on ad-hoc mechanisms, or on traumatic individual debt renegotiations. The problem of all these mechanisms has been that they generally come too late, after high indebtedness has had devastating effects on countries. Conditionalities have also been a significant source of problem for several poor countries and must be immediately lifted to allow these countries to benefit from these initiatives. The new international financial architecture should solve these problems by creating an international debt court, which would serve both as mediator and eventual arbitrator of both public and private sector international loans.

6. **The system must rely more broadly on regional institutions:** In all areas of reform, the IMF should make more active use of regional institutions and support their creation in other parts of the developing world. Indeed, the IMF of the future should be seen as the apex of a network of regional reserve funds.

The developing countries are in an excellent position to contribute to this task, given their large foreign exchange reserves. Using those reserves more actively for swap arrangements among central banks, pooling them in reserve funds, or using them to support the development of regional bond markets are all mechanisms to be used in expanding the scope to plan the new financial architecture. These reserves and existing sovereign wealth funds could also be used for creating the multilateral development banks owned by developing countries, and by investing in the capital bonds issued by such institutions.

Check Your Progress 3

1. Mention the factors which indicates the need for a new international financial architecture.

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2. State the essential features (by way of suggestions) for a new international financial architecture.

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3. Mention the lines (by way of your suggestions) on which a revamping of the International Monetary Fund is called for.

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23.7 LET US SUM UP

Bretton-woods conference, 1944, gave birth to two international institutions, viz. the IMF and the IBRD. Interim arrangements were made to regulate trade in goods through an institutional structure called GATT. GATT, however, did not live up to the expectations and requirements of newly developing countries. The continuous pressure exerted by these countries resulted in the setting up of the UNCTAD. The Uruguay round of negotiations on GATT culminated in the setting up of the WTO, which became operational from January 1, 1995. During the period since the WTO has been in existence, it has broadly lived up to the expectations of majority of countries.

However, the response of the WTO to the fast changing global situation has also been found inadequate. This can be seen from the slow progress made by the Doha round of negotiations. Simultaneously, international financial system has come under deep stress with the turmoil having its origins in the US and in the highly volatile large capital movements across the globe. This has brought out the need for a new international financial architecture.

23.8 KEY WORDS

Bretton-woods Institutions : Refers to the two institutions of IMF and World Bank following their establishment as a result of a conference held in a place called Bretton-woods in 1944 as a sequel to the need felt for extending economic support following the end of II World War.

General Agreement on Tariffs and Trade (GATT) : An organisation set up by the rich developed countries in 1947. It was biased in favour of the rich countries and hence was dubbed as the 'rich men's club'.

World Trade Organisation (WTO) : An international organisation set up in 1995. This organisation too came up as a result of the initiative and support of the members of GATT. However, its functioning was more democratic mainly in view of the change in the economic atmosphere which had seen the coming up of many newly industrially advanced countries since GATT.

Most Favoured Nation (MFN) Treatment : One of the four principles of WTO, which advocates no preferential treatment be given to any country. However, the other two principles of the remaining three provisions for such a treatment to some countries by 'protection through tariffs' based on the 'bound tariffs' approach.

TRIPs and TRIMs : Two agreements under WTO for protection of 'intellectual properties' and 'trade related investment measures'.

Doha Round : An inconclusive and continuing round which became controversial in view of its agenda on items like agriculture, services, environment, and other issues in which the views and situation of developing countries are different from those of developed countries.

23.9 SOME USEFUL BOOKS

Kaushik Basu (ed.), The Oxford Companion to Economics in India, Oxford University Press (OUP), New Delhi, 2008.

Ishwar C. Dhingra, The Indian Economy, Environment and Policy, Sultan Chand, New Delhi, 2009.

Ashwini Deshpande (ed.), Globalisation and Development, OUP, New Delhi, 2007.

Basudeb Guha (ed.), The WTO, Developing Countries and the Doha Development Agenda, Palgrave, New York, 2004.

K.S. Jomo (ed.), Globalisation Under Hegemony, Uneven Development and Global Inequality, OUP, New Delhi, 2005.

23.10 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See Section 23.2.1 and answer.
2. See Section 23.2.2 and answer.
3. See Section 23.2.3 and answer.
4. See Section 23.2.4 and answer.
5. See Section 23.2.5 and answer.
6. See Section 23.2.5 and answer.
7. See Section 23.2.5 and answer.

Check Your Progress 2

1. See Section 23.4.1 and answer.
2. See Section 23.4.2 and answer.
3. See Section 23.5 and answer.

Check Your Progress 3

1. See Section 23.6.1 and answer.
2. See Section 23.6.2 and answer.
3. See Section 23.6.2 and answer.

UNIT 24 EDUCATION AND HEALTH

Structure

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24.1 Introduction
24.2 Concept and Significance of Human Capital
24.3 Education Sector in India
24.3.1 Elementary Education
24.3.2 Secondary Education
24.3.3 Higher Education
24.4 Achievements of the Education Sector
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24.5 Assessment of Government Policy
24.5.1 Future Education Policy
24.6 Recent Initiatives
24.6.1 Scheme for Universalisation of Access to Secondary Education (SUCCESS)
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24.14 Some Useful Books
24.15 Answers/Hints to Check Your Progress Exercises

ignou THE PEOPLE'S UNIVERSITY

24.0 OBJECTIVES

After reading this unit you will be able to:

- explain the meaning and importance of the concept of human capital;
- discuss the present state of the education sector in India;
- identify the strengths and weaknesses of the education sector;
- discuss the outlined future education policy for India;
- appraise the present state of the health sector in India;
- outline the recent initiatives of the government in the health sector of India;
- explain the linkage between health and poverty;
- compare the differential health status between groups (i.e. male-female, rural-urban, different states) in terms of major health indicators; and
- identify the causes of poor health vis-à-vis the existing health care system and policy initiatives.

24.1 INTRODUCTION

Education and health contribute to build up what has come to be known as 'human capital'. Human capital is distinct from 'physical capital' but is complementary to the latter. Physical capital facilitates economic growth which, in turn, creates conditions which demand better education and health facilities. This results in human capital formation in the economy. Human capital formation, in turn, spurs economic growth. Thus, these social aspects of development invariably attract the attention of both policy-planners and political leaders albeit with differing motivations for each. In this context, the present unit discusses the issues relating to the two specific sub-sectors of social sector development viz. education and health in the Indian economy.

24.2 CONCEPT AND SIGNIFICANCE OF HUMAN CAPITAL

Human capital can be defined as the body of knowledge possessed by the population and the capacity of the population to use the knowledge effectively.

Till the late 1950s, economists and other social scientists did not pay much attention to the role of investment in human capital as an important determinant of economic development. The birth of this idea can be

traced to the presidential address of Prof. Theodore W. Schultz to the American Economic Association in December, 1960. Following this, the concept of human capital formation came to occupy the center stage as the economists and other social scientists began to look more closely at the functions that human capital can perform in the process of economic development.

24.2.1 Significance of Human Capital

In the present day emerging economies like India the significance of human capital arises from the following:

1. 21st century will promote people who respond to technology (@ speed of thought as Bill Gates has said in his recent book). It will reject those who refuse to move fast enough.

2. There is a technological shift to knowledge-based, brainpower industries. Brain power industries do not have a natural home and can be located anywhere. Smart countries are those who attempt to make themselves attractive to the brainpower industry by educating their people and creating the required brainpower through education and training.

3. In the knowledge economy, the value of intangible assets is increasing and that of tangible assets decreasing. In order to have a cutting edge in this scenario, having only the right kind of technology is not enough – rather a proper organisational climate with the right people competencies is critical.

4. Modern physical technology, which is becoming more and more complex, requires the back up of an advanced social technology. Social technology covers all advances in skills acquired by people individually and collectively.

5. All the well-known breakthroughs in physical technology would not have been possible if they were not preceded by relevant social innovations. Social innovations fosters the birth of more advanced physical technologies, taking them to further matured levels.

6. Higher education is believed to promote independence and initiative, both of which are valuable intellectual resources for the generation and dissemination of knowledge in society.

7. Available evidence in almost all the countries, including India, establish significant —

   - positive association between proportion of people below the poverty line and the proportion of illiterate persons;
   - negative correlation between female literacy and birth rate;
   - positive correlation between years of schooling and net increase in farm production.

8. Poverty is both a cause and consequence of deficiencies in human development. With poverty alleviation at the top of the development agenda, a serious assault on poverty will no doubt bring human beings into focus as the major beneficiaries of development. Increased public spending on aspects of human development is more likely to have a greater impact on poverty reduction and, at the same time, in improving human development.

In short, human resource development is an important condition for improving productivity which hold the key to economic development. Indeed, the available empirical evidence testifies that poverty ceases to be a handicap when a poor country builds up human capital and then uses the low cost skilled labour with global capital to produce a competitive skilled work force. The developing economies have already over-taken the developed economies in many fields particularly in the sector of labour-intensive production.

24.3 EDUCATION SECTOR IN INDIA

The role of education in facilitating social and economic progress is well recognised. It opens up opportunities leading to enhancement of both individual and group potentials. Education, in its broadest sense, is the most crucial input for empowering people with skills and knowledge, giving them access to productive employment opportunities. Improvements in education are not only expected to enhance efficiency but also augment the overall quality of life. The current growth strategy being pursued in India places the highest priority on education as a central instrument for achieving rapid and inclusive growth. It encompasses programmes designed to strengthen the education sector covering all segments of the education pyramid viz. (i) elementary education, (ii) secondary education, and (iii) higher education.

24.3.1 Elementary Education

The 86th Constitutional Amendment of 2002 led to inclusion of a new article 21-A in Part III of the Constitution providing for free and compulsory education to all children of 6 to 14 years of age as a Fundamental Right. Pending enactment of a suitable follow-up legislation (till end of 2008), the amendment has not yet been enforced. However, it is recognised as imperative to ensure good quality elementary education to all children in the age group of 6 to 14 years. Elementary Education, that is, Class I-VIII consisting of primary (I-V) and upper primary (VI-VIII) levels is the foundation of the educational system pyramid and has been emphasised in all our programmes of development. The goal of universalisation of elementary education (UEE) got a big push with the adoption of the *Sarva Shiksha Abhiyan* (SSA) programme in 1999. The scheme has been guided by the following five principles:

- Universal access
- Universal enrolment
- Universal retention
- Universal achievement
- Equity

The specific aims of the SSA are :

i) All children to be enrolled in regular school by 2005;

ii) All gender and social category gaps at primary stage to be bridged by 2007 and at elementary education level by 2010;

iii) Universal retention by 2010; and

iv) Focus on elementary education of satisfactory quality with emphasis on education for life.

SSA has brought primary education to the doorstep of millions of children, including first generation learners, through successive fast track initiatives in hitherto underserved habitations.

24.3.2 Secondary Education

Secondary education serves as a bridge between elementary and higher education. Since universalisation of elementary education has become an accepted goal, it has become essential to push this vision forward to move towards universalisation of secondary education, something which has already been achieved in a large number of developed countries and the newly industrialised East Asian economies.

Till now, the thrust of secondary education has been on improving access and reducing disparities by emphasising on the Common School System in which it is mandatory for schools in a particular area to take students from low-income families in the neighbourhood. The thrust has also been on revision of curricula with an emphasis on vocationalisation of education. In essence, vocationalisation means focusing on providing employment-oriented courses. Other areas of thrust are: expansion and diversification of the open learning system, reorganisation of teacher training, etc. These objectives till now (2009) have, however, been achieved only partly.

24.3.3 Higher Education

The investment made in higher education in the 1950s and 1960s has given India a strong knowledge base in many fields and contributed significantly to economic development, social progress, and political

democracy in Independent India. At the time of independence, the number of universities was no more than 20 and colleges around 500. The total enrolment was less than 1 lakh. By the end of the Tenth Five Year Plan, the Indian higher education system has grown into one of the largest in the world with 378 universities, 18,064 colleges, a faculty strength of 4.92 lakhs, and enrolment of 140 lakh students.

Despite the expansion that has occurred, the system is under stress to supply the required numbers of skilled human power, equipped with the required knowledge and technical skills helpful in catering to the demands of the economy. The accelerated growth of the economy has already created shortages of high-quality technical manpower. Unlike the developed countries, where the young working age population is fast shrinking with higher dependency ratio, India is in a stage of demographic transition (recall what you have read in Unit-7) with about 70% of the population below the age of 35 years. But this advantage can be realised to economic advantage only if opportunities for youth are expanded on a scale and diversity spread over different fields of basic sciences, engineering and technology, health care, architecture, management, etc. This is possible only if rapid expansion is initiated along with long overdue reforms in the higher, technical and professional educational sectors.

24.4 ACHIEVEMENTS OF THE EDUCATION SECTOR

Since independence, there has been a significant expansion of the education sector in India. Some of the positive achievements in the sector can be summarised as follows:

1. It has thrown open the doors of education at the point of admission at every level – elementary, secondary and higher levels – to all sections of population. Education is no more 'elitist'; but somewhat 'democratised' with a larger proportion of socio-economically weaker section participating in education at all levels, including higher education.

2. There has been an explosion of educational facilities in the country. Indian educational system is now colossal, with almost 100 million students and three million teachers, and costing billions of rupees each year. This is the result of a consciously pursued public policy, with two basic features viz.: (i) Access-based strategy, and (ii) Incentive-based strategy. The principal focus of the education policy has been to increase access to education at all levels. Now, almost everyone (in rural areas over 93%) lives within 1 km. distance of a primary school. Similarly, over 92% of the people in rural areas have a middle school within about 5 km. distance and 82% of the rural population lives within

8 km. distance of a high school. A district headquarter town without an arts college is now unheard of. Colleges have thus proliferated at an even faster rate than schools.

3. India has the second largest (next only to China) pool of educated and skilled men and women (together referred to as manpower) in the field.

4. There has been development of institutions of excellence at every level. India is thus beginning to measure up to the demands being made on it in areas which attract international attention.

24.4.1 Weaknesses of the Education Sector

The education sector has, however, demonstrated a number of weaknesses, among which the more important are as follows :

1. **Narrow coverage:** It has a very narrow coverage with only 2.5 % of the Indian population in the relevant age group attending colleges and universities, compared with 64% in the US and Canada, 47% in the OECD countries, 37.7% in South Korea and 20% in countries such as Cuba, Costa Rica and Venezuela. Moreover, it has a very low retention rate: of the 100 children entering class I, only 60 make it to the end of the primary school (Class V). In contrast, 68% of the world's children complete primary education. Further, less than 3 children complete class XII. The extremely poor retention rate at the primary level has been traced to the general neglect of the sector. Nevertheless, there has been a significant improvement during the last few years following the implementation of the SSA programme. The dropout rate in primary schools has fallen sharply from 70 per cent in 1950s to 40 per cent presently.

2. **Iniquitous**: The educational system in India is highly iniquitous in respect of access to facilities, utilisation of these facilities and finally realisation of the benefits from education. A recent World Bank study on the subject has established that 10% of the best educated Indians received 61% of the total resources as against 36% across Asia, reflecting higher degree of inequality in the system. The Gini coefficient for India (on a scale of 0 to 100 representing a progressive inequality) is 60, against a regional average of 43. In comparison only Bangladesh does worse than this in this respect.

3. **High cost of Education** : The cost of higher education in particular, has been relatively high. Though it is obvious that higher education would have much larger unit costs (defined as the percentage of per capita GDP spent on each pupil), cross-country comparison shows that India's outlays on higher education are much above the level in many countries (Table 24.1).

Table 24.1: Public Expenditure Per Student - 2005

(% of GDP Per capita)

	Primary	Secondary	Higher
Australia	16.4	14.4	22.5
Brazil	10.8	11.2	48.9
France	17.6	29.6	33.9
Japan	22.6	22.3	19.6
South Korea	18.6	25.1	9.3
Mexico	15.5	16.8	44.1
South Africa	14.2	17.6	49.6
Thailand	13.9	13.1	23.0
UK	18.4	28.4	28.1
USA	21.5	25.8	26.7
India	11.1	19.8	68.6

Spending on higher education is thus 1.55 times the Asian average, where as, it is only 0.61 times for primary education. This means that given the overall allocation of funds invested in the education sector, expenditure on higher education has crowded out the allocation for primary education.

4. **Low Quality**: Notwithstanding the fact that we have 13 regulatory bodies of higher education, the quality of education is fairly low and content less relevant to the 'needs of the individual and the society'. Only 3 Indian universities appear in a group of top 200 universities in the world. The educational system suffers from what has been called 'diploma disease' i.e. it does not aim at conveying knowledge and skills but is more concerned with certification and credentialing. As such, its contribution to the growth of human capital is minimal; it is unable to meet the emerging demands of skilled professionals.

   Another related aspect is that we have one of the most rigid educational systems in the world. At every stage of one's educational career, doors are being shut, rather than opened. The prospectus of the Cambridge University tells the potential applicants for admission: 'you can arrive in Cambridge expecting to become a physicist or Zoologist, and emerge after three years as a metallurgist or a psychologist.' Unfortunately, this cannot happen even in the best universities or institutes in India.

5. **Gender Bias**: Spread of education has been more biased towards boys than girls. This is brought out clearly by the data relating to gross enrolment ratio at different levels of education (Table 24.2).

Table 24.2: Gross Enrolment Ratio and Dropout Rate– 2004-05

	Boys	Girls
Primary (I-V)	110.7	104.7
Upper Primary (VI-VIII)	74.3	65.1
Elementary (I-VIII)	96.9	89.9
Secondary (IX-X)	57.4	45.3
Hr. Secondary (XI-XII)	30.8	24.5
Dropout Rate (I-X)	**0.4**	**63.9**

The gross enrolment rates for girls are lower at all levels of education, whereas drop out rates are steeply higher. These facts are further supported by the data relating to the number of female teachers in relation to the number of male teachers, in some selected states in India, as shown in Table 24.3 below.

Table 24.3: Number of Female Teachers Per 100 Male Teachers

States	Female Teachers Per 100 Male Teachers
Bihar	24
Jharkhand	26
MP	36
Rajasthan	38
UP	40

Given the emphasis on improving girls' enrolment which is critically dependent upon the presence of female teachers, there is a need to increase the recruitment of female teachers in educationally fragile states in India.

In view of the above weaknesses, India's record in the field of education is held to be abysmal.

Check Your Progress 1

1. What do you understand by human capital?

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2. Write a brief note on growth in (i) elementary education, (ii) secondary education, and (iii) higher education in India.

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3. Identify the major weaknesses of the education sector in India.

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24.5 ASSESSMENT OF GOVERNMENT POLICY

Since independence, a number of measures have been taken to reform the educational system. These measures can be grouped into three heads, viz. (i) equality reforms, (ii) quality reforms, and (iii) reforms for administrative ease. Studies on the effectiveness of these reforms, further classifying each of these into two categories: as (i) class-oriented reforms, and (ii) mass-oriented reforms, have arrived at the following conclusions.

(a) Equality reforms meant for the masses have turned out to be, by and large, less successful than equality reforms meant for the classes. Thus, equality reforms of higher levels of education (pursuants of which are from the relatively better-off sections) have been found to be more successful than at lower levels of education.

(b) In the case of quality reforms also, the mass-oriented reforms are less successful as compared to the class-oriented reforms.

(c) In advanced environments, the educational reforms seem to have achieved a degree of success but in less-developed and socio-economically weaker environments, educational reforms have been less successful.

(d) It thus follows that reforms meant for the classes seem to succeed in a shorter time period.

(e) In the case of a majority of the educational reforms, the primary initiative was taken by the Government with the mass involvement very much limited. The stake holders, both the target group and others, simply followed this initiative or the leadership on the part of the government. This contributes to reduced impact of measures.

(f) The global approach to educational change have received greater attention by the policy-makers than the specific measures meant for specific target groups. The global measures carry an implicit bias towards the socio-economically better-off sections of society, as major benefits from such measures, owing to greater political influence, could be cornered by them.

In short, educational reforms have not been successful in overcoming the weakness of smaller coverage, lower quality and higher inequality. In some cases, the problems have been aggravated with widening inter-regional disparities, inter-community disparities and still larger inequalities on the gender-based fronts.

24.5.1 Future Education Policy

With increased demand for education from across the class, caste and community divides, the four most important elements in future education policy may be identified as follows:

1. Make primary education not only available but also accessed by and availed of by all children, so that at least in the next generation, we have a more educated, live and alert population.

2. Focus on the education of women, and particularly female children, by especially reaching out to them.

3. Make education worthwhile relating it to the actual needs of the population, in terms of suitability of the education imparted for employment, acquisition of better skills, better understanding of health, education, environmental and other relevant issues.

4. Make use of the opportunities offered by the latest advances in information technology to make teaching/learning far-reached, broad-based and effective.

Primary education to be meaningful has to be imparted in the mother tongue of all children, at least in the 16 major languages (and scripts) which are in use across the country. To this may be added that school curricula have to be made less rigid with innovative initiatives adopted. Substantial increase in the proportion of funding of primary education is also necessary, just as increasing the community involvement to make the education system work more effectively. This calls for decentralisation and de-bureaucratisation of the education system by giving the initiative to the community at large to run the educational system. Also, in order to give effect to the principle of equal opportunity for all through education, primacy has to be given to:

- education for women and, in particular, girls of school-going age,

- education for other backward sections of the population like scheduled castes and tribes.

24.6 RECENT INITIATIVES

Since universalisation of elementary education has become an important goal, it is essential to push this vision forward to move towards universalisation of secondary education. Not only universal enrolment, but universal retention and satisfactory quality of learning should be of a priority. The major challenge before secondary education is that of meeting the surge in demand due to success of Sarva Shiksha Abhiyan whose target is to ensure that all children of elementary school going age are enrolled 100% by 2010. The government has, therefore, embarked upon launching a centrally-sponsored scheme, viz. Scheme for Universalisation of Access to Secondary Education (SUCCESS).

24.6.1 Scheme for Universalisation of Access to Secondary Education (SUCCESS)

The main objective of the SUCCESS is to make secondary education of good quality available at affordable levels to all young students in the age group of 15-16 (classes IX and X). The targets before the scheme are, therefore, two-fold:

1. Universal access of Secondary level education to all students in the age-group 15-16 years by 2015; and

2. Universal retention by 2020.

The objectives of the programme are the following:

a) provision of necessary infrastructure and resources in the secondary education sector to create higher capacity in secondary schools in the country and improve quality of learning in the school;

b) provision for filling the missing gaps in the existing secondary school system;

c) provision of extra support for education of girls, rural children and students belonging to SC/ST, minority and other weaker sections of the society; and

d) adoption of a holistic convergent framework for implementation of various schemes in secondary education.

24.6.2 National Knowledge Commission

In early 2005, the Government constituted the National Knowledge Commission under the Chairmanship of Sam Pitroda with the aim of making India not only a knowledge-producing society but also a knowledge-sharing and knowledge-consuming society.

The Commission submitted its report on higher education in early 2007.

The report advocated expansion to attain gross enrolment ratio of at least 15 per cent by 2015 and increase in government support of higher education to at least 1.5 per cent of GDP. It provides a direction for systematic overhaul of the entire education system without diluting academic standards. The Commission has recommended: (i) transition to course credit system to bring in more flexibility in course structures, (ii) decentralised examination system with focus on internal assessment, (iii) periodic revision and restructuring of curricula and (iv) criteria based resource allocation to ensure maintenance of standards with strategic preference to promote excellence.

Check Your Progress 2

1. Make a brief assessment of the government policy in the education sector.

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2. Outline the important features that should be included in the current/ future education policy for India.

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3. Write a brief note on the Scheme for Universalisation of Access to Secondary Education.

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24.7 HEALTH SECTOR IN INDIA

The health of a nation is an essential component of development, vital to the nation's economic growth and internal stability. Assuring a minimum level of health care to the population is a critical constituent of the development process. Since Independence, India has built up a vast health infrastructure and health personnel at primary, secondary, and tertiary care in public, voluntary and private sectors. Considerable achievements have been made over the period in our efforts to improve health standards, such as life expectancy, child mortality, infant mortality,

and maternal mortality. Nevertheless, problems abound. Malnutrition affects a large proportion of children. An unacceptably high proportion of the population continues to suffer and die from new diseases that are emerging; apart from continuing and new threats posed by the existing ones.

24.7.1 Health and Poverty

Improvement in the health status of a population is recognised as instrumental for increasing productivity and economic growth, as well as an end in itself. Here, it is important to understand the link between poverty and ill-health. The onset of a long and expensive illness can drive the non-poor into poverty. Ill health creates immense stress even among those who are financially secure. High health care costs can lead to entry into or exacerbation of poverty. The importance of public provisioning of quality health care to enable access to affordable and reliable health services cannot, therefore, be underestimated. This is especially so, in the context of preventing the non poor from entering into poverty or in terms of reducing the suffering of those who are already below poverty line.

24.8 HEALTH INDICATORS IN INDIA

The important indicators of health in a country are; (i) the infant mortality rate (IMR), (ii) life expectancy (LE) at birth, and (iii) the maternal mortality rate (MMR).

(i) The IMR is defined as the number of children dying before age 1 divided by number of live births during that year. It is expressed as the number of infant deaths per 1000 live births. LE at birth is defined as the number of years a newborn would live if the prevailing patterns of age-specific mortality rates at the time of birth were to continue throughout the child's life. The MMR is defined as the number of maternal deaths per 1,00,000 live births. Finally, the under-5 mortality rate (per 1000 live births) is defined as the probability of dying between birth and upto 5 years of age, expressed per 1000 live births.

24.8.1 Trends in Health Indicators

Table 24.4 provides the value of four health indicators for India for selected years over three decades. Its analysis reveals the following :

Table 24.4: Trends in Selected Health Indicators in India

Indicators	1982	1992	2003
LE	55.5	60.3	63
IMR	105	79	63
Under -5 Mortality rate	152	94	87
MMR	-	-	540

i) The LE at birth was 30 years at the time of independence. Since then, India has made rapid progress. In recent years, the LE increased significantly between 1982 and 1992, but slowed down since then. The current LE in India is much lower than what many other countries have achieved: the figures are 78 and 67.2 respectively for high and medium human development countries, and 74 for Sri Lanka for the same year. Japan and Sweden are on top in this respect with LE of over 80.

   Gender difference in LE is a very important marker for inequities that may exist between males and females in health and other related social well-being indicators. In the countries with the highest LE, women tend to outlive men by 5 to 8 years; this difference is 0 to 3 years in countries where the LE is low. In case of India, the female and male LE are 65 and 61.5 respectively. In Sri Lanka, the figures are 76.8 and 71.5 for females and males respectively.

ii) The IMR for India, although has come down over the years is still high. With an IMR of 63, India is way behind when compared to high and medium human development countries for whom the corresponding values of IMR are 9 and 46 respectively. Bangladesh currently has a lower IMR (46) than India. If one looks at the last thirty years, Sri Lanka, Bangladesh, and China have all achieved a more rapid decline in IMR than India.

iii) The under-5 mortality rates that stood at 242 in 1960, with a decline to a figure of 87 over 40 years, is indeed significant. However, here too, there remains huge scope for improvement: for example, high and medium human development countries have figures in this respect of 11 and 61 respectively. Sri Lanka and China have values of 15 and 69 respectively, again bettering India's figure of 87.

iv) The MMR is a difficult parameter to estimate correctly. It is, therefore, indicated only for the latest available year in Table 24.4. The adjusted MMR for India has been calculated by the UNDP as 540, whereas the unadjusted figure is significantly lower at 400. Even this lower value is much higher than the levels existing in developed as well as some developing countries: for example, USA and Sri Lanka have adjusted MMRs of 17 and 92 respectively. Bangladesh has done much better than India with an MMR of 380, not to mention China which is way ahead at 56. Interestingly, Pakistan also has an adjusted MMR of 500, which is lower than India's.

24.8.2 Rural-Urban and Male-Female Differentials

Table 24.5 presents the values of major health indicators, area-wise and gender-wise.

Table 24.5 Area-wise and Gender-wise Health Indicators

	Rural			Urban			Total		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
IMR	67	72	69	40	39	40	62	65	63
Crude Mortality Rate	9	8.4	8.7	6.5	5.6	6.1	8.4	7.7	8.1
LE at Birth	58.9	59.8	59.4	64.9	67.7	66.3	60.1	61.4	60.7

The following inferences flow from the data:

i) There is a large difference between IMR in rural (69) and urban (40) India;

ii) The crude mortality rates are also higher for rural India, though females have a slightly better rate in both rural and urban areas; and

iii) The LE at birth is significantly lower in rural India than that in urban India.

24.8.3 State-wise Variations

Since inter-state variations are critical to such analysis, some state-level analysis is presented in able 24.6. For ease of analysis, the states have been divided into four groups: (i) major states, (ii) the newly defined Empowered Action Group (EAG) states, (iii) north-eastern states, and (iv) union territories. The EAG states broadly correspond to the BIMARU states – a term that was coined to describe the states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh. The new list of EAG states additionally included Chhattisgarh, Uttaranchal, Jharkhand and Orrisa.

Table 24.6 Health Indicators Across States in India

State/Group	IMR		MMR	LE	
	M	**F**		**M**	**F**
All India	63.0	62.0	407.0	60.4	61.8
Union Territories	27.7	26.5	NA	NA	NA
NE States	34.3	35.7	NA	NA	NA
EAG States	66.3	63.0	538.8	58.1	57.5
Major States	46.8	46.0	151.3	58.1	60.1

The values of IMR and MMR in Table 24.6 indicates that both these indicators for the EAG states are close to that of 'All India' rates. Among these EAG states, the highest IMR is in Orissa, followed by Madhya Pradesh, Uttar Pradesh and Rajasthan. The NE states and the UTs are ahead in their progress, both for males and females in respect of IMR.

The dominance of the EAG states in respect of LE in lowering the national average is also seen from Table 24.6.

To conclude, therefore, there is immense scope for improvement in the health status of the people in India to be focused particularly on the EAG states.

24.9 CAUSES OF POOR HEALTH

The important causes of poor health in India are as follows:

a) High birth rate and fast growth of population

A number of health risks derive from high fertility rates in India. When large number of people live in poor households located in crowded, unsanitary surroundings, communicable diseases spread easily. High mortality results therefrom, especially among the children.

High mortality rates, in turn, induce families to have many children so that they can assure themselves of a few surviving children. This circular pattern adversely affects the health standards.

Similarly, population growth makes it more difficult to provide safe or sufficient water supply, garbage disposal and sanitation for the community. It increases the cost of providing adequately trained health manpower and medical facilities.

b) Malnutrition

Widespread malnutrition contributes to the incidence and severity of health problems. It poses a major threat to the children and, in extreme cases, threatens their lives.

In addition, malnutrition creates serious health problems by contributing to premature births and to abnormally low weight at birth.

Malnutrition is also a major contributing factor in spreading infectious diseases. By weakening the body response to diseases, malnutrition reduces acquired immunity. The problem of inadequate nutrition is compounded by rapid population growth. Large family size and close spacing of births frequently preclude sufficient food and care for children.

c) Unsanitary conditions and housing

The contamination of food, water or soil with human waste is a cause of a number of diseases. If water is not safe for drinking, or is insufficient for personal hygiene and sewage disposal, diseases spread more easily. This reduces the health status of the country.

In addition to poor sanitation and water supply, very sizeable proportion

of the total population of cities live in substandard dwellings lacking in space, ventilation and sunlight. Such conditions tend to increase the incidence of diseases.

24.10 HEALTH CARE SYSTEM IN INDIA

Over the last six decades, India has built up a vast health care system. The health care system consists of the following:

1. Primary, secondary and tertiary institutions, manned by medical and paramedical personnel.

   i) The primary health care institutions provide the first level of contact between the population and health care providers. These consist of primary health centres, dispensaries run by various Government departments, medical infrastructure of PSUs and large industries.

   ii) The secondary health care institutions consist of district hospitals and urban hospitals. They take care of (a) patients referred to them by the primary health care institutions, and (b) primary health care needs of the population in the places in which they are located.

   iii) The tertiary health care hospitals are attached to medical colleges, both in the public and the private sector.

2. Medical colleges and paraprofessional training institutions to train the needed manpower giving them required academic input especially in terms of practical training.

3. Programme managers managing ongoing programmes at central, state and district levels.

4. Health management information system consisting of a two-way system of data collection, collation, analysis and response.

24.10.1 Deficiencies in Health Care System

In spite of the phenomenal expansion of the health care system at all levels, the system suffers from a number of deficiencies.

One: communicable diseases have become more difficult to combat because of development of insecticides resistant to strains of vectors, antibiotic resistant strains of bacteria and emergence of HIV infection.

Two: longevity and changing lifestyle have resulted in the increasing prevalence of non-communicable diseases.

Three: under-nutrition, micro nutrient deficiencies and associated health problems co-exist with obesity and non-communicable diseases.

Four: the existing health system suffers from inequitable distribution of institutions and manpower.

Five: even though the country produces every year some 20,000 doctors in modern system of medicine and similar number of practitioners and professionals in Indian systems of medicine, there are huge gaps in critical manpower needed in institutions providing primary health care, especially in the remote rural and tribal areas, where the health care needs are the greatest.

24.10.2 Issues in Health Care System

It is becoming clear that India is in the midst of a health care transition across the following four dimensions:

1. **Demographic:** With declining mortality and fertility, we find that in the year 2020, as compared to 2002, the percentage of total population in the age group of 15-64 years will increase from 59 per cent to 67 per cent, and that for above 64 years, from 7 to 9 percent. The percentage of population below 15 years of age will drop from 35 to 28 percent. This window of 'demographic opportunity' in India is expected to last for a quarter century from then i.e. up to 2045. Among the increasing older population, many may be widows, without family support. This demographic shift has implications for the way in which institutional health care is delivered by extending the social-security provisions.

2 **Epidemiological:** We are encountering a 'double burden of disease'. A high proportion of the population continue to die from preventable infections like diarrhoea, pneumonia, under-nutrition, child birth related complications, etc. Simultaneously, the growing incidence of non-communicable chronic conditions of ill-health is stretching the capacity of the health care system, since it must continually attend to the 'unfinished agenda'.

3. **Social:** There is, on the one hand, a rising demand for high quality health care, including a preference for multi-specialist hospital even if these entail higher costs. On the other hand, there is an unwillingness to discord myths and misconceptions, as for instance, practices contributing to adverse sex selection (see unit 26 for more details).

4. **Managerial:** We need to develop health financing systems (inclusive of risk pooling) that will address the shift in disease burden due to increase in health service costs, and minimise inefficiencies across health care management. To respond to these issues and existing deficiencies, a comprehensive national health policy has been formulated and implemented.

24.11 POLICY INITIATIVES

With the aim of achieving inclusive growth, recent policy initiatives in health sector include two programmes viz. (1) National Rural Health Mission, and (2) National Urban Health Mission, the two forming **Sarva Swasthya Abhiyan,** in health sector, parallel to the **Sarva Shiksha Abhiyan** in the education sector.

24.11.1 National Rural Health Mission (NRHM)

NRHM was launched to address the infirmities and problems prevaliing across the primary health care system in the country. It, thus, aims to bring about improvement in the health system and the health status of those who live in rural areas. The mission aims to provide universal access to equitable, affordable, and quality health care that is accountable and at the same time responsive to the needs of the people.

Five Planks of the Mission

1. The Mission is expected to address the gaps in the provision of effective health care to rural population with a special focus on 18 states, which have weak public health indicators and/or weak infrastructure.

2. The mission is a shift away from the vertical health and family welfare programmes to a new architecture of all inclusive health development in which societies under different programmes will be merged and resources pooled at the district level.

3. The mission aims at effective integration of health concerns, with a focus on major determinants of health like drinking water, sanitation, and nutrition, through the drawing up of integrated district plans for Health. There is a provision for flexible funding so that, States can utilise it in the areas they feel are important.

4. The mission provides for appointment of Accredited Social Health Activists (ASHA) in each village and strengthening of the public health infrastructure, including outreach through mobile clinics. It emphasises involvement of the non-profit sector, especially in the underserved areas. It also aims at flexibility at the local level by providing for untied funds.

5. The mission, in its supplementary strategies, aims at fostering public-private partnerships (PPPs) for improving equity concerns, reducing out of pocket expenses, introducing effective risk pooling mechanisms by social health insurance, and taking advantage of social health traditions.

24.11.2 National Urban Health Mission (NUHM)

The NUHM will meet the health needs of the poor, particularly the slum dwellers, by making available to them essential primary health care

services. This will be done by investing in high-calibre health professionals, appropriate technology through PPP and health insurance for urban poor.

The NURM will ensure the following:

1. Resources for addressing the health problems in urban areas, especially among urban poor.

2. Need based city specific urban health care system to meet the diverse health needs of the urban poor and other vulnerable sections.

3. Partnership with community for a more proactive involvement in planning, implementation, and monitoring of health activities.

4. Institutional mechanism and management systems to meet the health-related challenges of a rapidly growing urban population.

5. Framework for partnership with NGOs, charitable hospitals, and other stakeholders.

6. Two-tier system of sick pooling like: (i) women's Mahila Arogya Samiti to fulfill urgent hard-cash need for treatments; (ii) a Health Insurance Scheme for enabling urban poor to meet medical treatment needs; etc.

Check Your Progress 3

1. Bring out the relation between ill-health and poverty in about 50 words.

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2. State, in brief, the important causes of poor health in India.

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3. State, in brief, the important components of the health care system in India.

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24.12 LET US SUM UP

In the process of economic development, human capital has come to be recognised as an important factor. This factor is recognised to be two edged i.e. it influences growth, and at the same time, is itself influenced by growth. Human capital has been defined as the body of knowledge possessed by the population and the capacity of the population to use the knowledge effectively. Two important determinants of human capital are education and health. Since independence, significant changes have taken place in both these social sectors of the Indian economy. Nevertheless, much still remains to be achieved if India is to catch up with other middle-income countries.

24.13 KEY WORDS

Universalisation of Elementary Education or Sarva Shiksha Abhiyan : A government initiative to provide elementary education from class I to VIII to all school going aged children in the age group of 6-14.

Dropout Rate : An indicator expressed in percentage terms conveying the number of children not reaching the next class (or stage of education) from the previous class (or stage of education). In India, it is estimated that out of every 100 children enrolled in Class I, only about 19 reach the stage of higher secondary education. This means that at the secondary school level the drop out rate is 81 percent.

Unit Cost of Education : Percentage of per capita GDP spent on each pupil.

24.14 SOME USEFUL BOOKS

1. Government of India — Economic Survey

2. Planning Commission — Mid-Term Appraisal of the Tenth Five Year Plan

3. Planning Commission — Eleventh Five Year Plan: 2007-12

5. Kaushik Basu (ed.) — The Oxford Companion of Economics in India

24.15 ANSWERS/HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See section 24.2 and answer.
2. See section 24.3 and answer.
3. See section 24.4.1 and answer.

Check Your Progress 2

1. See section 24.5 and answer.
2. See sub-section 24.5.1 and answer.
3. See sub-section 24.6.1 and answer.

Check Your Progress 3

1. See sub-section 24.7.1 and answer.
2. See sub-section 24.9 and answer.
3. See section 24.10 and answer.

UNIT 25 LABOUR AND EMPLOYMENT

Structure

25.0 Objectives
25.1 Introduction
25.2 Labour Force and Employment: Concept & Measurement
25.3 Dominance of Informal Sector
25.4 Labour Policy and Regulations
25.5 Wages: Trends and Structure
25.6 Child/Bonded Labour
25.7 Employment Guarantee Schemes
25.8 Social Security for Unorganised Sector Workers
25.9 Labour Market Flexibility
25.10 Let Us Sum Up
25.11 Key Words
25.12 Some Useful Books/References
25.13 Answers/Hints to CYP Exercises

25.0 OBJECTIVES

After going through this unit you will be able to

- discuss the conceptual aspects of employment and labour force;
- explain the dominance of informal sector in the Indian economy;
- discuss the issues pertaining to labour policy and regulation;
- explain the issues relating to trends and structure of wages;
- discuss the measures initiated by the government to address the issues of child and bonded labour;
- explain the need and rationale for launching employment guarantee schemes;
- describe the issues pertaining to social security for unorganised sector workers; and
- describe the aspects of labour market flexibility.

25.1 INTRODUCTION

Promotion of employment opportunities, suitable to the size and composition of the labour force in the country, will be among the priority objectives of any government. International Labour Convention No. 122 (Employment Policy Convention and Recommendation, 1964), enjoins the ILO member States to promote 'full, productive and freely chosen employment'. The level of employment in a country depends upon many factors like policies, realised economic growth, savings and investment levels, consumption patterns, skill composition of labour force, etc. The type of employment is distinguishable in terms of two broad categories viz. *wage employment* and *self employment*. Wage employment refers to employment services offered in exchange for returns in cash or kind. Self-employment refers to any economic activity undertaken (e.g. agricultural cultivation, business venture, trading, etc.) either employing some persons or running the operation solely. The relative share of the two types of employment depends upon the extent and pattern of development of a country. In developing countries like India, within the overall composition of employment, the proportion of self employment is dominating (55 percent in 2001-02). As the level and the pattern of development change, opportunities for wage employment with assured wages and other benefits would increase. In an economy where the proportion of unskilled labour is high, a compulsive situation of 'need to be employed' irrespective of the levels of earning would necessitate state initiatives for state-funded programmes of employment creation.

The present unit deals with the issues of labour and employment. It begins by discussing the complexities involved in the 'concept and measurement' of employment, particularly in a large agriculture based developing economy like India. Other related characteristics of employment like dominance of informal sector, labour policy and wage structure, issues of child/bonded labour, employment guarantee programmes, social security for workers and issues of labour flexibility are also discussed.

25.2 LABOUR FORCE AND EMPLOYMENT: CONCEPT & MEASUREMENT

The term labour force includes all those persons in the working age group who are not only 'employed' but even those who are 'unemployed'. A condition on the latter is that the unemployed must be both *available* and *willing* to work. Recall from your study of units 7 and 8, that the working age-group, is considered as 15-59 years where the upper age limit of 59 is relaxed to 64 and beyond in developed countries. You would also have noted that many professionals and workers (e.g. doctors, lawyers, small service providers, etc.) continue to be working remaining economically active well past the age of 59 in a self-employed capacity.

The upper age limit for working is thus relevant for jobs in the formal sector carrying assured service conditions including social security benefits. The absence of such social security benefits is precisely what marks the plight of large informal sector workers dominating the developing economies. You would also be aware that in such economies many children in the school going age group (i.e. 6-14 years) take to working due to reasons of socio-economic compulsion. You have already studied in Unit 24 on the programme of *universalisation of elementary education* (UEE) or Sarva Shiksha Abhiyan launched in India in the year 1999. You may recall that UEE aims at compulsory enrolment of all children in the school going age group to provide for a minimum level of schooling considered necessary for promotion of *marketable skills* suitable to many jobs of modern times particularly in the booming services sector of the economy. Such persons who are not only adequately schooled but also trained constitute the 'skilled workforce' in a country. A characteristic feature of developing economies is the low proportion of such skilled workers in the total labour force of the economy.

The measurement of employment is characteristically difficult, particularly in the developing economies, as a large number of workers survive on employment performed on a day to day, and within a day on an hourly, basis. As you are aware, the sectoral distribution of workers in India is tilted heavily towards the agricultural and allied sector accounting for a majority of 58.4 percent of total workforce (in 2004-05) in the country. The activities in the sector are seasonal, mostly of self-employment type with weak 'wage system' and commonly undertaken by 'unpaid family labour'. The seasonality of activities contribute to many of those engaged in the sector being under-employed. In view of this, during non-agricultural seasons, the rural labour of the sector depend upon unskilled jobs made available by the government through infrastructure development programmes (e.g. Pradhanmantri Gram Sadak Yojna). The need for generating employment of this nature, to a large number of unskilled workers, is the main reason behind the recently enacted National Rural Employment Guarantee Act (2005) on which you will read more in the present unit later. These inherent characteristics of employment make its measurement challenging. As you studied earlier in Unit 8 on Data Sources, two major data collecting organisations, namely The Census and the NSSO, have evolved methods suitable for assessing the employment dimensions of workers in India. We will briefly refer to the conceptual details of employment measurement as adopted by these two sources below.

Decadal Census: The population census was first conducted in India in 1871. However, till 1921, the question on 'economic activity' in the census was focused on the 'livelihood or occupation pursued for subsistence' by a person. Even persons not actually working but receiving income from land, property, etc. were considered economically active. In the census of 1931, the term 'income' was more specifically

introduced with the population classified into: earner, working dependent and non-working dependent. This classification was changed to 'wholly dependent, partly dependent and others' in the 1941 census. The 1951 census classified the population into 'self supporting person, earning dependent and non-earning dependent'. The definitions adopted during 1931 to 1951 thus considered 'dependency' resulting from lack of earnings (exchanged either in cash or kind) as an important factor in the classification of persons for their economic activity.

The term 'worker' was used for the first time in the 1961 census. Work was defined in this census to include not only actual work but also effective supervision and direction. Work of more than 'one hour a day' for seasonal work (e.g. cultivation, livestock, dairying, household industry) and 'employed during any of the 15 days preceding the day of enumeration' for *regular employment* in trade, profession, service, business or commerce were considered for determining the status of a 'worker'. Persons not engaged in any economic activity were treated as 'non-workers'. Classification of population was thus dichotomous viz. *workers and non-workers*. The 1971 census adopted the '*time spent criterion'* for producing goods and services to distinguish a 'worker' from a 'non-worker'. The reference period for regular workers was changed from '15 days prior to the date of enquiry' adopted in the 1961 census to 'the week prior to the date of enumeration' in 1971. A person was categorised as 'worker' depending on the 'main activity' pursued in any economically productive work. Students, housewives, etc. were treated as 'non-workers' but were recorded for 'secondary worker status' wherever 'some marginal contribution' to work was made by them. The more recent censuses (1981 onwards) have adopted a similar dichotomous classification of workers but with a changed connotation viz. '*main workers*' and '*marginal workers*'. With the reference period changed to one year preceding the date of enumeration, 'main workers' are considered as those who worked for greater part of the reference period (i.e. 183 days). Depending on the main activity of the workers, 'workers' are further classified into four categories viz. cultivator, agricultural labourer, engaged in household industry and others.

National Sample Survey Organisation (NSSO): As opposed to the decadal censuses which makes the data available on 'workers' once in ten years, the reports of NSSO make available the data on employment status of working age population twice in a period of ten years. Set up in 1951 for conducting nation-wide surveys on various aspects of socio-economic interest, one of its first surveys focusing on 'employment and unemployment' was conducted in 1953. Beginning with this survey, till 1962 for rural areas and till 1967 for urban areas, NSSO conducted the employment and unemployment surveys on an annual basis. However, much of this 14 year period was devoted to experimentation for development of concepts in defining and measuring employment. With a further five year time taken to standardise the concepts, since 1972-73, NSSO is conducting its *labour force surveys* (another name for

employment-unemployment surveys) in 5-yearly intervals. Called, therefore, also as Quinquennial Employment and Unemployment Surveys (QEUSs), so far seven surveys have been conducted in the years 1972-73, 1977-78, 1983, 1987-88, 1993-94, 1999-2000 and 2004-05. Depending on the reference period adopted, the QEUSs adopt three distinct approaches viz. (i) the *usual status approach* (with one year or 365 days preceding the date of survey as the reference period), (ii) the *current weekly status approach* (with one week preceding the date of survey as the reference period) and (iii) the *current daily status approach* (with each day of the preceding week as the reference period). Under each of these three approaches, classification of persons surveyed are made into one of the three broad activity statuses viz. employed, unemployed and *out of labour force*. The classification is made depending on the 'major time or priority time criterion'. While the 'major time' criterion is used for the 'usual status' approach, the 'priority time' criterion is used for the two 'current status' approaches. `Work' or `gainful activity' is defined as activity pursued for pay, profit or family gain i.e. activity which adds value to the 'national product'. As in the Census, attending to the household chores is not taken to constitute work.

As said before, labour force includes both 'employed' and 'unemployed' persons. Persons who are neither 'working' nor 'seeking or available for work' during the specified reference period are considered as 'out of labour force'. The 'out of labour force' include students, those engaged in domestic duties, rentiers, pensioners, recipients of remittances, beggars, infirm or disabled persons, persons too young to work i.e. children, and casual labourers not working due to sickness. The QEUSs provide comprehensive estimates of the labour force for four broad group of workers as follows:

- number of persons in the labour force according to the *usual status* by considering the usual principal activity only (i.e. principal status or ***ps***),
- number of persons in the labour force according to the *usual status* by considering the usual primary and subsidiary activity together (i.e. principal status & subsidiary status or ***ps + ss***),
- number of persons in the labour force according to the *current weekly status approach*, and
- number of 'Person Days' in the labour force according to the *current daily status approach*.

Usual Principal/Subsidiary Activity Status: The *usual principal activity status* relates to the activity on which a person spent relatively longer time (*major time criterion*) during the 365 days preceding the date of survey. Persons are first categorised as those *in the labour force* and those *out of labour force* depending upon the major time spent during the reference period of one year. For persons belonging

to the labour force, the broad activity status of either 'working' (employed) or 'not working but seeking/available for work' (unemployed) is then ascertained based on the same major time criterion. Note that a person whose usual principal status was determined on the basis of the major time criterion could have pursued some other economic activity for a minor period. This status is termed as *usual subsidiary economic activity status* of that person.

Current Weekly Status: The *current weekly status* (CWS) of a person is obtained on the basis of a reference period of 7 days preceding the date of survey. It is also decided *on the basis of a priority cum major time spent criterion*. According to this criterion, the status of 'working' gets priority over the status of 'not working but seeking or available for work' which, in turn, gets priority over the status of 'neither working nor available for work'. A person is considered working (or employed) if he/she had worked for at least one hour on at least one day during the 7 days of the week. A person is considered 'seeking or available for work (i.e. unemployed)' if, during the reference week, he/she was not working even for one hour, but seeking or available for work. A person who had neither worked nor was available for work for any time during the reference week is considered as 'not in labour force'. After deciding the broad current weekly activity status of a person on the basis of 'priority' criterion, the detailed current weekly status is decided on the basis of 'major time' criterion if that person performed *multiple* economic activities.

Current Daily Activity Status: The current daily status (CDS) of a person is determined on the basis of activity status of a person on each day of the reference week using the priority- cum-major time criterion (i.e. day to day labour time disposition). Each day of the reference week is looked upon as comprising two 'half days'. For assigning the activity status, a person is considered 'working' (employed) for the full day if he/she had worked for 4 hours or more during the day. If a person had worked for 1 hour or more but less than 4 hours, the person is considered 'working' (employed) for half day. Likewise, a person is considered 'seeking or available for work (i.e. unemployed)'or 'neither working nor available for work' (i.e. not in labour force) depending on whether the person was seeking/available for work or not during each half day for all 7 days of the week. Thus, labour force measured in terms of current daily activity status gives the average picture of number-days (not persons) in the labour force. The number of person-days in the labour force on a day during the reference week is obtained by dividing the person-days in the labour force in a week by 7.

The above classificatory description must have made you aware of the complexity of the task involved in capturing the employment-unemployment dimensions of a large number of persons residing in rural areas, engaged in agricultural activities and pursuing work on an hourly basis much of the time. It must also be clear to you that the

unemployment estimates obtained by any of the three approaches of NSSO gives only an estimate of 'chronic unemployment' only; it does not directly give you an estimate of full-employment or under-employment which is even more difficult to estimate. It should be of interest for you to know now, how the unemployment rate is calculated which, with the results of a labour force survey, is in fact, easy to *estimate*. This is briefly outlined below.

Unemployment: Unemployment is defined as the proportion of 'number of unemployed' to 'total persons in the labour force'. Thus, if a labour force survey of a town of 10,000 total population brings out the number of total persons employed as 4000, those seeking and available for work i.e. the number of unemployed persons as 500, then the unemployment rate for the town is: [500/(4000+500)]*100 or 11.11%. Note also that the ratio of [4500/10,000]*100 = 45% i.e. 'labour force divided by total population multiplied by 100' is what is called as '*labour force participation rate*'. It should be of interest for you to know the magnitude and growth of labour force and unemployment in India as it has grown in the past two decades. This is presented in the sub-section below.

Labour Force and Employment: Size Structure and Growth

The labour force in India has increased from 378 million in 1999-2000 to 428 million in 2004-05 (Table 25.1). The increase in labour force is thus by 50 million during the five year period. Employment, on the other hand, has increased by a little less than 48 million during the corresponding period. The average growth per annum in labour force has thus been higher (2.54%) than the average growth in employment (2.48%) resulting in an increase in the unemployment rate from 2.8% in 1999-2000 to 3.1% in 2004-05. The unemployment rate is based on data from the usual status approach for the principal activity status of the persons. The estimates of unemployment by the CWS method would be higher than the usual principal status approach and the estimates by the CDS method would be higher than the CWS approach (Table 25.2).

Table 25.1: Growth in Labour Force and Employment (by Usual Principal Status)

	(figures in millions)				Average Annual Growth Rate (%)		
	1983	**1993-94**	**1999-00**	**2004-05**	**1983 to 1993-94**	**1993-94 to 1999-00**	**1999-00 to 2004-05**
Employed	269.4	334.5	367.4	415.3	2.1	1.57	2.48
Unemployed	8.0	9.0	10.5	13.1			
Labour Force	277.4	343.5	377.9	428.4	2.1	1.6	2.54
Unemployment Rate (%)	2.88	2.62	2.78	3.06			

Source: *Economic Survey 2006-07*

Table 25.2 Unemployment Rate (%) over 1993-94 & 1999-2000

Period	Approach	Rural		Urban	
		Male	Female	Male	Female
1993-94	Usual Status	2.0	1.4	5.4	8.3
	CWS	3.0	3.0	5.2	8.4
	CDS	5.6	5.6	6.7	10.5
1999-2000	Usual Status	2.1	1.5	4.5	5.7
	CWS	3.9	3.7	5.6	7.3
	CDS	7.2	7.0	7.3	9.4

Source: *Manpower Profile, India Yearbook 2005, p-258.*

This is because the activity statuses of the persons measured respectively by the US, CWS and the CDS approaches, and used subsequently to estimate the unemployment rates, captures the chronic unemployment experienced by the persons in a progressively more rigorous order with the shrinkage of the reference period considered in each of the three methods. You can study the magnitudinal difference in the rates of unemployment by the three approaches, between the rural and the urban areas and for the gender linked differentials in the country, in the estimates presented in Table 25.2.

Check Your Progress 1

1. Why is the measurement of employment a complex task in developing economies?

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2. How is a 'worker' defined in the recent decadal censuses? What are its two dichotomised classification in the recent censuses?

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3. How is the definition of a 'worker' defined by NSSO conceptually comparable with that of decadal census?

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4. How does the growth in 'labour force' and 'employment' compare for the time period of 2000-05?

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25.3 DOMINANCE OF INFORMAL SECTOR

Employment is dichotomised into two distinct segments viz. the formal sector and the informal sector. The distinction is drawn, as said above, based on whether the workers are protected for their wages and other service conditions (like paid leave, medical benefits, etc.) including social security (like pension) for the old age. Since the protection of wages and other social security benefits are accorded under the provisions of a law or an Act (e.g. Minimum Wages Act, Employees Provident Fund and Family Pensions Act, etc.), the term formal sector is referred to connote all those organisations and their employees which are covered by at least one legislation or the other. In developing economies, the share of informal sector employment in the total employment is very high; it ranges from 35 to 85 percent in Asia, 40 to 97 percent in Africa, and 30 to 75 percent in Latin America. The corresponding figure for India, in 2000, was 90 percent including agriculture and 78 percent in the non-agricultural sectors combined. The significance of the informal sector in India can thus be gauged both by its employment share as also its contribution to GDP which is estimated to be 48 percent* in 2002.

The concept of informal sector was first used in the year 1972 by the International Labour Organisation (ILO) in its Kenya Mission Report. The sector was identified to be characterised by: (a) ease of entry and exit, (b) reliance on indigenous resources in production, (c) family ownership, (d) small scale operation, (e) labour intensive techniques of production, (f) skills acquired informally i.e. without attending any school or college, and (g) unregulated competitive markets. This understanding was replaced in 1990s with a trichotomised employer-worker relationship identified to comprise of:

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* The share of unorganised sector (of which the informal sector is a major constituent, although the two i.e. the informal and the unorganised sectors are treated synonymously in India) in the NDP of the country in 2001-02 is placed at 58.5 percent.

a) own-account workers i.e. those who own and operate their own business, working alone or with the help of unpaid family members;

b) owner-employers of micro enterprises employing a few paid workers, usually less than 10 in number, and

c) dependent workers, paid or unpaid, including family workers, apprentices, contract labour, etc.

In India, the informal sector is commonly referred to as the 'unorganised sector' and the workers working in them referred to as 'unorganised workers'. The term 'informal economy' is used conjointly to represent the informal/unorganised sector and informal/unorganised workers. Informal sector workers are characterised by low educational level, poor financial capacity, possessing at best low-end skills, strenuous/arduous working conditions, and low bargaining capacity due to lack of the organisational skills. Workers in the informal sector get low wages and if they are self- employed, their income is usually meagre. In rural areas, the bulk of the informal sector workers comprise of landless agricultural labourers, small and marginal farmers, sharecroppers, persons engaged in animal husbandry and fishing, forest workers, toddy tappers, workers in agro-processing and food processing units, artisans such as weavers, blacksmiths, carpenters and goldsmiths, etc. On the other hand, the urban informal sector workers comprise of manual labourers in construction, carpentry, trade and transport, small and tiny manufacturing enterprises and persons who work as street vendors and hawkers, head load workers, rag pickers, etc. In order to improve the condition of their lot, the government of India constituted a National Commission in 2004 called *National Commission for Enterprises in the Unorganised Sector (NCEUS)* under the chairmanship of Professor Arjun Sengupta. The Commission defined the informal sector/workers as:

All unincorporated private enterprises owned by individuals or households, engaged in the production and sale of goods and services, operated on a proprietary or partnership basis and employing less than ten workers.

The Commission has since prepared two draft bills: (1) Unorganised Sector Workers Social Security Bill, 2005 and (2) Unorganised Sector Workers (conditions of work and livelihood promotion) Bill, 2005. An Unorganised Sector Workers' Social Security Bill, 2007 was introduced in the Rajya Sabha on September 10, 2007. These are thus some recent measures in the direction of improving the lot of informal sector workers in India.

25.4 LABOUR POLICY AND REGULATIONS

India's labour policy draws from the various labour laws in the country. The labour laws, particularly in the post-independent era, have derived their origin, inspiration and strengths from different sources. These include the views expressed by our nationalist leaders and freedom

fighters, the debates of the Constituent Assembly, and the International Conventions & Recommendations. The labour laws have also been significantly influenced by important human rights, conventions and standards emerging from the United Nations, recommendations of various National Committees and Commissions, and deliberations of various sessions of the Indian and International Labour Conferences. The Fundamental Rights and Directive Principles of State Policy enshrines the protection and safeguards of the interests of labour in the Constitution of India. Broadly, the labour laws confer upon every citizen: (i) right to work of one's choice and protection against discrimination, (ii) right to social security, protection of wages, redressal of grievances, just and humane conditions of work, and (iii) right to organise and formation of trade unions, collective bargaining and participation in management. Prohibition of child labour is another important legislation to protect the interests of children from being employed and exploited in the world of work.

Under the Constitution of India, labour is placed as a subject in the concurrent list. Thus, in case of labour, both the Central Government and the State Government are competent for enacting various legislations. These could be categorised into four distinct groups viz.

a) Labour Laws enacted by the Central Government, where the Central Government has the sole responsibility for enforcement;

b) Labour Laws enacted by the Central Government, and enforced both by the Central Government and the State Governments;

c) Labour Laws enacted by the Central Government, and enforced by the State Governments; and

d) Labour Laws enacted and enforced by the various State Governments applicable to the respective State.

Keeping in mind the emerging needs of the economy such as attaining higher levels of productivity and competitiveness, the labour laws needs to be reviewed and updated periodically. An underlying thrust in these laws is that 'the labour laws should protect workers, not jobs'. This has given rise to a situation in which, by international comparison, India emerges as having the most rigid labour laws. There is a complexity of laws, inconsistent and overlapping, posing difficulty in resolving disputes. The rules and regulations are spread over so many central and state Acts, that it becomes difficult for the enterprise and the workers to be aware of their rights and obligations.

The Ministry of Labour & Employment is entrusted with the task of protecting and safeguarding the interests of the working class in general and those of vulnerable sections of the society in particular. The Ministry has been performing the tasks through various legislations with the help and cooperation of the State Governments.

The Second National Commission on Labour

The First National Commission on Labour was constituted on 24.12.1966, which submitted its report in August, 1969. It had examined in detail all aspects of labour problems, pertaining to both the organised and the unorganised sectors. In the wake of the economic reforms initiated in early 1990s, a need for setting up the Second National Commission on Labour was felt strongly. The recommendations of the Commission, submitted in June, 2002 includes : (i) introduction of umbrella legislation for workers in the unorganised sector and agricultural labour; (ii) emphasis on up-gradation and development of skills by training/retraining of workers; (iii) encouragement of small scale industries, agri-business and rural sector for higher employment generation; (iv) bringing an attitudinal change, with change in the mindset and work culture, where the employer and the workers work as partners i.e. participative management; (v) consolidation of social security legislations and establishment of social security system; (vi) abolition of child labour, etc.

25.5 WAGES: TRENDS AND STRUCTURE

Wages refer to all remuneration payable in terms of salary and allowances. The term 'salary and allowances', which includes many other benefits, applies to only *organised sector employment*. The proportion of organised sector workers is less than 10 percent of total employment in India. For a fair proportion of unorganised sector workers, their service conditions are not spelt out in writing. Their wages are paid as per the verbally agreed rates either at the end of the day's work or periodically (e.g. week, month).

As per the 'Committee on Fair wages', there are three distinct levels of wages:

a) *living wage* representing a standard of living which provides not only for a bare level of physical subsistence, but also for the maintenance of health and decency, a measure of frugal comfort including education for children, protection against ill-health, requirements of essential social needs and some insurance against the more important misfortunes;

b) *minimum wage* ensuring not only the bare sustenance of life, but also the preservation of the efficiency of the worker by providing for some measure of medical requirements; and

c) *fair wage* which is the wage above the minimum wage but below the living wage.

The Minimum Wages Act, 1948

The provision for statutory fixation of minimum wage commonly prevails

in the developed countries. It is however necessary even in the developing countries as the bargaining power of large poor unskilled workers is very low. In India, the Minimum Wages Act was passed in 1948 with the main object of fixing minimum rates of wages in certain employments. It extends to the whole of India and applies to scheduled employments in respect of which minimum rates of wages are fixed by the appropriate government. The minimum rates of wages so fixed is reviewed at intervals not exceeding five years. The Act also provides for regulation of working hours, overtime, weekly holidays and overtime wages. Period of payment of wages, and deductions from the wages are also regulated by the Act.

Although the Minimum Wages Act, 1948 recognises the argument for providing minimum protections to the workers, it does not itself set a minimum wage for all works/occupations, leaving it to the states for fixing occupation-specific wages. This has led to anomalies which is evident by the sharp variation in wages among the different states and between the two genders in the country. For instance, as per the Indian Labour Year Book (2004), the average wages per man day worked in 2000-01 varied from Rs. 75 in Orissa to Rs. 94 in Andhra Pradesh, Rs. 122 in U.P., Rs. 142 in Haryana, Rs. 176 in Maharashtra, and Rs. 182 in Chandigarh. Likewise, the per day *all Industry average* in the urban areas (for both the agricultural and non-agricultural industries combined) in 1999-2000 for casual labourers were Rs. 62 for males and Rs. 38 for females respectively. The corresponding average for rural India was Rs. 45 for males and Rs. 29 for females. Thus, in spite of another enactment, called The Equal Remuneration Act (1923), gender based differentials in wages have continued to prevail even in the year 1999-2000. This is not the case only for casual wage jobs usually availed by the unskilled. The average wages for the regular wage/salaried employees (many of whom are educated although it includes illiterates too) in rural areas was Rs. 127 for males and Rs. 114 for females in 1999-2000. The corresponding figures in urban areas was Rs. 166 for males and 141 for females. The figures are indicative of lower gender based wage differentials for the *regular* wage employees. In other words, scope for reducing the anomaly in wage differentials for the unskilled exists needing to be rectified by appropriate institutional intervention. The data is presented for 1999-2000, as the figures for the later years are presently unavailable in published form.

Check Your Progress 2

1. What were the characteristics of 'informal sector' as it was identified initially in 1972?

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2. What was the trichotomised relationship of informal sector employment as it came to be accepted in the 1990s?

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3. How was the informal sector and its workers defined by the NCEUS in the early part of the millennium decade of 2000s?

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4. What were the major recommendations of the Second National Commission on Labour (2002)?

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5. What are the limitations of the Minimum Wage Act 1948?

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25.6 CHILD/BONDED LABOUR

Child labour is a universal phenomenon associated with the socio-economic plight of the masses. It is a situation in which to supplement family income, children are engaged to assist their poor parents in household enterprises, fields, in domestic and non-domestic work. They are also employed in workshops, factories, commercial establishments like restaurants/hotels, etc. Most often, owing to high incidence of illiteracy and ignorance of the parents, the children are deprived of the opportunity for building up their career, and at the time of family need, they tend to join the labour market.

Conventionally, a child labour is defined as a child in the range of 5 to 14 years, who is doing labour, either paid or unpaid. The term 'child labour' is generally used to refer to any work by children that interferes

with their full physical development curtailing the opportunities for education and the needed recreation. Despite a number of efforts made for the eradication of child labour, the situation remains still grave. As per the census, in India, there were 11.3 million working children (5-14 years) in 1991 and 12.6 million in 2001. More than 90 per cent of them were engaged in rural areas in agriculture and allied activities like cultivation, agricultural labour, livestock rearing, forestry, fishery, etc.

The Child Labour (Prohibition and Regulation) Act, 1986

As per the Act, any person below fourteen years of age and engaged in any work, for wages whether in cash or kind, is a child labour. The Act bans the employment of children, below 14 years of age, in certain specified occupations considered unsafe. It regulates the conditions of work of children in other occupations where they are not prohibited from working. The Act also lays down penalties for employment of children in violation of the provisions of the Act, as also other Acts which forbid the employment of children.

The Act extends to the whole of India and applies to all establishments. An 'establishment' includes a shop, commercial establishment, workshop, farm, residential hotel, and restaurant, eating house, theatre or other place of public amusement or entertainment.

Though the Act has been in existence for more than 20 years, it has not been able to make sufficient impact on the eradication of child labour. The Act is limited in scope as it does not cover all occupations and processes restricting itself to only hazardous and dangerous occupations and processes. More importantly, it excludes children working in family based enterprises.

National Child Labour Policy

The National Child Labour Policy (1987) addresses the issue of child labour in a comprehensive, holistic and an integrated manner. The constitutional and legislative provisions, providing protection to children against employment, forms the integral components of the Policy. The action plan under this policy is multi-pronged and mainly consists of:

i) A legislative action plan;

ii) Focus on general development programmes for the benefit of the families of children; and

iii) Project-based action plan in areas of high concentration of child labour.

In pursuance of this policy, the Ministry of Labour has been implementing the National Child Labour Policy Scheme, which is a project-based action programme. Under the programme, projects with the objective of withdrawing and rehabilitating children working in identified hazardous

occupations and processes are initiated. During the Tenth Five Year Plan, the scheme was covering 250 districts in 20 states.

The issue of child labour can therefore be viewed from three angles: (i) an economic attraction by an increase in income blurring the advantage of sending the child to school, (ii) an economic compulsion which forces the family to engage the child in work and (iii) the social undesirability dimension. Global awareness has resulted, of late, in international condemnation by way of banning the products from countries practicing child labour. There have been reports of some countries suspending trade orders from India following reports of child labour employed in the exporting units of certain sectors in India. Consequent to these developments, the Ministries of Commerce, Labour and Women & Child Development in India have taken steps to get the exports from five child labour-sensitive sectors viz. apparel, handicraft, carpet, sports goods and gems & jewellery conduct annual external social audits on child labour as per the national labour laws and rules. The economic consequences of the issue of child labour is thus a recent manifestation in the direction of influencing affirmative action to eliminate child labour practices in India.

A multi-pronged strategy is needed to eradicate the child labour as it depends largely on improvements in socio-economic growth process, poverty eradication, adult wages, quality of schooling, etc. Eradication of child labour is a very ticklish issue, and has to be addressed by applying complementary strategy involving all sections of the society.

Bonded Labour

Bonded labour is the existing form of slavery. It has been in existence for centuries in most parts of the world. The uneven social structure characterised by the age-old feudal system, has led to the emergence of the bonded labour. It was an outcome of socio-economic problem of surplus labour, un/under-employment, low wages, etc. It is a system in which generations of workers work to repay a documented debt of a parent or grand parent or even a great grand parent. Most of the bonded labourers are found in the agricultural and allied sectors.

Though the system of 'bonded labour' is in existence for centuries, it was only in the year 1975, with its inclusion in the 20-point programme, it came to the forefront as a national issue. The programme stated that 'bonded labour, however it exists, will be treated illegal'.

Bonded labour was abolished in India in 1975 by an Ordinance. Subsequently, Bonded Labour System (Abolition) Act was passed in 1976. Salient features of the Act are:

- The bonded labour system shall stand abolished and every bonded labourer shall stand freed and discharged from any obligation to render bonded labour.

- Liability to repay bonded debt shall be deemed to have extinguished.
- Property of the bonded labourer to be freed from mortgage, etc.
- District Magistrates entrusted with the responsibility of implementing the provisions of the Act.
- Vigilance Committees mandated to be constituted at district and sub-divisional levels.

A Centrally Sponsored Plan Scheme for Rehabilitation of Bonded Labour was launched in 1978 for the rehabilitation of bonded labourers. The Scheme has provisions for conducting surveys for identification of bonded labour, providing financial assistance to freed bonded labour, undertaking awareness generation activities, integrating the scheme with other ongoing poverty alleviation programmes, etc.

25.7 EMPLOYMENT GUARANTEE SCHEMES

Tackling the twin issues of poverty and unemployment is the biggest challenge in developing countries like India. In view of the large number of unskilled workers, direct intervention by programmes such as: infrastructure development programmes, food for work programme, etc. is the policy pursued in this regard. These programmes aim at ensuring optimum utilisation of scarce resources and providing employment opportunities for the poorest segments of the society. They strive to strike a balance between the allocation of resources and employment creation through the adoption of labour intensive practices in programmes like building of rural roads, irrigation canals, water conservation schemes, etc.

The Indian planners in the early 1950s had visualised that the fruits of general economic growth may not percolate to the masses and the problem of rural poverty and unemployment may continue for many decades to come. There was a realisation that the attack on rural poverty has to be made by endowing the rural poor with either productive assets or skills (or both) so that their capacity could be both developed and sustained. A number of employment generation and poverty alleviation programmes initiated during the early Plan period included Small Farmers' Development Programme (SFDA), Marginal Farmers and Agricultural Labourers Programme (MFALP), Drought Prone Area Programme (DPAP), Rural Artisans Programme, Tribal Development Agency, Hill Area Development Programme, Comprehensive Area Development Programme, Minimum Needs Programme, etc. There was, however, a great degree of overlapping in these programmes as a number of districts had more than one programme for the same target group with similar objectives but funded from different sponsors.

The above lacunae was sought to be minimised with the initiation of Integrated Rural Development Programme (IRDP) in 1976-77. The basic objective of the programme was to assist the selected rural families of the target group cross the poverty line by taking up self-employment ventures. Different programmes launched under the IRDP initiative include Jawahar Rozgar Yojana, Employment Assurance Scheme, Swarnjayanti Gram Swarozgar Yojana (SGSY), Sampoorna Grameen Rozgar Yojana (SGRY), National Food for Work Programme (NFFWP), Prime Minister Rozgar Yojana (PMRY), etc. With the introduction of the Swarna Jayanti Shahari Rozgar Yojana (SJSRY) in 1990s, the programme was extended to include the poor in urban areas also. Thus, the programme covered the entire country in a comprehensive manner as capacity building by way of skill development and creation of productive assets was brought under its thrust. Thus, in spite of the significant efforts made in this direction, although the proportion of people below the poverty line declined significantly, the compelling need to generate employment programmes for the poor and unskilled continued to demand the attention of the planners even by the year 2005. In response to this situation, the country launched a new initiative by way of the National Rural Employment Guarantee Scheme.

National Rural Employment Guarantee Scheme (NREGS)

Enacted by the parliament, as the National Rural Employment Guarantee Act (NREGA), 2005, the Act guarantees 100 days of employment in a financial year to any rural household whose adult members are willing to take up unskilled manual work. The basic objective of the Act, among others, is to enhance livelihood security in rural areas, generate productive assets, protect the environment, empower rural women, reduce rural-urban migration and foster social equity. The Act came into force initially in 200 districts. Later, it was extended to another 130 districts. With effect from April 2008, the Act has been extended to all the 604 districts in the country.

The NREGA is a ‘People’s Act’ in several ways. Firstly, the Act was prepared through a wide range of consultations with people’s organisations. Second, the Act addresses itself to the fundamental right to work by providing the option to seek work on demand. Third, the Act empowers ordinary people to play an active role in the implementation of employment guarantee schemes through Gram Sabhas, social audits, participatory planning and other means. The Act also aims at enhancing the livelihood of people on a sustained basis by developing the economic and social infrastructure in rural areas. In spite of all these laudable goals, the Act nonetheless seeks to address the situation of chronic unemployment resulting from drought, deforestation and soil erosion. Effectively implemented, the employment generated under the Act has the potential of dealing with the vast numbers of unskilled job seekers in the rural areas of the country.

25.8 SOCIAL SECURITY FOR UNORGANISED SECTOR WORKERS

Social security is the protection against various contingencies like loss of employment, old age, etc. or deprivation of livelihood resulting in loss of income, to the workers and their family members. The International Labour Organisation's Convention No. 102, indicates nine core contingencies that lead to stoppage or substantial reduction in earnings. These are: unemployment, invalidity, sickness, employment injury, maternity, old age, death, need for long term medical care, and supporting family and children.

In India, the social security provisions covering the entire range of contingencies spelt out above are available only to the organised sector workers. But the bulk of the workforce, as we know, is in the unorganised sector. The social security problems of the workers in the unorganised sector could be divided into two distinct categories. The *first* evolve out of deficiency on account of inadequate employment, low earnings, poor health, low levels of education, etc. (called *conditions of deprivation*). Measures to overcome such deprivations needs to be tackled, in the long term, by promotion of education and public health provisions. In the short term, however, the social security needs of many workers in the unorganised sector needs to be met by a different set of measures. The *second* set of problems needing to be addressed, arise out of *adversity conditions* related to the absence of adequate safety nets. Noted economist Professor Amartrya Sen distinguishes between two different types of social security viz. protection and promotion. The protective type measures relate to old-age pensions, widow pensions, survivor benefits, etc. The promotional type of measures include employment (both wage and self) generation programmes covering health care and education.

The provision of social security is the responsibility of both the central and the state governments. The workers of the unorganised sector, who are the unprotected majority, do not have health security, accident insurance, maternity benefits, old-age income security, etc. There is a fear that in the aftermath of post-liberalisation growth scenario, the unorganised sector workers are getting even more marginalised. In view of this, with the objective of suggesting a modality for designing a measure of social security to the unorganised sector workers, a National Commission for Enterprises in the Unorganised Sector (NCEUS) was constituted in the year 2004.

Set up in September, 2004 under the chairmanship of Professor Arjun Sengupta, the NCEUS prepared two draft bills: (1) Unorganised Sector Workers Social Security Bill, 2005 and (2) Unorganised Sector Workers (Conditions of Work and Livelihood Promotion) Bill, 2005. *The Unorganised Sector Workers' Social Security Bill, 2007*, inter alia, provides for: (i) the constitution of a National Social Security Advisory

Board (by the central government) to recommend suitable welfare schemes for different sections of the unorganised sector workers, on the basis of which, the Central Government can notify suitable welfare schemes for the unorganised sector workers, and (ii) constitution of similar State Social Security Advisory Boards by the state governments to recommend suitable welfare schemes for different sections of the unorganised sector workers in the states, on the basis of which, the State Governments can notify suitable welfare schemes for the unorganised sector workers in the states. The Bill provides legislative backing to 11 social sector schemes mentioned in the 'Schedule' to the proposed legislation. These include Aam Admi Bima Yojana, National Old Age Pension Scheme and the Swasthya Bima Yojana. After the enactment by the Parliament, the Bill would be called the Unorganised Sector Workers' Social Security Act, 2007.

The Unorganised Sector Workers (Conditions of Work and Livelihood Promotion) Bill, 2005, proposes the conditions of work for the agricultural and the non-agricultural sector workers separately. Placing the responsibility of ensuring the conditions of work on the State government, the bill prohibits employing of workers by any employer in contravention of other Acts like: Bonded Labour System Act, 1976, Child Labour (Prohibition and Regulation) Act, 1986, Minimum Wages Act, 1948, etc. The bill stipulates the cieling on the number of hours of work as eight hours beyond which a worker would have to be additionally compensated. Some of the other important provisions made in the bill favouring the conditions of workers in the unorganised sector are:

- Right to organise for collective bargaining;
- Prohibition of discrimination on the grounds of sex, caste, religion, etc.;
- Providing every unorganised sector worker with safety equipments while handling hazardous substances and equipments;
- Ensuring that there is no sexual harassment in the work place;
- For self-employed persons ensuring availability of credit, raw material supply and marketing facilities for goods and service produced; etc.

25.9 LABOUR MARKET FLEXIBILITY

The concept of labour market flexibility has assumed great importance in the context of new and emerging technologies, and the challenges of highly competitive market structure resulting from economic liberalisation and globalisation. Within the economy, both in the manufacturing sector and the services sector, technological changes are taking place at a fast pace. As a result, occupations with manual content are waning, old occupations are giving place to the emerging new

occupations, etc. The result is a rapidly changing job profile of several jobs. In this changing scenario, the ability to adapt to new occupational patterns has become a key factor. With a shift in the emphasis from job security, labour markets are demanding to be made more flexible, meaning that the employers be given a free hand to lay off workers becoming redundant. This demand is to make the conditions in the Indian labour markets in tune with that of the global labour market trends. The concept of labour market flexibility, in a nut shell, is thus aimed at enhancing the adaptability of employing organisations by deregulating labour market and removing protective regulations. In other words, it seeks to make the labour markets attain its own equilibrium in continuity, the equilibrium being determined by the free inter play of demand and supply forces. It is argued that such a free inter play leads to an efficient and optimum utilisation of resources on the one hand and help achieve equitable distribution of rewards among all the resources, on the other.

Technically, labour flexibility can be distinguished to be of four types:

1. *External numerical flexibility:* It refers to the adjustment of labour intake or the number of workers engaged from the external market. It can be achieved by employing workers on temporary work or fixed – term contracts or through relaxed hiring and firing regulations. It is the outcome of relaxation of employment protection legislations providing the employer with a free hand to hire and fire employees as per the needs of the enterprise.

2. *Internal numerical flexibility:* This is also known as working time or temporal flexibility. It is the flexibility in which number of employees remain constant but the number of hours spent by them are adjusted as per the requirements of the enterprise. This is achieved by adjusting the working hours or schedule of workers employed in the enterprise. It includes methods like part-time, flexi-time or flexible working hours/ shifts, working time adjustments, leave, overtime, etc.

3. *Functional flexibility.* Also known as organisational flexibility, it refers to an arrangement in which, depending upon the requirements of the enterprise, workers can be shifted to different activities and tasks within the enterprise.

4. *Financial flexibility.* It is also known as wage flexibility under which there are more differences among the wages of workers. Here wages are based on the notion that pay and other employment costs reflect the supply and demand of labour. It can be achieved by rate-for-the-job systems or assessment based pay systems, or individual performance wages.

Besides these four types of flexibility, there are other types of flexibility. For instance, locational flexibility or flexibility of place which permits

employees working outside the normal work place, such as, home based work, outworkers or tele-workers, etc.

Check Your Progress 3

1. How is a child labour conventionally defined ?

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2. What are the limitations of the Child Labour (Prohibition and Regulation) Act, 1986?

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3. What are the three distinct angles from which the issue of child labour can be looked at comprehensively?

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4. What does the NREGA, 2005 guarantee?

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5. What is labour flexibility ? What are its avowed advantages ?

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25.10 LET US SUM UP

Labour force or economically active population, refers to the population

which supplies or seeks to supply labour for production. It includes both the 'employed' and the 'unemployed' persons with the condition that the latter are seeking and available for work. Persons who are neither 'working' nor 'seeking or available for work' are considered 'out of labour force'. These include students, those engaged in domestic duties, rentiers, pensioners, recipients of remittances, infirm or disabled persons, too young persons, and casual labourers not working due to sickness, etc. In India, there is a dominance of informal sector workers, generally called as and equated with `unorganised sector workers`. Such workers are characterised by low level of education, poor financial capacity, possessing low-end skills, working in strenuous/arduous conditions, having low bargaining capacity due to lack of organisation, etc. In view of the fact that a large number of them are unskilled, direct intervention in creating job opportunities in labour intensive projects by way of infrastructure development works, food for work programme, etc. becomes essential to implement. Such workers are not covered by any social security scheme. Such a situation obtaining in India, necessitated the enactment of a National Rural Employment Guarantee Act as late as in 2005 and the introduction of an Unorganised Sector Workers' Social Security Bill in 2007. Amidst these issues of concern, the labour market in India, is beset with the issues of child and bonded labour. There is a widely made out case for introducing labour reforms, which in many respects is similar to introducing labour market flexibility features. This seeks to deregulate the labour market by removing or minimising the protective regulations. The unit deals with these issues so as to provide an account of the labour and employment situation in India.

25.11 KEY WORDS

Labour Force : Refers to economically active population, comprising of both 'employed' and 'unemployed' persons. The latter is the unused potential who are ready to offer their services if employment is made available to them.

Unemployment : The unemployed comprise of all persons within a certain age group who during the reference period were either without work or seeking/available for work.

Underemployment : Underemployment refers to an inadequate utilisation of available human resources and capacities.

Informal Sector : All unincorporated private enterprises owned by individuals or households engaged in the production and sale of goods and services,

		operating on a proprietary or partnership basis and employing less than ten workers.
Labour Market Flexibility	:	Refers to 'labour reforms' achieved by a deregulation of labour market consequent to removal of employment protecting regulations.
Wages	:	Refers to all remuneration in terms of salary, allowances, or otherwise, which would be payable to a person in return for his/her work rendered.
Child Labour	:	Refers to any work performed by children that interferes with their physical and mental development.
Bonded Labour	:	Refers to a system where a person is bonded to another person for providing labour services to repay an alleged debt taken by either oneself or any of his ancestors.
Social Security	:	Refers to the protection against various contingencies resulting in loss of employment or livelihood.

25.12 SOME USEFUL BOOKS/REFERENCES

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25.13 ANSWERS/HINTS TO CYP EXERICES

Check Your Progress 1

1. See Section 25.2 and answer.

2. See Section 25.2 and answer.

3. Main worker defined in census is comparable to the 'usual principal status worker' defined in the NSSO LF surveys. Likewise, marginal worker is comparable to the 'usual subsidiary status worker'.

4. See Table 25.1 and answer.

Check Your Progress 2

1. See Section 25.3 and answer.

2. See Section 25.3 and answer.

3. See Section 25.3 and answer.

4. See Section 25.4 and answer.

5. See Section 25.5 and answer.

Check Your Progress 3

1. See Section 25.6 and answer.

2. See Section 25.6 and answer.

3. See Section 25.6 and answer.

4. See Section 25.7 and answer.

5. See Section 25.9 and answer.

UNIT 26 GENDER ISSUES OF DEVELOPMENT

Structure

26.0 Objectives
26.1 Introduction
26.2 Female Literacy
26.3 Sex Ratio
26.4 Gender Issues in Labour Market
26.5 Maternal Health
26.6 Women Empowerment
26.7 Panchyati Raj Institutions, 73rd and 74th Constitution Amendments
26.8 Self Help Groups and Micro Finance
26.9 Let us Sum up
26.10 Key Words
26.11 Suggested Books for Reading
26.12 Answers/Hints to CYP Exercises

26.0 OBJECTIVES

After reading this unit, you will be able to:

- explain the position of women in India in terms of their sex ratio and literacy levels;
- discuss the gender issues in labour market vis-à-vis labour force participation rates and wage differentials;
- discuss issues like female foeticide/infanticide and the importance of women empowerment measures to combat such social evils;
- bring out the measures taken in uplifting the level of women in society in terms of institutional measures like formation of Self Help Groups and Micro Finance; and
- explain the governmental initiatives by way of enactment of constitutional amendments to improve the position of women in the Indian society.

26.1 INTRODUCTION

Equality between men and women is recognised by all members of United Nations Organisation (UNO) as a fundamental right and citizenship.

Equality between sexes is explicitly extended by the constitutional guarantees of many countries. Yet, despite such formal commitments, and demonstrated benefits of gender equality to societies and economies, gender inequalities remain pervasive in many countries. Gender equality and the empowerment of women to fully participate in social, economic and political life is recognised as an important developmental need. This is reflected in the national development plans of many countries including India. In line with these legislative and constitutional provisions, specific policies and action plans for reducing the gender gaps have been initiated. In spite of these measures, discrimination against females have continued in one form or another. Common gender concerns relate to discrimination against female in respect of hunger, malnutrition, healthcare needs, opportunities for education and income earning avenues, etc. Gender linked discrimination against females, thus, pervade both the social and economic spheres of societal attitude and behaviour. In this context, the present unit deals with the various gender dimensions of Indian economy. Specifically, it deals with the issues of female literacy, sex ratio, labour market features, maternal health, and women empowerment.

26.2 FEMALE LITERACY

Literacy as a prerequisite to higher education and better employment is an instrument of empowerment. The more literate the population is, the greater consciousness of career options, as well as participation in the knowledge economy. Further, literacy can lead to health awareness and fuller participation in the cultural and economic activities of the community. Literacy varies considerably across gender, regions and social groups. When literacy begins to impinge upon one’s basic freedom and consequently livelihood issues, it assumes a severe limiting character to the process of economic development itself.

The link between gender equality and economic development is clear in areas like education and health. Research studies of World Bank and many other social scientists have revealed that more equitable access to education by women and girls yield positive returns in improving family health and greater productivity in work besides according the benefits of reduced family size. These studies have particularly estimated that countries in which there is more gender disparity in male to female enrolment ratio in schools, suffered 25 per cent low GDP than that of countries where there is less gender disparity in education. The findings of these studies have thus established that there is a strong correlation between female literacy and a development index like GDP of the country.

The mean year of schooling provides a summary statistic of the average level of education of the population. As per National Family Health Survey (1998-99), the mean years of schooling for males and females in India (at all India level) is 5.33 and 3.39 respectively. Several strategies have been adopted to promote female literacy in Independent

India. In particular, all formal and informal education and training programmes have been opened to both women and men. Separate provisions exclusively for women/girls have also been made by opening separate institutions for them. Education is free for girls up to the higher secondary stage. Several states have made education free for girls up to university level. There are other incentives like free midday meals, free books, free uniforms, scholar-ships for good attendance, bicycles, etc. Legislation for reservation of seats in institutions of higher learning are also made. Even with all these initiatives taken, India still has a long way to go in bridging the gap between the male and female literacy levels even after more than 5 decades of its independence. Table 26.1 shows the progress made and the disparity that still exists in respect of female literacy in India during the period 1951-01. Though there still exists disparity in male female literacy rates, post-1981, the gender gap is slowly reducing. Table 26.2 shows details of progress in female enrolment in primary, upper primary, secondary/high secondary and higher education stages. The trends show that the various measures initiated have contributed significantly to reduce the gender inequality in education although to reach the mid-mark of 50 percent level, there is still a long way to go.

Table 26.1: Literacy Levels (%) by Gender in India: 1951-2001

Year	Persons	Males	Females	Male-Female Gap
1951	18.3	27.2	8.9	18.3
1961	28.3	40.4	15.4	25.1
1971	34.5	46.0	22.0	24.0
1981	43.6	56.4	29.8	26.6
1991	52.2	64.1	39.3	24.8
2001	65.4	75.9	54.2	21.7

Source: *Census of India*

Table 26.2: Female Enrolment as a Percent of Total Enrolment in Different Stages of Education: 1951-2001

Year	Primary (I-V)	Upper Primary (VI- VII)	Secondary (VIII-X)/ Higher Secondary (10+2)	Higher Education (degree level)
1950-51	28.1	16.1	13.3	10.0
1960-61	32.6	23.9	20.5	16.0
1970-71	37.4	29.3	25.0	20.0
1980-81	38.6	32.9	29.6	26.7
1990-91	41.5	36.7	32.9	33.3
2000-01	43.7	40.9	38.6	36.9

Source: *Selected Education Statistics, Ministry of Education, GoI.*

26.3 SEX RATIO

Sex ratio is defined as the number of females per 1000 men. It is a useful indicator to understand women's health and position in a society. India, along with china and few other South Asian countries, has a deficit of females for a long period. Sex ratio in India has declined over the past century from 972 in 1901 to 927 in 1991. The sex ratio has since gone up to 933 in 2001.

26.3.1 Juvenile (0-6 age group) Sex Ratio

The sex ratio in the 0-6 age group in India shows a more disturbing situation. It has declined from 976 in 1961, to 962 in 1981 and to 927 in 2001. The decline is particularly steep in the post-1981 years. A number of reasons like poverty, illiteracy, culture and preference for male child are held accountable for the continuous decline in this ratio. In a country like India where most of the population is still steeped in feudal mindsets, the obsession for a son has led to an adverse sex ratio with the situation becoming particularly alarming in some states. A number research studies conducted in different parts of the country reveal that the main cause of adverse juvenile female sex ratio is the practice of female foeticide/infanticide.

26.3.2 Female Foeticide/Infanticide

Termination of foetus in the womb, after determining the sex of the unborn foetus, is termed female foeticide. This phenomenon is widely rampant in India. The prenatal techniques of sex determination called amniocentesis is medically useful for detecting genetic disorders or congenital malformations in pre-born foetuses. However, this technology is misused in large scale for sex determination of the foetus and to the practice of female foeticide in large parts of India.

In order to curb the social evil of female foeticide, Government of India has enacted the Pre Conception and Pre-Natal Diagnostic Act (PC&PNDT ACT) in 1994. Yet the incidence of female foeticide is unabated in several parts of India. States like Punjab, Haryana, Himachal Pradesh, Delhi and Gujarat and Union Territory of Chandigarh have witnessed large decline in sex ratio which has reached the alarmingly low level of 900 girls per 1000 boys in these states.

Female foeticide is thus the result of an unholy alliance between the traditional preference for sons and modern medical technology coupled with other factors like the increasing greed of doctors, the rising demand for dowry that makes daughters a financial burden, the ineffective implementation of the Pre-conception and Prenatal Diagnostic Act and the Medical Termination of Pregnancy (MTP) Act, and most important of all, the lack of serious involvement of civil society in fighting the menace.

Measures to control female foeticide

Government policies coupled with grass root efforts are required to

curb the social evil of female foeticide. To reinforce, the various measures required to fight this social evil are:

- more effective implementation of PC and PNDT Act;
- active monitoring of birth ratios;
- detailed medical audits of all ultra sound examination carried out by registered clinics including sale-purchase records of ultra sound machines and to make these record public;
- sustained social campaigns, financial incentives to parents giving birth to female child, free educational scholarships, reservation for females in educational institutions and jobs; and
- active involvement of community, NGOs and other voluntary organisations and SHGs with support from government are needed.

Infant and Child Mortality

Another critical gender dimension of economic development is the survival and health of female child. On the basis of biological factors, the survival ratio of female to male child would ordinarily be less than one. Many developing countries in East Asia and South Asia have female infant mortality ratio, compared to that of male infants, more than one. In India also female infant mortality rate is more than that for male as seen from Table 26.3**.** The ratio of male-female mortality ratio has increased from 1:1.02 to 1:1.09 over the years. The present trend of female foeticide along with relatively high female infant mortality is contributing to this adverse ratio. The trend needs to be arrested and reversed if the consequences of adverse ratio is to be checked. State Governments are taking number of measures like providing financial incentives to parents of female child. These include: payments for each female child in instalments until the girl reaches schooling age, a lump sum amount deposited in the name of child to meet the cost of higher education or marriage expenses, etc.

Table 26.3: Infant Mortality Rate in India by Sex: 1980-2005

Year	Male	Female	Ratio (male:female)	Male + Female
1980	113	115	1:1.02	114
1985	96	98	1:1.02	97
1990	78	81	1:1.04	80
1995	73	76	1:1.04	74
2000	67	69	1:1.03	68
2005	56	61	1:1.09	58

Source: *Sample Registration System, Registrar General, India.*

26.4 GENDER ISSUES IN LABOUR MARKET

Gender issues in labour market can be discussed in terms of two main factors viz. (i) work force participation rates and (ii) wage discrimination.

26.4.1 Work Force Participation Rate

Work force generally consists of persons in the age group of 15 to 59 years. They refer to economically active population who are physically and mentally able and willing to work. The work force participation rate (WFPR) for females in India is very low as compared to males. For instance, in 2003, as per the usual status of individuals, for rural areas, the WFPR for females was 31.1 percent as against 54.7 percent for males. The corresponding estimates for urban areas was 54.1 percent for males and 14.6 percent for females. Several constrains restrict the women to participate in labour market. These constraints are different for the urban educated and the rural poor. For the urban areas, the arguments made are on the following two grounds.

- One, the availability of well paying, secure jobs for educated women is low. Hence, educated women belonging to the high socio economic strata, prefer to opt out of the labour force.

- Two, cultural factors prevent many households from allowing women to go out and work.

In case of poor households, mainly in rural areas, their ability to participate in labour market is influenced by many factors like:

- Remoteness of work site from habitations requiring long travel. These will affect women's work participation, as they need to combine their outside work with household work chores like child care;

- Lack of education and skills marginalise poor women from opportunities outside their home compelling them to confine themselves to low wage work in agriculture and allied activities many times on their own farm which is often unpaid;

- Discrimination in labour markets affects women, not only due to wage differentials, but also due to social norms restricting women's participation in labour market. Quite often, certain types of work are labelled as inappropriate for women. Such typification makes it discriminatory in nature.

26.4.2 Wage Differentials

Gender based wage differences are not observed in organised sector, especially in government sector jobs, where wages differ only by skill

levels. Wage differential based on gender, however, exists in unorganised sector jobs, especially in manual works. Since most manual workers have minimum education, exploitation based on wage differentials becomes easier. Research has revealed that about 30 percent male-female wage differences are explained due to productivity differences and the residual, amounting to a majority of 70 percent, is based on discrimination due to gender.

26.5 MATERNAL HEALTH

Maternal health relates to healthcare of women during pregnancy, child birth and the postpartum period. Large number of women in India and other developing countries die due to pregnancy related factors every year. The major causes identified for high incidence of maternal mortality are: haemorrhage, toxaemia (hypertension during pregnancy), anaemia, obstructed labour, puerperal sepsis (i.e. infections after delivery or abortion), etc.

Promotion of health of mother and children has been one of the most important thrusts of the Family Welfare Programme in India. The primary objective of the programme is to provide public health services to pregnant women, locating expecting mothers and infants, strengthening child survival and safe motherhood by specifically targeted programmes, etc. The National Population Policy (2000) recommended a holistic strategy for bringing about inter-sectoral coordination at the grass roots level by involving NGOs, Civil Society, Panchyat Raj Institutions and Women Self Help Groups in reducing maternal mortality.

26.5.1 Maternal Health Care Measures

Maternal health care measures include: (i) policy directed to strengthen or create health infrastructure and (ii) targeting expectant mothers directly. The former includes: (i) establishment of Regional Institutes of Maternal and Child Health in states where infant and maternal mortality rates are high; (ii) provision of essential and emergency obstetric care in Public Health Centers (PHCs) and First Referral Units (FRUs); (iii) referral transport, safe delivery and abortion services; (iv) training of MBBS doctors in anaesthetic skills for emergency obstetric care at PHCs and FRUs; (v) setting up of blood storage centers at FRUs; etc. In order to improve maternal health at the community level, a cadre of community level skilled birth attendants is to be established. Further, a new scheme called ‘vandemataram’ to reduce maternal mortality rate (MMR) under Public Private Partnership (PPP) is taken up. This scheme envisages setting up of private clinics under PPP with the involvement of Federation of Obstetric and Gynaecological Society of India. The aim of the scheme is to involve and utilise the vast resources of specialists/trained workforce available in the private sector. The scheme intends to provide free antenatal and postnatal check, counselling on nutrition, spacing of births, breastfeeding practices, etc.

Targeting expectant mothers directly include arranging for: (a) antenatal care, (b) tetanus toxoid vaccination, (c) providing iron and folic acid tablets, and (d) encouraging institutional deliveries. Antenatal care refers to pregnancy related health care provided by a doctor or a health worker before the birth of the child in a hospital or at home. It includes advice on correct diet and the provision of iron and folic acid tablets to pregnant women. Antenatal care can contribute significantly to the reduction of maternal mortality. Further, improved nutritional status can help reduce the incidence of low birth weight babies and thus reduce prenatal, neonatal and infant mortality deaths. The tetanus toxoid immunisation programme for expectant mothers in India was initiated in 1975-76 and was integrated with the expanded programme of immunisation (EPI) in 1978. An important cause of death among neonates in India is neonatal tetanus which is caused by infection of the new born (usually at the umbilical stub) by tetanus organisms. Neonatal tetanus is most common when the delivery takes place in an unhygienic environment using unsterilised instruments. The tetanus toxoid immunisation programme was integrated with the Universal Immunisation Programme (UIP) in 1985-86. The UIP, the objective of which was to vaccinate all the pregnant women against tetanus by 1990, was recognised as a 'technology mission'.

Proper maternal nutrition is important for the healthy intrauterine growth of a baby and can affect the birth weight of the baby. In India, 33 per cent of babies are low birth weight, suggesting a nutritional deficiency among many expectant mothers. Improvement in mother's nutritional status, coupled with proper healthcare during pregnancy, can substantially increase birth weight of the children. Provision of iron and folic acid tablets to pregnant women to avoid nutritional anaemia is an integral part of mother and child health activities. It is recommended that a woman take 100 tablets of iron and folic acid during pregnancy. Encouraging institutional deliveries in which at least one trained worker is involved is another important measure planned under the programme of reaching out to the targeted expectant mothers directly.

Check your progress 1

1. Briefly state the progress made in female literacy in India.

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2. What are the causes for decline in juvenile sex ratio?

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3. In which sector and type of work wage discrimination is rampant and why ?

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4. Explain briefly the maternal healthcare measures instituted in India.

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26.6 WOMEN EMPOWERMENT

Empowerment means involvement in decision making and control over resources for being able to achieve higher quality of life, and also improving the capability for taking advantage of the opportunities for development, provided by the system. Women empowerment is a mission that aims at enabling women to gain control over the sources of power - economic, social and political - through awareness and capacity building leading to greater participation in decision making process, control and transformative action. What is important here is to identify the factors that result in poor women disempowerment, so that measures to alleviate these can be worked out.

Factors Behind Women Disempowerment

The factors behind women disempowerment can be classified under two heads viz. (i) general and (ii) women specific. The general causes include: (i) lack of possession of productive assets, (ii) inadequate access to institutional sources of credit due to absence of ability to provide collateral security, (iii) gender discrimination in general, and (iv) lack of skills. Causes specific to women can be identified as: (i) illiteracy, (ii) seclusion, (iii) lack of organisation, (iv) absence or limited control over family earnings, (v) exclusion in household decisions relating to size of the family, education and marriage of female children, purchase or sale of assets etc., and (vi) lack of awareness and information.

Various strategies aimed at empowering women have been tried out to address the causes of women disempowerment. It is particularly emphasised in all developmental plans to have greater focus on women

empowerment. A more vigorous thrust in this respect is particularly given since the 8th Five Year Plan in India. Since overall empowerment of women is crucially dependent on earnings of women, policy makers have time and again reinforced government intervention at different levels to ensure removal of discrimination as a step towards enhanced earnings for women. These include focused development projects that enhance income earning capacity of women through appropriate and specific skill formation, capacity building, and increased access to institutional credit. In this context, the efforts of many non-government organisations and social workers who have supplemented the government efforts in bringing women into the mainstream of economic development need to be appreciated. The 73rd and the 74th constitutional amendments effected in 1994 marks a significant step in the direction of providing legislative provision for women empowerment in India.

26.7 PANCHAYATI RAJ INSTITUTIONS: 73RD AND 74TH CONSTITUTION AMENDMENTS

Article 40 of the Indian constitution directs the government to establish panchayats to serve as institutions of local self government. Most states implemented this directive principle along the lines of the recommendations of the Balwantarai Mehta Commission report. The commission recommended a 'three tier' system of Panchayati Raj Institutions (PRIs) viz. the popularly elected village council (gram panchayat) as the village level basic unit, Block (block is a larger sub unit of a district) council (or panchayat samithi) at the Block level, and the district council (or the Zilla parishad) at the district level. Introduction of PRIs was hailed as one of the most important political initiatives in India. It was envisaged as a institutional arrangement for achieving rural development through people's initiative and participation.

26.7.1 Main Problems

The panchayat raj system has been experiencing ups and downs over the years. The activities of these institutions are broad based but its resource base is very weak. In view of this, the PRIs constituted in various states could not live up to the expectations of the people. Deficient in funds and authority, the panchayats in most states were largely inactive until late 1970s. Some of the major problems and short comings that adversely affected the functioning of these institutions are:

- elections not being held regularly;
- lack of adequate transfer of powers and resources;
- lack of power to generate their own resources; and

- non representation of women and weaker sections in the elected bodies.

In 1989, the Government of India took two major initiatives to enhance the role of panchayats. **First**, it initiated the Jawahar Employment Plan (Jawarhar Razgar Yojana) which provided funding directly to village councils to create jobs for unemployed through public woks. **Second**, it also proposed the 64th Constitution Amendment Bill to make it mandatory for all states to establish a three tiered (village, block and district) system of Panchayats in which representatives would be directly elected for five year terms. Panchayats were to be given expanded authority and funding over local development efforts. Despite the popular appeal of transferring power to panchayats, the 64th amendment bill was rejected by Rajya sabha.

26.7.2 73RD AND 74TH Constitution Amendments

In the year 1990, the issue relating to the strengthening of panchayati raj institutions were considered afresh and based on detailed discussion in the cabinet, sub-committees were set up for this purpose. It was resolved that a Constitution Amendment Bill may be drawn up afresh. In June 1990, the matter of constitution amendment was discussed in the Chief Ministers' conference which endorsed the proposals for the amendment.

On December 22, 1992, the 73rd Constitution Amendment Bill was passed by the parliament which came into effect from April 24, 1994. Principally, it gave:

a) the panchayats' constitutional status (previously panchayat matters were considered as state subject);

b) an institutionalised three tier system (except for states with a population of less than 2 million) at village, block , and district levels;

c) the amendment stipulated that all panchayat members be elected for five year term in the elections supervised by the state election commission.

26.7.3 Reservation For Women

The73rd amendment act has made mandatory on the part of the states to reserve a minimum of one third of seats to women in the PRIs so as to involve women actively in the decision making process. In accordance with this, 33 percent of seats have been reserved for rural women in the PRIs. This statutory reservation has provided an opportunity for the formal involvement of women in the development through political process at the grass roots level thereby enabling them to influence the decisions in the local governments. Further, the state legislature may:

a) authorise a panchayat to levy, collect and appropriate such taxes, duties,

tolls and fees in accordance with laid down procedures and limits;

b) assign to a panchayat such taxes, duties, tolls and fees levied and collected by the state government to be used for specific purposes subject to specified conditions and limits; and

c) provide grants-in-aid to the panchayats from the consolidated fund of the state.

The amendment also empowers the governor of the state to review the financial position of the panchayats and make suitable recommendations for distribution of resources between the panchayats in the state. Further, Article 243-I provides for the constitution of a state finance commission to review the financial position of panchayats and make suitable recommendations for sharing the resources, between the state and the PRIs.

26.8 SELF HELP GROUPS AND MICRO FINANCE

A major rethinking on the existing strategies of rural development in general and women empowerment, in particular, led to the realisation that a new approach is needed to 'help the women to help themselves'. Such an approach, popularly known as promotion of Self Help Group (SHG) formation, was started with the objective of meeting the micro credit needs of poor women. Micro credit in common parlance refers to small loans that help the poor women to meet their immediate credit needs. The SHGs were imbibed the habit of thrift and credit by which small but regular contributions made by the members were pooled together and used for lending to the members for meeting their short term credit needs. The SHGs are small groups having members ranging from 12 to 18 and mostly belonging to the same social and economic group. Members of the group voluntarily come together to form a group, mutually agreeing to contribute to a common fund, so that the pooled savings could be lent to its members at some agreed rate of interest (normally 2 percent per month). Once the group performs well and exhibits its strength and financial soundness, the group will have bank linkage with which the members can take up major economic proposition enabling them to earn additional income.

With the central and state Governments, along with the National Bank for Agriculture and Rural Development (NABARD), extending the required support for women SHGs as a strategy for women empowerment, the SHGs have taken firm roots in India. The movement is eventually expected to reduce gender inequalities in the country. Important policy initiatives initiated in this regard include: promotion of groups under the Development of Women and Children in Rural Areas (DWACRA) Programme and adoption of the model of South Asia Poverty Alleviation Programme (SAPAP). The SAPAP is assisted by United Nations

Development Programme (UNDP) as a response to the Dhaka declaration of the SAARC summit on 'Eradication of Poverty and Reduction of Gender Inequalities'.

The major elements of the SHG approach to micro credit include the following:

a) provide a cost effective approach to formal institutions for expanding and reaching out to poor;

b) offer an effective alternative to pursue the objective of growth by facilitating the empowerment of rural poor women;

c) make available micro finance to cater to the consumption and production needs of poor women;

d) provide a platform for poor women to participate in mainstream economic activity; and

e) help in capacity building by providing greater awareness on various development and welfare programmes relating to women and child health in general and education of children in particular.

The SHGs, by providing access to financial services and informing the women members about the various welfare programmes especially targeted to women and children, truly empower women by making them partners in bringing about the needed social and economic transformation. The efforts of SHGs are thus, to a very great extent, contributing to address the gender issues of economic development in India.

Check your progress 2

1. What are the general and specific causes for women disempowerment?

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2. What are the main problems that adversely affected the functioning of Panchayat Raj Institutions in India?

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3. What are the major elements of the SHG approach to micro credit?

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26.9 LET US SUM UP

Maintaining a healthy sex ratio and according a rightful place for the women in a country, has important socio-economic consequences. The development of a country will not only depend but also be greatly determined on the extent to which a country is able to cater to the needs and concerns of its women. The Indian situation is both unsatisfactory and dangerously imbalanced in this regard. The unit has discussed the specific aspects of the falling sex ratio, lack of equal opportunities to education and employment of women, absence of familial and institutional systems of support of women's economic enterprises, etc. as it obtains in India. The achievements on gender development are placed in contrast to the gaps requiring to be bridged on the basis of available empirical evidence. The developments of 1990s, in terms of Self Help Groups formed by women, the official recognition and support accorded to the SHGs, and above all, the constitutional amendments to extend an earmarked share for women's representation in the grass roots level elected bodies (PRIs) are the major achievements in the direction of promoting gender equality in the country.

26.10 KEY WORDS

Female foeticide : Termination of unborn female foetus by medical intervention

Wage differential : Discriminatory payment in wages for work of equal nature on the basis of gender

Juvenile sex ratio : Sex ratio of children in the age-group 0-6

Women empowerment : Providing control over resources and decision making to women by legislative and institutional guarantee

Self Help Groups : Women groups in villages from poor families who organise themselves to support each other in various ways

26.11 SUGGESTED BOOKS FOR READING

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26.12 ANSERS/HINTS TO CYP EXERCISES

Check Your Progress 1

1. See Tables 26.1 and 26.2 and answer.
2. See section 26.3.1 and answer.
3. See section 26.4.2 and answer.
4. See section 26.5.1 and answer.

Check Your Progress 2

1. See section 26.6 and answer.
2. See section 26.7.1 and answer.
3. See section 26.8 and answer.

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UNIT 27 WATER AND DEVELOPMENT

Structure

27.0 Objectives

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27.2 Water as a Resource

- 27.2.1 Water as a Renewable Resource
- 27.2.2 Water as a Multi-Use Resource

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27.0 OBJECTIVES

After reading this unit you will be able to :

- explain the multifarious uses of water and their significance in economic life;

- discuss the availability of water resources and its adequacy or otherwise in relation to requirements of the economy;
- identify emerging problems and issues relating to water use;
- develop an understanding about the methods to augment the supply of utilisable water in the economy;
- state the measures that can be adopted to improve water use efficiency in the economy; and
- analyse the various issues relating to use of water in different areas like on-farm water management, industrial water needs, rural and urban drinking water, flood management, etc.

27.1 INTRODUCTION

India with 2.4% of the world's total area has 16% of the world's population; but has only 4% of the total available fresh water. This clearly indicates the need for water resource development, conservation, and optimum use. Fortunately, at a macro-level, India is not short of water. The problems of water are thus only managerial and the challenges facing it should, therefore, be not insurmountable. We focus on these issues in this last unit of the course.

27.2 WATER AS A RESOURCE

Water is a renewable multi-use resource. Let us, therefore, look at some of its characteristics first.

27.2.1 Water as a Renewable Resource

How was water formed on earth while practically no other planetary body appears to have any trace of water? Was water simply produced on earth during the very early stages of earth's history by the catalytic interaction of Hydrogen and Oxygen gases or whether the earth mass came into being with some form of water on it already? While theories on origin of water may continue, this much is certain that water gets produced in a hydrological cycle in which oceans play a big role. Being the largest store-house of water (95-96% of all available water) and occupying more than two-thirds of the surface of the earth, oceans dominate anything related to water. In comparison, the biosphere stores only 0.0001% of all water. Rivers have only 0.0001% of water on earth, with groundwater constituting 1.05% of water in the hydrological cycle. The largest storehouse of fresh water are the ice caps and glaciers. The main source of water to the ocean is from river runoff from various continents.

27.2.2 Water as Multi-Use Resource

As a multi-use resource, water finds application in many competing

areas. Most important, water is the very basis of all life forms. Human body needs a regular intake of water to sustain itself and make a productive existence possible. The provision of safe drinking water through easy sources becomes the prime responsibility of a civilised society and a welfare state. What is, therefore, important is that not only drinking water should be available whenever and wherever it is required, but also it should be free of pollutants. Polluted water is a big threat to health, and hence to human capital.

Water is the basis of all agricultural activities. All crops, whether dry or wet, require water in some degree. Some crops may require it in a small quantity, other crops may simply be water-guzzlers. A large part of the available supply of water in the economy needs to be diverted for use in agriculture as rain water never suffices. Water is required in industry as it is an important intermediate good in a number of manufacturing industries. In construction too, water is an indispensable input.

Water is an important source of energy – hydro energy – in the economy. A large mass of water is collected in man-made reservoirs and energy is produced out of it. Energy in turn, as we have already seen (in unit 6), is a single major factor that distinguishes a developed economy from a developing economy.

27.3 WATER RESOURCES IN INDIA

The water resources potential of the country has been assessed from time to time by different agencies. The different estimates are shown in Table 27.1 . It may be seen that since 1954, the estimates have stabilised and are within the proximity of the currently accepted estimates of 1869 billion cubic metre (bcm) which includes replenishable groundwater that gets charged on an annual basis.

Table 27.1 Estimates of Water Resources in India

(bcm: billion cubic metre)

Agency	Estimate in bcm	Deviation from 1869 bcm
First Irrigation Commission (1902-03)	1443	-23%
Dr. A.N. Khosla (1949)	1673	-10%
Central Water and Power Commision (1954-56)	1881	+0.6%
National Commission on Agriculture	1850	-1%
Central Water Commission (1988)	1880	+0.6%
Central Water Commission (1993)	1869	-

27.3.1 Utilisable Water Resource Potential

Within the limitations of physiographic conditions, socio-economic environment, legal and constitutional constraints, and the technology available at hand, the utilisable water resources of the country have been assessed at 1123 bcm, of which 690 bcm (61.4%) is from surface water and 433 bcm (38.6%) from groundwater resources. Harnessing of 690 bcm of utilisable surface water is possible only if matching storage facilities are built. Tans-basin transfer of water, if taken up to the full extent as proposed under the National Perspective Plan, would further increase the utilisable quantity by approximately 220 bcm. The irrigation potential of the country has been estimated at 139.9 MH without inter-basin sharing of water and 175 MH with inter-basin sharing.

While the total water resource availability in the country remains constant, the per capita availability of water has been steadily falling since 1951 due to population growth. The twin indicators of water scarcity are per capita availability and storage. A per capita availability of less than 1700 cubic metres (m^3) is termed as a **water stressed** condition while if per capita availability falls below 1000 m^3, it is termed as a **water-scarcity** condition. While on an average we may be nearing the water-stressed condition, on an individual river basin-wise situation, nine out of our 20 river basins with 200 million populations are already facing a water-scarcity condition. Even after constructing 4,525 large and small dams, the per capita storage in the country is 213 m^3 as against 6103 m^3 in Russia, 4733 m^3 in Australia, 1964 m^3 in the USA and 1111 m^3 in China. It may touch 400 m^3 in India only after the completion of all the ongoing and proposed dams.

27.3.2 Pattern of Utilisation

Available estimates of water utilisation by use are given in Table 27.2.

Table 27.2 Gross Utilisation by End Uses of Water (bcm)

	1968-69		1997-98	
	Total	**%**	**Total**	**%**
Domestic	9.1	2.9	30	5
Industrial	2.7	0.7	30	4
Thermal Power	6.9	1.8	9	1.5
Agriculture & Live Stock	356.8	95.0	524	88.5
TOTAL	**375.5**	**100.0**	**593**	**100**

Being based on sketchy data and arbitrary assumptions, the estimates shown in Table 27.2 are gross approximations. What they point out is that the segment of 'agriculture and livestock' is the pre-dominant user

of water. Other users are also growing much faster – more than three fold for domestic use, more than ten times for industry – in absolute terms. However, although the combined share of non-agriculture livestock segment of users has more than doubled, the bulk of water (close to 90%) is still being used by agriculture and livestock alone.

27.4 WATER REQUIREMENT

The requirement of water for various purposes has been assessed by the National Commission on Integrated Water Resources Development (NCIWRD) in the year 2000. This requirement is based on the assumption that the irrigation efficiency will increase to 60% from the present level of 35-40%. These are shown in Table 27.3 below.

Table 27.3 Water Requirement for Various Sectors

Sector	Water Demand in bm^3 (or bcm)		
	2010	2025	2050
Irrigation	557	611	807
Drinking Water	43	62	111
Industry	37	67	81
Energy	19	33	70
Others	54	70	111
TOTAL	**813**	**843**	**1180**

It would be seen that water requirements are estimated to increase by about 40% over the next four decades. Increased requirements would be shared by all the sectors of the economy, the largest increase being claimed by energy where a more than three-fold increase is envisaged. Likewise, drinking water requirements and industrial needs are projected to go up by more than 100 per cent. We will have to find additional sources of water as already our supply rates are far below the demand growth rates. Thus, unless we find new resources, the per capita availability will further drop sharply in the years to come.

27.5 EMERGING PROBLEMS AND RESPONSES

Agricultural demand for water has been increasing because of a large and growing differential between the productivity of irrigated and un-irrigated land. Non-agricultural demand has grown even faster because of population growth, urbanisation, and industrialisation. There is ample evidence to suggest that the expansion in supplies, though significant has not kept pace with demand. Growing competition among farmers is reflected in the following:

a) extensive violation of rules of allocation and use (including unauthorised tapping of canal water by farmers within and outside the command);

b) the proliferation of wells and tube-wells and competitive deepening of wells in the face of falling water tables;

c) growing complaints of water shortage in urban areas; and

d) the social and political tensions generated by attempts to meet non-agricultural demands by diverting supplies from irrigation.

The situation in all these respects is worsening. Hence, corrective measures are imperative. These measures must recognise that, unlike other resources, water is in the nature of a common pool serving multiple uses and users. They must be such as to address the need of access to and use of this limited resource among the competing uses and users. The allocation should be seen to be fair and equitable taking into account the principle of 'sustainable consumption' so that the supply of water for future generations is not threatened.

Check Your Progress 1

1. Briefly mention the different uses of water in the economic life of a nation.

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2. Differentiate between 'water-stressed condition' and 'water-scarcity condition'.

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3. Write a note on pattern of utilisation of water in India.

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4. Examine in brief the nature of emerging problems relating to the availability and use of water in India.

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27.6 AUGMENTING UTILISABLE WATER

Usable water availability can be increased by tapping water that otherwise would run-off to the sea. Water storage above ground through dams and diversion through ***weirs*** *(low dams built across the river to raise the level of water upstream or regulate its flow)* are the conventional means. However, water can also be stored underground by enhancing percolation through artificial recharge. Rain water harvesting in many small ponds through construction of bunds can also add to water availability. Inter-basin transfer of water through inter-linking of rivers can substantially expand availability.

27.6.1 Artificial Recharge and Rainwater Harvesting

The groundwater levels are declining in many parts of the country. Artificial recharge of groundwater with rainwater is an important strategy to arrest this trend. In urban areas, many cities have by-laws making rainwater harvesting compulsory for new buildings. However, in rural areas there is no such programme. Measures needed to augment the effective usage of water includes the following:

i) Local storage: There is significant potential for increasing the overall utilisable water through methods like: rainwater harvesting, construction of check dam, watershed management, and restoration of traditional water bodies as well as creation of new ones.

ii) A cess on bottled water is merited since many negative externalities are associated with it like generation of plastic waste, their improper disposal, etc. The cess levied could be used for revival of traditional water bodies or for recharging ground water with community participation. The local communities need to be motivated to undertake this work on priority basis and to build their capacity for this purpose.

iii) Technical support systems for developing an optimal water management master plan for a micro watershed/hydrological unit need to be created.

iv) Groundwater mapping, GIS mapping, satellite imagery, etc. need to be utilised for assisting the village community in preparing master plans for water resource development and management. This is

possible with the internet broadband connectivity expected to reach all over India in the Eleventh Plan. It is, however, a difficult challenge to create the institutional systems and delivery mechanisms required for providing the technical back-up and support to the village community for preparing the water management plans.

v) The flood plains in the vicinity of rivers can be good repositories of groundwater. A planned management of groundwater in such areas offers excellent scope for its development helpful to meet the requirements of water. During rainy season, the flood water spreads over the plains, but due to very shallow water table the recharge is small and the rejected recharge result in river out-flows. Development of shallow aquifers in flood plains, therefore, creates the necessary subsurface space for augmentation of groundwater from the river flows during the monsoon. *Induced recharge* is an effective management tool to meet the gap between demand and supply in areas adjacent to rivers with active flood plains.

27.6.2 Inter-Basin Transfers Through Inter-linking of Rivers

The inter-linking of rivers and the transfer of surplus water, especially in the monsoon period from the surplus basins to the deficient basins has been championed by many experts over time.

Advantages

One, the idea of interlinking of rivers is described as the perfect win-win situation that will address the twin problems of water scarcity in the western and southern parts of the country and the problem of flood in the eastern and north-eastern regions. When the proposed interlinking project is completed, the right quantity and quality of water could be stored and delivered at the right time in the right places.

Two, interlinking of rivers will promote and sustain the objective of food security both by increasing productivity of land and enabling reclamation of waste lands.

Three, the essence of the proposed interlinking of rivers is that with the construction of storage dams, the severity of floods and the extent of flood damage will be drastically reduced. When transferred to other basins with lower water endowment, the water thus stored would reduce the regional imbalance in the availability of water in the country.

Issues

The project, however, raises some issues which are as follows:

1. **Issue of Cost Effectiveness**: The impression that the mega-project involving interlinking of rivers offers all the solutions to the problems of water scarcity in India has diverted public interest from promoting

local-level initiatives for the harvesting and conservation of water. A belief has been created that there is enough water in the 'surplus' rivers to cater to all the needs of the people and what is to be done is only to invest in this mega-project for transferring water from surplus basins to deficit basins. However, various non-governmental initiatives have established that local and cheaper options do exist for providing domestic water security in drier regions. Such initiatives also need to be promoted by the state.

2. **Food Security**: An impression has been created that to meet the future requirements of food-grains in the country, there is no choice but to expand the area under irrigation. However, there exists a large volume of literature that has clearly established that there are several other more cost-effective ways to sustain food security. Particular attention should be given to the removal of the obstacles to technological changes in agriculture so that we can achieve in actual practice, the same level of yield on existing irrigated lands that had already been well received in the experimental farms. If this is realised, then the food grains production will outstrip the requirements.

3. **Knowledge Gap in Himalayan Component**: The essence of the proposed interlinking of rivers is that with the construction of dams as proposed, the severity of flood and the extent of flood damage will be drastically reduced. When transferred to other basins with lower water endowment, the water thus stored would reduce the regional imbalance in the availability of water in the country. Construction of dams on the Himalayan rivers, as a component of the proposed interlinking of rivers, cannot, however, be undertaken by ignoring the vital questions on the uncertainty associated with the one-sided view of development of the Himalayan rivers. There is no scientific evidence that the proposed dam will control floods in the Himalayan rivers. In the background of the inadequate knowledge base, the newer interventions may be counter-productive.

Other Arguments Against Interlinking

Some other arguments against interlinking of rivers may be briefly mentioned as follows:

i) **Compensation for Resettlement and Rehabilitation of the Displaced:** The project would involve huge displacement of people with attendant loss of property and productive assets. Unless a satisfactory solution is found to this, any move in the implementation of the project would prove counter-productive.

ii) **Compensation for Environmental Damages from the Project**: While flood water in India is seen as a 'harmful surplus', the same flood water is seen as a source of free minerals for the enrichment of land, free recharge for groundwater resources, a free medium for

the transportation of fish and conservation of biological diversity and free bumper harvest for humans. The diversion of water from the 'surplus' to the 'deficit' basins would have significant impacts on the physical and chemical compositions of the sediment land, river morphology, aquatic biodiversity and the configuration of the delta.

iii) **Sharing the Benefits and Costs of the Project Among the States**: Conventionally, the thinking has been that inequitable distribution of fresh water leads to violent inter- and intra-basin conflicts. However, water conflicts are frequently generated not by an inherent scarcity in a region, but over the sharing of additional supplies. Factors like end-use efficiency and sustainability of irrigation practices have given way to war over the quantity of water.

iv) **Inter-Country Conflicts**: Inter-state trans-boundary water-related conflicts may become inter-country. The proposal risks major confrontation with Bangladesh, which receives much of its water from the Ganga and Brahmputra, after they flow out of India. It becomes necessary to examine whether the interlinking project would end up intensifying the already bitter trans-boundary conflict over water-sharing and availability from the village to the country levels.

All the same, inter-linking of rivers is a challenging project and is essential for meeting the looming water crisis in future. The syndrome of drought and floods is hampering the required growth in agriculture and inter-linking of rivers offers an effective solution to the problem.

Check Your Progress 2

1. What measures do you suggest to promote artificial recharge and rainwater harvesting?

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2. What are the advantages resulting from inter-basin transfers through inter-linking of rivers?

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3. What are the different issues arising from inter-linking of rivers?

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27.7 IMPROVING WATER USE EFFICIENCY

For a gross cropped area of about 87 MH, the water use is 541 bcm which gives a delta of 0.68m per ha of gross irrigated area. The average rainfall in India is 1170 mm (1.17m). Taking 70% of the rainfall as effective for crop consumptive use, the gross water use is about 1.45 m (4.8 feet) per ha of the gross cropped area. This is very high as compared to water use in irrigation systems in, say, the US where water allocation is about 3 feet. This overuse in the country reflects a low irrigation efficiency of about 25% to 35% in most irrigation systems, with efficiency of 40% to 50% in a few exceptional cases.

27.7.1 Reasons for Low Irrigation Efficiency

The reasons that contribute to low irrigation efficiency can be briefly identified as follows:

- Completion of dam/head works ahead of canals;
- Dilapidated irrigation systems;
- Unlined canal systems with excessive seepage;
- Lack of field channels;
- Lack of canal communication network;
- Lack of field drainage;
- Improper field levelling;
- Absence of volumetric supply;
- Inadequate extension services;
- Low rate for water.

The equitable and optimal use of water from canal irrigation has been a matter of continuing concern. The traditional approach of pursuing these objectives through the field-level functionaries of irrigation department has its limitations. The participation of actual beneficiaries and the maintenance of village-level distribution channels through water user's

associations (WUAs) have been found useful. There is broad consensus that this has been a step in the right direction. This needs to be pursued more vigorously with genuine empowerment of WUAs. The objective should be to cover the entire command of all major and medium projects with WUAs by the end of the Eleventh Plan.

27.8 ON-FARM WATER MANAGEMENT

On-farm water management covers many areas such as field channels, field drains, land levelling, and irrigation scheduling with the objective of reducing field application losses. The works below the outlet are traditionally taken as command area development (CAD) works and are not included as part of the scope of irrigation project which stops at the outlet. Outlay on CAD works has been rather low which has resulted in poor on-farm management, viz. low application efficiency and shortage in supplies to tail-enders. It is suggested that all CAD works should be taken as a part of the irrigation project itself so that infrastructure required for irrigation water to reach every field is implemented along with the dam. This, together with conjunctive use, will no doubt hike project cost but since compartmentalised approach has not succeeded, an integrated approach will have to be seriously considered.

27.9 MEETING INDUSTRIAL WATER NEEDS

Industrial demand for water is growing. Also, disposal of waste water from industries without appropriate treatment pollutes water bodies, underground aquifers and soils. In addition, long-term land use planning for urbanisation and industrialisation is now a necessity and provision of water on a sustainable long-term basis should be a key factor in such planning exercise. In the absence of such planning, demand for water emerges in areas where the provision of water requires enormous investments in carriage systems over long distances or even treatment of sea water. With proper long-term planning in terms of location of SEZs, industrial parks and townships, it should be possible to optimise costs of industrial developments.

New industries should ideally be located only in planned industrial areas and industrial parks. Townships in industrial zones must be in places identified in Township Master Plans. They should be provided water by the local authorities who should charge prescribed rates on a volumetric basis. These rates should fully cover:

i) the cost of supply;

ii) a premium to reflect the scarcity value of water in areas where there is water shortage; and

iii) the cost of treatment to enable the discharge to go back into the water system through drainage into irrigation canals, rivers, lakes, etc.

Where groundwater is the source of supply and is under stress, the cost of supply should include the cost of recharge wherever such recharge is required and the recharge component should be credited to a dedicated Recharge Fund so that its utilisation is suitably monitored. For new and existing water-intensive industries, which would use groundwater on their own, there should be a system of IT-based volumetric metering of water extraction particularly in those areas where ground water levels have become critical. For these areas, there should be prescribed rates for ground water use by industry in a particular hydrological unit. The option of recycling the water and using it for secondary needs i.e. other than drinking, should be a strategy for water management.

27.10 RURAL AND URBAN DRINKING WATER

Provision of clean drinking water is vital to improve the health of the people and to reduce incidence of diseases and deaths. Drinking water is less than 1% of the total water demand and should have the first priority among all uses of water.

27.10.1 Major Issues of Rural Water Supply

The major issues in rural water relate to: (i) sustainability of water availability and supply, (ii) poor water quality, (iii) centralised versus decentralised approaches, and (iv) financing of operation and management (O&M) costs. To address these issues, following measures are suggested.

a) The conjunctive use of groundwater, surface water, and rooftop rainwater harvesting systems will be required to be encouraged as a means of ensuring sustainability of water usage in general and drinking water security in particular. While convergence of various programmes for funds and physical sustenance is most important, states should put in place an effective coordinating mechanism. In its absence, the vicious cycle of unsustained usage of water scarcity would continue.

b) The Finance Commission awards for maintaining the water supply systems by local bodies must be implemented and schemes transferred to Panchayats. States can share a part of the O&M cost of such panchayat as a hand-holding support for first few years till the local bodies become self-sustainable. To enable local bodies attain that state an effective Management Information System (MIS) for assessing the status of water supply in every habitation in the State should be put in place with every State earmarking funds for this purpose.

c) In order to universalise access to safe drinking water, it needs to be isolated from agriculture and industrial uses wherever possible. To prevent lowering of water tables due to excessive extraction, cooperation with agricultural and industrial users becomes necessary. A cooperative body of water users and panchayat representatives has

to regulate the limits of average annual water rechargeable level. All groundwater-based resources should be provided with a recharge structure that would help keep the usage sources alive.

d) Where groundwater quality and availability is unsatisfactory, surface water sources need to be developed. Restoration and building of tanks and other water bodies along with rainwater harvesting structures for recharge and for direct collection at community and household levels constitute an attractive option in this regard.

27.10.2 Major Issues in Urban Water Supply

The major issues in urban water supply can be identified as follows:

i) **Sustainability and Equity**: Sustainability in the urban water supply is addressed mainly through supply side augmentation. Distant perennial sources are identified and long distance piped water transfer to the cities and towns are made. Augmentation plans are generally gigantic and engineering-oriented and have greater acceptability at all level. In contrast, demand management is a lesser preferred option. However, when it comes to payment of water charges, the decision is invariably with the elected government and not with the executing agency. The executing agency has to depend on the grants for O&M, for sustaining the quantity and quality.

   It is not uncommon that pockets of urban areas would get higher service levels both in terms of number of hours of water availability as well as per capita availability. Leaking water supply systems and illegal tapping reduces water availability. The average water loss in the leaking supply system varies from place to place in the range of 20-50%. Dedicated efforts to plug the leakages in addition to demand management measures are required for achieving sustainability and equity.

ii) **Demand and Supply Management**: There is a huge gap between the demand and supply of water in urban areas. This is ever increasing due to growing population and urbanisation. Recycling and reuse of water, reducing the water demand through rain-water harvesting, using water-efficient household equipment, etc. would go a long way in conserving water and reducing demand. Proper metering of water and rational tariff would reduce water demand and encourage conservation. We need to have a concept of water efficient homes in urban areas and for this there is a need to have a well-orchestrated information campaign. Demand management is necessary to achieve sustainability.

iii) **Financing and Institutional Issues** : Provision of water supply in urban areas is basically a responsibility of urban local bodies. The public-private partnership (PPP) efforts to attract financing of water supply projects are finding its place, though so far only in a few

cases. PPP is important to leverage government investments and to access private sector management efficiencies. Reforms are a necessary pre-condition for gaining success through PPP.

iv) **Tariff and O&M**: Evolving realistic water tariff so as to discourage excessive use of treated/potable water is one of the important management reform tools for demand management. Not much has been done on this important aspect in many urban local bodies in India except in a few large cities that have undertaken some measures by way of installing water meters for consumers. The major reason for slow progress in this regard is that good quality meters are not available on a large scale. The main reason for this is that the meter manufacturing facility is at present vested with small-scale industries who do not have the capacity to produce meters on large scale.

Poor O&M practices due to inadequate financial resources is one of the primary reasons for low sustainability and equity in water supply. Assessment of demand and willingness to pay by the communities would help to arrive at a basis for proper pricing of water management services and to enhance the scope for adopting 'full cost recovery' policies to achieve financial sustainability.

27.11 FLOOD MANAGEMENT

Every year some part or other of the country gets flooded. A multi-pronged approach consisting of measures of prevention, protection, management, forecasting and early warning are needed to manage flood situation properly.

i) **Prevention and Protection**: Floods can be prevented or significantly moderated by watershed management of the catchments area of rivers. For international rivers originating in Nepal and Bhutan, a joint mechanism for watershed management needs to be evolved. Another way is to preserve and augment flood cushions like natural swamps and lakes which can be developed into detention basins. Also, capacity of existing depression can be improved for absorbing flood waters. Efforts should also be made for utilising the existing reservoirs for flood moderation to the extent possible. Even in reservoirs constructed for power generation or other purposes, the 'rule curves' may be framed in such a way that effective flood moderation is achieved. Rule curves guide the operation of a reservoir and ensure that a desired level of storage cushion is maintained to absorb floods of specified probability. Raising and strengthening of the existing embankments, if required after detailed studies of hydrological, morphological, topographical and developmental aspects, provide some protection.

Watershed management in the hilly catchments of the rivers originating in Nepal, Bhutan, and hilly areas of India should be selectively chosen and fully funded. Implementation should be done

through a joint mechanism. The ideal solution for flood control is the creation of adequate storages in flood prone river systems. The storage projects need to be investigated, designed and executed expeditiously.

The strategy of flood control through embankments has been pursued by the States over the years. A holistic view of an entire tributary or a large stretch of a tributary needs to be taken. Wherever feasible a one time decisive investment for a flood protection project should be made.

ii) **Managing Flood**: Besides construction at appropriate location of spilling sections/'sluices' in flood embankment areas, integration of drainage sluices with other infrastructural developmental programmes in the sectors of road, railways, inland waterways, and canal/command area development works are necessary for flood management. Drainage improvement in critical areas in the country should be given priority.

iii) **Forecasting and Early Warning**: Development of digital elevation model of flood–prone areas for taking up schemes for inundation forecast, preparation of flood risk maps, planning of flood management schemes, etc. should be taken up.

Check Your Progress 3

1. State in brief the reasons for low irrigation efficiency in India.

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2. Suggest measures to improve irrigation efficiency in India.

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3. What measures will you suggest for improving on-farm management of water?

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4. What measures are suggested to meet the growing Industrial demand for water?

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5. What are the various issues involved in rural water supply in India?

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6. Mention in brief the various issues involved in urban water supply in India.

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7. State the important elements of an approach for efficient flood management in India.

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27.12 WATER GOVERNANCE

In the present system of water governance, public irrigation and water supply systems are designed, constructed, and managed entirely by the government. Users have no stake or say in any of these functions. The various functions involved in the development and efficient management of water resources — such as defining the nature and basis of entitlements, laying down broad principles and institutional mechanisms for deciding and implementing projects, for regulatory functions and dispute settlement – are all vested in the executive arm of the government.

Rules are made and enforced by governments, guided more by considerations of political expediency than any serious concern for efficient use and equitable distribution of water. Extensive violations of rules of entitlement for access and use have not only been tolerated but

even encouraged by the policy of providing water at below cost. Water charges are so low, and collections so lax, that users have hardly any incentive to avoid waste and make prudent use of available water. Conflict resolution mechanisms do not exist or have become defunct or ineffective. In such a situation, there is no transparency, due process, or accountability in the discharging of functions. The interests of the political class and the bureaucracy, rather than the larger and long-term public interest, dominate the whole process. These trends cannot be arrested, much less reversed, without drastic changes in policies and reforms in water resource management. In this direction, some of the essential changes required are the following:

1. Limiting the government's role in laying down the broad principles of determining water entitlements of different users within a basin and establishing institutional arrangements for intervention to regulate contingent circumstances.

2. Creation of autonomous and financially self-reliant organisations for integrated planning and management of water resource for different uses with effective participation of users' representatives.

3. Levying and collecting water charges to cover costs (including capital costs) without any state subsidy (or subject to explicitly defined limits of budgetary subsidies).

4. Redefining the laws relating to private rights over groundwater towards community control and regulation.

27.13 NATIONAL WATER POLICY

A National Water Policy, 2002 with its main features as follows is under implementation.

i) Stress on maintenance of irrigation projects;

ii) River basin organisations to ensure development and management of inter-state river basins;

iii) Calls for dam safety legislation to ensure proper inspection, maintenance and surveillance;

iv) Calls for national policy for resettlement and rehabilitation of project affected people;

v) Participatory approach in water management including water users associations and private sector for the employment of modern information systems;

vi) Encouraging private sector participation in planning, development and management of water resources projects for diverse uses. It would help in introducing innovative ideas, generate financial

resources, introduce corporate management and improve service efficiency and accountability to users; and

vii) Employing non-conventional methods of water conservation like rain-harvesting, artificial re-charge of ground water, inter-basin transfers, desalinisation of seawater, etc.

27.14 LET US SUM UP

Water is essential for life on earth. There is a need for water resource management, conservation and optimum use of this scarce resource. At a macro level India is not short of water and the problems are largely of managerial nature. There is a need both to augment utilisable water supply and to improve water use efficiency. The unit has discussed different sets of measures that can be adopted to improve the situation on this front. A few of these suggested measures find expression in the National Water Policy (2002).

27.15 KEY WORDS

Bio-sphere : Regions of the surface and atmosphere of the earth occupied by living organisms.

Aquifer : A body of permeable rock able to hold or transmit water.

MIS (management information system) : Refers to the group of information management methods related to the automation (or support) of human decision making.

Weirs, Rule Curves & Sluices : Weirs are low head dams used to raise the level of a water body like river or stream. 'Rule curves' are guidelines to set the water levels for each section of the water body, depending on the time of year. A 'sluice' is a sliding gate used to control a flow of water.

27.16 SOME USEFUL BOOKS

Kaushik Basu (ed.) *The Oxford Companion to Economics in India*

M.C. Chaturvedi *Second India Series, Water*

A . Agarwal and S. Narain *State of India's Environment*

Government of India *Economic Survey*

Planning Commission *Eleventh Five Year Plan 2007-12*

27.16 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See section 27.2.2 and answer.
2. See sub-section 27.3.1 and answer.
3. See sub-section 27.3.2 and answer.
4. See section 27.5 and answer.

Check Your Progress 2

1. See sub-section 27.6.1 and answer.
2. See sub-section 27.6.2 and answer.
3. See sub-section 27.6.2 and answer.

Check Your Progress 3

1. See sub-section 27.7.1 and answer.
2. See sub-section 27.7.2 and answer.
3. See sub-section 27.8 and answer.
4. See sub-section 27.9 and answer.
5. See sub-section 27.10.1 and answer.
6. See sub-section 27.10.2 and answer.
7. See section 27.11 and answer.

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UNIT 28 GLOBAL ECONOMIC CRISIS

Structure

28.0 Objectives

28.1 Introduction

28.2 Origin of the crisis

28.2.1 Spread of the Crisis

28.3 Web of Crisis

28.4 Roots of the Crisis

28.5 Impact of the Crisis

28.6 What is to be Done

28.6.1 Need for Coordinated International Action

28.6.2 Need for a New International Financial Architecture

28.7 Impact on India

28.7.1 Policy Agenda for Future

28.7.2 What needs to be done?

28.8 Let us Sum up

28.9 Key Words

28.10 Answers/Hints to CYP Exercises

28.0 OBJECTIVES

After going through this unit you will be able to:

- trace the origins of the current global economic crisis;
- assess the impact of the crisis on developing economies like India;
- describe the measures that have been taken to deal with the crisis; and
- articulate the elements of an international coordinated action demanded by the crisis.

28.1 INTRODUCTION

The world economy is now mired in the most severe financial crisis since the Great Depression of 1930s. In a little over a year, the mid-2007 sub-prime mortgage debacle in the US developed into a global financial crisis and began moving the global economy into a recession. Aggressive monetary policy action in the US and massive liquidity injection by the central banks of the major developed countries were unable to avert this crisis. Several major financial institutions in the US

and Europe failed, and stock market and commodity prices collapsed and became highly volatile. Most developed economies entered into recession during the second half of 2008, and the economic slowdown spread to developing countries and the economies in transition.

28.2 ORIGIN OF THE CRISIS

Origin of the present global crisis can be traced to the sub-prime mortgage market in the US. Sub-prime mortgages are residential loans that do not conform to the criteria of 'prime' mortgages, and so have a lower expected probability of full repayment. Because of their high risk of default, sub-prime borrowers are charged higher interest rates than prime borrowers. The sub-prime loans are securitised by which is meant that they have been advanced without asset backed securities such as collaterised debt obligations (CDOs). Institutional investors such as hedge funds, pension funds and banks have been investing in such securities.

The first sign of trouble in sub-prime lending in the US was associated with high volume of 'early payment deficits' (or defaults) in which the borrower misses one or two of the first three monthly payments, followed by rising delinquency rates. Apart from the slowdown in the residential property market, the adjustable interest rate loans offered by the lenders was also a factor responsible for defaults and delinquencies. As interest rates increased and house prices first flattened and then turned negative in a number of regions, many borrowers were left with no option but to default on repayment as refinancing options were not feasible with little or no housing equity.

The crisis in sub-prime lending sent shock waves through other parts of the financial system. Many of the structured credit and mortgaged market products came under severe trade stress. Many investors facing margin calls from worried counterparts were unable to sell holdings to raise cash as there were no buyers forcing them to seek cash via the money market. Hedge funds, who are investors in structured products, also faced heavy withdrawals and margin calls. As a result, several banks were hit by losses from risky property loans.

28.2.1 Spread of the Crisis

The crisis which had its origin in the sub-prime mortgage markets in the US, took some time before problems in financial markets were experienced in the real economies. By the second half of 2008, however, most developed economies entered into recession with the effect of economic slowdown spreading to developing countries and economies in transition. Following this, vast majority of countries are experiencing a sharp reversal in the robust growth registered during the period 2002-2007. For instance, among the 160 economies in the world for which data are available, the number of economies that had an annual growth

in GDP per capita of 3 percent or higher is estimated to have dropped from 106 in 2007 to 83 in 2008, which is further feared to have declined to 52 in 2009. Among the 107 developing countries, this number is estimated to have dropped from 70 in 2007 to 57 in 2008, and to 29 in 2009. The trend suggests a significant set-back in the progress made in poverty reduction in many developing countries over the past few years.

The apparent robust growth pattern that had emerged from the early 2000s came with high risks. Growth was driven to a significant extent by strong consumer demand in the US, stimulated by easy credit and by very high rates of investment demand and strong export growth in some developing countries, notably China. Growing US deficits in this period were financed by increasing trade surpluses in China, Japan and other countries accumulating large foreign exchange reserves and willing to buy dollar denominated assets. At the same time, increasing financial instruments and risk-management techniques encouraged a massive accumulation of financial assets leading to growing levels of debt in the household, corporate and public sectors. In some countries, both developed and developing, since the early 1980s, domestic financial debt had risen four to five fold as a share of national income. This rapid explosion in debt was made possible by the shift from a traditional 'buy-and-hold' banking model to a dynamic 'originate-to-sell' trading model (called securitisation). Leverage ratios of some institutions went up to as high as 30, well above the ceiling of 10 generally imposed on deposit banks.

All parties seemed to benefit from the boom, particularly the major financial players in the rich countries. The risks were conveniently ignored, despite repeated warnings that mounting household, public sector and financial sector indebtedness in the US and elsewhere would not be sustainable over time. As strains in the US mortgage markets were transmitted to the wider financial sector, fears of a meltdown escalated and spread around the world.

In short, the origin and spread of the current global crisis can be traced to:

i) excessive expansion of financial flows in blind pursuit of profit;

ii) failure of government supervision of the financial sector; and

iii) unsustainable model of development, characterised by prolonged low savings and high consumption.

28.3 WEB OF CRISIS

The global crisis is an interwoven web of three crises:

First: The collapse of the consumer spending: American consumers

represent 70% of the economy. Traumatised by plunging home values and stock prices – which have shaved off an estimated $ 7 trillion worth of personal wealth – they have curbed spending and increased saving. This has directly led to a US recession and layoffs.

Second: The financial crisis: Lower lending deprives the economy of the credit to finance businesses and costly consumer purchases (e.g. cars, appliances).

Third: A trade crisis: Global spending and saving patterns are badly askew. High saving Asian Countries relied on export-led growth which, in turn, required American consumers to spend ever-larger shares of their income. Huge trade imbalances have resulted in US deficits and Asian surpluses plunging Asia too into recession.

Check Your Progress 1

1. What are sub-prime mortgages?

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2. What are the two factors responsible for sub-prime borrowers to default?

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3. Mention the three high risk factors with which the robust growth rates of early 2000s were accompanied in many developing economies like India.

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28.4 ROOTS OF THE CRISIS

The roots of the crisis lie in the interplay of several developments that have fundamentally transformed the finance capitalism that existed in the time period of Great Depression of 1929 or even just about there decades ago.

One, traditionally banks were careful to lend only to trusted clients carrying the debts on their books. In the new financial system, with securitisation emerging as a major force, lenders pool the loans and resell them as asset-backed securities. These securities are then repackaged, leveraged and resold many times over.

Two, there have emerged highly sophisticated derivative products. Especially important among these currently are the credit default swaps. Taken together, asset-backed securities and derivatives widely spread the risk. But they also breed complacency towards risk, laying the foundation for quick contagion.

Three, there has emerged highly-leveraged investment banks. Commercial bank leveraging is limited by stringent capital adequacy norms. In contrast, investment banks could raise and invest funds up to 30 times their equity base, thus vastly increasing the fragility of the system.

Four, there has been a globalisation of the financial system. One aspect of this is a major imbalance between economic and political power. China, India and other emerging economies in Asia and Middle East are now the creditors of the west especially the US. Yet they have little say in the design of the global financial architecture. Another aspect of this is technological. Billions of dollars can now be transmitted instantaneously across the globe. But so can market information and market sentiments which can be on both the positive and negative sides (on positive side exuberance and on negative side fear among investors).

In short, **securitisation, derivatives, leveraging** and **globalisation** have made the global economy much more volatile and risky than the world of 1929.

28.5 IMPACT OF THE CRISIS

Developed economies are leading the global slowdown. Meanwhile, through international trade and finance channels, the weakness has spread rapidly to developing countries with the following consequences.

1. The employment situation has deteriorated globally. Much of the employment gains seen in the recent years due to a surge in exports in developing economies like India is lost because of the global economic slowdown.

2. World trade is grinding to a halt. This is a big worry because in the post-war economic progress world economy has been built on the premise that free trade between nations improves overall efficiency and spreads wealth. However, many countries are now reporting sharp declines in their exports since September 2008. These include all major economies e.g. US, Germany, China, India, etc. The World Bank says that global trade is likely to decline during 2009 for the first time since many decades.

At the micro level, a drop in the movement of goods across national borders will create huge pressures on the intricate web of global supply chains that companies have built in recent decades. At the macro level, recessions and slowdowns could lead to trade wars as countries try to protect domestic manufacturers from imports. The knee-jerk reaction is likely to be protectionist to mollify domestic lobbies.

3. Financial markets will continue to be under stress with their troubles pulling down growth in what the IMF describes as 'a pernicious feedback loop'. The recession is adding to bad loans and balance sheet owes of global banks resulting in worsening financial crisis at the global level.

4. The continuation of the financial crisis, as policies fail to dispel uncertainty, has caused the asset values to fall sharply across advanced and emerging economies. This has led to decreased household wealth and the resultant downward pressure on consumer demand. In addition, the associated high level of uncertainty has prompted household and businesses to postpone expenditure, reducing demand for consumer and capital goods. At the same time, widespread disruptions in credit are constraining household spending which, in turn, is curtailing production and trade.

5. A sharp drop in net capital inflows to the emerging economies is also taking place. Globally, it is estimated that the net capital inflows to emerging markets would drop to $ 165 billion in 2009, from $ 466 billion in 2008 and $ 929 billion in 2007. Private financing too for emerging Asia is expected to dip from $ 96 billion in 2008 to $ 65 billion in 2009 partly because FDI is expected to see a drop.

   The current slump in net private capital inflows to emerging markets is the worst compared with the two previous crisis episodes of 1981-86 and 1996-2002. For instance, the net private inflows had fallen from a peak of 3.5% of emerging market GDP in 1981 to a low of 0.3% of GDP in 1986. Again, during 1996-2002, it had fallen from a peak of 5.7% of GDP in 1996 to a low of 2% in 2002. This time around, however, the net inflows are expected to fall from a peak of 6.9% GDP in 2007 to about 1.1% of GDP in 2009.

6. A prolonged slowdown will mean that earnings could suffer hampering the ability of companies to repay loans. This could lead to a rise in bad loans with the units in the export-oriented sectors. The interest-rate sensitive units would also experience greater stress.

   With companies facing cash flow problems bankers fear that they may resort to diverting funds from one business to another, hoping they would be able to pay back when the situation improves. The banks are getting increasingly concerned about such risks, especially in case of companies with multiple accounts.

The one silver lining right now is that the sharp downturn in the world economy and the fall in commodity prices has led to cooling down of inflationary pressures, a far cry from the inflationary scare in the middle of 2008.

28.6 WHAT IS TO BE DONE

There are two sets of responses.

One, to prevent a deeper financial crisis and the other to keep the real economy of output and jobs as much on track as possible. The two problems are linked as a further fall in growth will do more damage to bank balance sheets which will worsen the credit crisis and lead to a sharper fall in economic activity. Governments and central bank should therefore move fast to put the financial sector back on its feet, even as they increase public spending and money supply to support demand.

But there is little clarity on how all this is to be done. We have already seen policy response changes – from temporary liquidity pumped into the global financial markets to direct purchases of government securities by the US Federal Reserve, expensive plans to buy troubled assets and semi-nationalisation of banks and financial institutions. But the financial crisis has continued unabated.

Two, there have been announcements of lavish fiscal stimulus running into several billions of dollars. These are attractive short-term prescriptions with long-term ramifications. They are most likely going to push government deficits and public debt. Meanwhile, the recession has deepened.

Thus, the world economy is in more serious trouble than what these time-tested solutions have proven to be effective. This brings us to the option of the need for a coordinated international action.

28.6.1 Need for Coordinated International Action

The stabilisation of financial markets and stimulation of the global economy will require a far greater policy coordination among the nations of the world. Measures of individual nations can not match the benefits of such a coordinated international action. These benefits can be stated as follows.

One, there are real and psychological gains. Stimulus measures from one country spill over to their trade partners, creating an additional boost. Coordinated efforts help mitigate the volatility in currency and bond markets which is usually the consequence of uncoordinated policies.

Two, coordination is an important defence against ‘beggar-thy-neighbour’ policies. Early forays into protectionism are already being made. There has been a gradual creeping up of tariffs. Even within their WTO

commitments, there is scope for countries to raise tariffs. If all nations shore up tariffs to their bound rate (the highest rate consistent with their WTO commitments), exporters from middle and high income countries could face tariffs twice as high as current levels.

Three, international cooperation is essential because the crisis has important implications for developing countries as they did not create this crisis but have been badly damaged by it. The global recession in advanced countries has weakened export opportunities for emerging countries. In addition, the financial crisis has restricted credit flows with crisis of debt to developing countries having widened significantly.

Four, the crisis presents an unprecedented opportunity to combine shorter-term stimulus requirements to boost growth and employment with the longer-term requirement to lift global productivity growth accelerating the transformation to a lower-carbon economy.

In the immediate period, the developed and developing nations will need to:

i. work out the quantum of stimulus necessary to offset the anticipated contraction in the economy and the consequential impact on employment;

ii. agree on the optimal content of stimulus policies to balance the short and long-term economic needs;

iii. coordinate the implementation of these measures; and

iv. develop a medium–term exit strategy to ensure that surviving this crisis does not shackle the world economy with a long-term inflation.

28.6.2 Need for a New International Financial Architecture

In today's world of increased economic and political interdependence, achieving a broad-based, rapid and sustained growth in income and employment involves even more complex policy challenges than in the past. The failure to create a truly inclusive system of global economic governance – for effecting adequate counter-cyclical policies in the short term and appropriate regulatory reform in the medium term – has frustrated a coordinated, comprehensive and inclusive international response to the current crisis. There is a growing need for a new international financial architecture.

The new international financial architecture should address at least the four core areas of reforms as follows.

i) Establishment of a credible and effective mechanism for international policy coordination to guide a more inclusive process with adequate participation and representation of developing countries in the process of policy coordination and institution of global governance;

ii) Fundamental reforms of existing systems of financial regulation and supervision leading to a new internationally coordinated framework that can avoid the excesses of the past;

iii) Reform of the present international currency system, away from the almost exclusive reliance on the US dollar, towards a multilaterally backed multi-currency system which, perhaps, over time could evolve into a single, world currency-backed system;

iv) Reforms of liquidity provisioning and compensatory financing mechanisms – backed by, among other things, multilateral regional pooling of national foreign-exchange reserves – which avoids the onerous policy conditionality attached to existing mechanisms.

Check Your Progress 2

1. Mention, in brief, the four factors responsible for the current global economic crisis.

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2. Briefly mention the main consequences of the present global economic crisis.

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3. What long term measures are needed to be taken to steer the economies from the path of the present economic crisis?

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4. What are the short term measures needed to be taken to cope with the current global economic crisis?

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28.7 IMPACT ON INDIA

It is difficult to comprehend the depth of the global crisis on a country like India which can still record growth of 6 to 7 percent during 2008-09 at a time when most developed countries are suffering from negative growth. Some sectors like exports, real estate, textiles, IT and transport equipment have been affected severely. But overall, the impact has been limited, largely due to the prompt and sustained measures taken by the RBI and the government.

The markets have stabilised and the decline of the rupee has been arrested. There has been a marginal decline in the financial resources to the commercial sector as resource mobilisation from capital markets and ECBs had been affected.

However, the massive liquidity injected into the system as a part of stimulus packages cannot translate into additional bank credit because of both supply and demand side constraints. In the gloomy economic scenario, instead of expanding commercial credit, banks prefer excessive investments in government securities as well as secondary market operations. They also tend to persist with high interest rates despite steep reductions in the RBI's benchmark rates. Following fiscal compressions, the capacity of the administration to absorb higher productive expenditure has suffered in recent years.

28.7.1 Policy Agenda For Future

While several issues relating to the future course of the economy arise, two potential stress points deserve particular attention from policymakers.

The **first** is the fiscal situation, which, over the course of the crisis, has gone from reasonably healthy to severely degraded state. The Prime Minister's Economic Advisory Council has estimated that the effective combined fiscal deficit (including fuel and fertiliser subsidies) of the centre and states would be around 8% of GDP in 2008-09. Many private forecasters put the number significantly higher, pointing to not just a sharp but a potentially irretrievable deviation from the fiscal responsibility mandate of 6 per cent. The current state of global capital market does not raise hopes of large capital inflows for sometime to come. This will put pressure on the government to provide resources for many investments (e.g. infrastructures) which were earlier expected to be financed by foreign investors. At the same time, if the growth rate does not return to the high levels of the past couple of years, revenue growth will be subdued. We may just have the makings of a painful trade-off between sustaining growth and fiscal discipline. It is quite clear that the issue of fiscal management will regain central stage in the policy formulation.

The **second** is the BOP scenario which is marked by threats to various components of inflows and outflows. Invisibles, both remittances and

service exports, face diminished prospectus, which, together with falling or stagnant merchandise exports, raise concerns of a widening current account deficit. Of course, subdued energy and commodity prices will help contain the pressure to an extent but capital flows are not going to provide anywhere near the cushion they have been extending for the past few years. Even optimistic observers of the global financial system do not believe that the flow of funds into emerging markets will return anywhere close to pre-crisis levels. Though the foreign exchange revenue position remains reasonably healthy, the overall situation is a far cry from the 'problem of plenty' that existed until 2007.

Overall, both the fiscal and BOP situation, while evolving in predictable ways during the downturn, do pose significant risk to even a moderately recovering economy. Their potential to inflict damage even as the economy begins to turn around should not be ignored.

28.7.2 What Needs to be Done?

Policy needs are to re-inflate and re-ignite demand. Although the monetary policy has been loosened considerably, it still has considerable room left to ease. For instance, short-term policy rates are still too high, because with prices set to fall further, real lending rates in India, will still be among the highest in the region. Given the long lags in transmitting policy rates to bank lending rates and then to overall activity, there is merit in getting policy rates down as quickly as possible.

Monetary policy outlined above will, however, not be enough. Its effectiveness is constrained due to rising credit risk, which is causing a divergence between policy and bank lending rates. Therefore, cutting policy rates is necessary but not sufficient to stimulate demand.

The responsibility will then have to fall on the fiscal policy. In particular, there needs to be additional stimulus in the coming year. There is an argument that there is no more fiscal space for further countercyclical policy as it would lead to the crowding out of the private sector and could lead to our debt burden becoming unsustainable. However, the arguments cannot be sustained for the following reasons.

One, in the current abnormal environment, the private sector has already been weakened as banks are not lending to them due to high credit risk. What is of concern is that corporate bond yields are very high relative to government bond yields. If monetary policy is further loosened, government yields can fall further. Additional fiscal stimulus is thus not part of the problem but part of the solution for corporates.

Two, although India's debt burden will rise, what mattes more for the long-term sustainability of debt is the differential between GDP growth and interest rates. It would be much worse for our debt ratio if growth rates were to be significantly lowered due to the negative shock. As long as fiscal expansion is temporary and helps to boost growth, it will not

endanger sustainability. India's favourable demographics will also help in bringing down the debt burden. However, the expansion should be carefully calibrated with a medium-term commitment to bring down the deficit when more favourable conditions return.

What form should a fiscal expansion take?

Increased spending by the government suffers from two problems – it takes time to filter through, and there are serious problems in implementation capacity. It is preferable to have a tax cut which is quick, equitable, and can unleash domestic demand from liquidity-constrained consumers.

To get back to 8 per cent growth, the long-term policy reform has to be more structural reform. But in the short-term, where falling domestic demand can affect India's growth process, the response has to be immediate counter-cyclical easing of both monetary and fiscal policy.

Despite the gloom on the economic growth front, once the global recovery begins, India's turnaround will be sharper and swifter due to its strong fundamental and untapped potential.

Check Your Progress 3

1. How do you assess the impact of the present economic crisis on India? Briefly outline in 50 words by identifying the sectors which have suffered a set back due to the current crisis.

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2. On the fiscal front, in what respects do you think there is scope for providing stimulus to the Indian economy to help absorb the present shock better?

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28.8 LET US SUM UP

The global economy is caught in an unprecedented crisis. The developed world is experiencing negative growth, while growth rates in developing economies have considerably slowed down. The origin of the present crisis can be traced to what has come to be known as the US sub-prime

mortgage crisis. This soon spread to different financial markets. Once the financial world was caught in the grip of a severe crisis, it was never going to be too long before the real economy got hurt. Most of the developed world is currently in the grip of recession and is struggling hard to prevent from slipping down into depression. As a part of the increasingly globalising economy, India too could not remain immune from the crisis, although the degree of damage suffered by India has been relatively low. Also, the process of recovery in India may be faster than in the rest of the world. To come out of the crisis, the world needs a well-designed internationally-coordinated action.

28.9 KEY WORDS

Sub-prime mortgages : Residential loans advanced without conforming to the criteria of 'prime' mortgages in terms of assured security.

Securitisation : A structured financial process involving pooling and repackaging of cash flow producing financial assets into securities that are then sold to investors. The name 'securitisation' is derived from the fact that the form of financial instruments used to obtain funds from the investors are securities.

Leveraging : Investing with borrowed money as a way to amplify potential gains (at the risk of greater losses).

28.10 ANSWERS/HINTS TO CYP EXERCISES

Check Your Progress 1

1. See Section 28.2 and answer.
2. See Section 28.2 and answer.
3. See Section 28.2.1 and answer.

Check Your Progress 2

1. See Section 28.4 and answer.
2. See Section 28.5 and answer.
3. See Section 28.6 and answer.
4. See Section 28.6.1 and answer.

Check Your Progress 3

1. See Section 28.7 and answer.
2. See Section 28.7.2 and answer.