



**BECE-002**  
**Indian Economic**  
**Development: Issues and**  
**Perspectives**

Block

# 7

## **SOCIAL ASPECTS OF DEVELOPMENT**

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HD Computer Craft

January, 2009

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ISBN-978-81-266-3798-0

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*Further information on the Indira Gandhi National Open University courses may be obtained from the university's office at Maidan Garhi, New Delhi-110 068.*

Printed and published on behalf of the Indira Gandhi National Open University, New Delhi, by Director, School of Social Sciences.

Laser typeset by : HD Computer Craft, WZ 34A, Lajwanti Garden, New Delhi-110046.

Printed at :

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# BLOCK 7 SOCIAL ASPECTS OF DEVELOPMENT

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## Introduction

This is the last block of the course focussing on Social Aspects of Development. The block consists of five units.

**Unit 24** is on Education and Health. Outlining the concept and significance of human capital, the unit spells out the achievements of the country in the areas of education and health over the last six decades of economic planning. Pointing out the weaknesses and deficiencies of the two systems, the unit discusses the recent initiatives taken by the government for tackling the situation in the country.

**Unit 25** is on Labour and Employment. Explaining the issues of concept and measurement involved in estimating employment and labour force in the country, the unit describes the characteristics of the Indian economy in terms of the dominance of informal sector, problems of child and bonded labour, social security for the unorganised sector workers, etc. The argument for adopting labour market flexibility features, deregulating the labour market by minimising the protective regulations in the context of efficiency and productivity concerns, is also explained.

**Unit 26** is on Gender Issues of Development. Issues of female literacy, falling sex ratio, maternal health, women empowerment, self help groups and micro finance, etc. are discussed in the unit.

**Unit 27** is on Water and Development. The significance of water as a resource for human sustenance and development, methods of augmenting utilisable water and improving water use efficiency, and the issues of flood management and water governance are covered in the unit.

The last unit of the block (**Unit 28**) is on Global Economic Crisis. A post-script unit, included to cover the recent developments in the world, it is not directly conforming to the main theme of the block. The sub-prime crisis which started in the US economy, but spread in its impact to affect all economies including India, is outlined in the unit. In the light of this, what needs to be done to minimise its impact on Indian economy is explained. An outline of the policy agenda for future is also provided.





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# UNIT 24 EDUCATION AND HEALTH

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## Structure

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- 24.3 Education Sector in India
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## 24.0 OBJECTIVES

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After reading this unit you will be able to:

- 1 explain the meaning and importance of the concept of human capital;
- 1 discuss the present state of the education sector in India;
- 1 identify the strengths and weaknesses of the education sector;
- 1 discuss the outlined future education policy for India;
- 1 appraise the present state of the health sector in India;
- 1 outline the recent initiatives of the government in the health sector of India;
- 1 explain the linkage between health and poverty;
- 1 compare the differential health status between groups (i.e. male-female, rural-urban, different states) in terms of major health indicators; and
- 1 identify the causes of poor health vis-à-vis the existing health care system and policy initiatives.

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### 24.1 INTRODUCTION

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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.

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### 24.2 CONCEPT AND SIGNIFICANCE OF HUMAN CAPITAL

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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. 21<sup>st</sup> 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 —
  - 1 positive association between proportion of people below the poverty line and the proportion of illiterate persons;
  - 1 negative correlation between female literacy and birth rate;
  - 1 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.

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## 24.3 EDUCATION SECTOR IN INDIA

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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 86<sup>th</sup> 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:

- 1 Universal access
- 1 Universal enrolment
- 1 Universal retention
- 1 Universal achievement
- 1 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.

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## **24.4 ACHIEVEMENTS OF THE EDUCATION SECTOR**

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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**

	<b>Boys</b>	<b>Girls</b>
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
<b>Dropout Rate (I-X)</b>	<b>0.4</b>	<b>63.9</b>

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**

<b>States</b>	<b>Female Teachers Per 100 Male Teachers</b>
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

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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-reaching, 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:

- 1 education for women and, in particular, girls of school-going age,
- 1 education for other backward sections of the population like scheduled castes and tribes.

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## 24.6 RECENT INITIATIVES

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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**

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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.

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## 24.8 HEALTH INDICATORS IN INDIA

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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 table 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 Orissa.

**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.

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## 24.9 CAUSES OF POOR HEALTH

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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.

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## 24.10 HEALTH CARE SYSTEM IN INDIA

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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 discard 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.

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## 24.11 POLICY INITIATIVES

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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 prevailing 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

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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.

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## 24.13 KEY WORDS

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**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.

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## 24.14 SOME USEFUL BOOKS

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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

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## 24.15 ANSWERS/HINTS TO CHECK YOUR PROGRESS EXERCISES

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### 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.



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# UNIT 25 LABOUR AND EMPLOYMENT

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## 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

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## 25.0 OBJECTIVES

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After going through this unit you will be able to

- 1 discuss the conceptual aspects of employment and labour force;
- 1 explain the dominance of informal sector in the Indian economy;
- 1 discuss the issues pertaining to labour policy and regulation;
- 1 explain the issues relating to trends and structure of wages;
- 1 discuss the measures initiated by the government to address the issues of child and bonded labour;
- 1 explain the need and rationale for launching employment guarantee schemes;
- 1 describe the issues pertaining to social security for unorganised sector workers; and
- 1 describe the aspects of labour market flexibility.



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## 25.1 INTRODUCTION

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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.

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## 25.2 LABOUR FORCE AND EMPLOYMENT: CONCEPT & MEASUREMENT

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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:

- 1 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*),
- 1 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*),
- 1 number of persons in the labour force according to the *current weekly status approach*, and
- 1 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			

**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**

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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.

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## **25.4 LABOUR POLICY AND REGULATIONS**

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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 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.

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### 25.5 WAGES: TRENDS AND STRUCTURE

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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**

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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:

- 1 The bonded labour system shall stand abolished and every bonded labourer shall stand freed and discharged from any obligation to render bonded labour.

- 1 Liability to repay bonded debt shall be deemed to have extinguished.
- 1 Property of the bonded labourer to be freed from mortgage, etc.
- 1 District Magistrates entrusted with the responsibility of implementing the provisions of the Act.
- 1 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.

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## 25.7 EMPLOYMENT GUARANTEE SCHEMES

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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.

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## 25.8 SOCIAL SECURITY FOR UNORGANISED SECTOR WORKERS

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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 Amartya 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:

- 1 Right to organise for collective bargaining;
- 1 Prohibition of discrimination on the grounds of sex, caste, religion, etc.;
- 1 Providing every unorganised sector worker with safety equipments while handling hazardous substances and equipments;
- 1 Ensuring that there is no sexual harassment in the work place;
- 1 For self-employed persons ensuring availability of credit, raw material supply and marketing facilities for goods and service produced; etc.

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## **25.9 LABOUR MARKET FLEXIBILITY**

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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**

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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.

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## 25.11 KEY WORDS

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- 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.

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## **25.12 SOME USEFUL BOOKS/REFERENCES**

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Deshpande, L.K. and Rodgers Gerry, (eds.), (1994), *The Indian Labour Market and Economic Structural Change*, Indian Society of Labour Economics, B. R. Publishing Co, Delhi.

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Rao, V.K.R.V. (ed.), (1968), *'Employment and Unemployment'*, Indian Society of Labour Economics, Allied Publishers, New Delhi.

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## **25.13 ANSWERS/HINTS TO CYP EXERCISES**

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### **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.



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# UNIT 26 GENDER ISSUES OF DEVELOPMENT

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## 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, 73<sup>rd</sup> and 74<sup>th</sup> 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

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## 26.0 OBJECTIVES

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After reading this unit, you will be able to:

- 1 explain the position of women in India in terms of their sex ratio and literacy levels;
- 1 discuss the gender issues in labour market vis-à-vis labour force participation rates and wage differentials;
- 1 discuss issues like female foeticide/infanticide and the importance of women empowerment measures to combat such social evils;
- 1 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
- 1 explain the governmental initiatives by way of enactment of constitutional amendments to improve the position of women in the Indian society.

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## 26.1 INTRODUCTION

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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.

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## **26.2 FEMALE LITERACY**

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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.*

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## 26.3 SEX RATIO

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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:

- 1 more effective implementation of PC and PNDT Act;
- 1 active monitoring of birth ratios;
- 1 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;
- 1 sustained social campaigns, financial incentives to parents giving birth to female child, free educational scholarships, reservation for females in educational institutions and jobs; and
- 1 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.*

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## 26.4 GENDER ISSUES IN LABOUR MARKET

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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 constraints 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.

- 1 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.
- 1 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:

- 1 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;
- 1 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;
- 1 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.

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## 26.5 MATERNAL HEALTH

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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, toxemia (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, Panchayat 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**

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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 8<sup>th</sup> 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 73<sup>rd</sup> and the 74<sup>th</sup> constitutional amendments effected in 1994 marks a significant step in the direction of providing legislative provision for women empowerment in India.

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## **26.7 PANCHAYATI RAJ INSTITUTIONS: 73<sup>RD</sup> AND 74<sup>TH</sup> CONSTITUTION AMENDMENTS**

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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:

- 1 elections not being held regularly;
- 1 lack of adequate transfer of powers and resources;
- 1 lack of power to generate their own resources; and

- 1 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 (Jawahar Razgar Yojana) which provided funding directly to village councils to create jobs for unemployed through public works. **Second**, it also proposed the 64<sup>th</sup> 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 64<sup>th</sup> amendment bill was rejected by Rajya Sabha.

### 26.7.2 73<sup>RD</sup> AND 74<sup>TH</sup> 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 73<sup>rd</sup> 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

The 73<sup>rd</sup> 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.

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## **26.8 SELF HELP GROUPS AND MICRO FINANCE**

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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 imbued 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

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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.

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## 26.10 KEY WORDS

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- 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

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## 26.11 SUGGESTED BOOKS FOR READING

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## **26.12 ANSWERS/HINTS TO CYP EXERCISES**

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### **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

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## 27.0 OBJECTIVES

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After reading this unit you will be able to :

- 1 explain the multifarious uses of water and their significance in economic life;



- 1 discuss the availability of water resources and its adequacy or otherwise in relation to requirements of the economy;
- 1 identify emerging problems and issues relating to water use;
- 1 develop an understanding about the methods to augment the supply of utilisable water in the economy;
- 1 state the measures that can be adopted to improve water use efficiency in the economy; and
- 1 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.

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## **27.1 INTRODUCTION**

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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.

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## **27.2 WATER AS A RESOURCE**

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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.

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### 27.3 WATER RESOURCES IN INDIA

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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)**

<b>Agency</b>	<b>Estimate in bcm</b>	<b>Deviation from 1869 bcm</b>
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<sup>3</sup>) is termed as a **water stressed** condition while if per capita availability falls below 1000 m<sup>3</sup>, 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<sup>3</sup> as against 6103 m<sup>3</sup> in Russia, 4733 m<sup>3</sup> in Australia, 1964 m<sup>3</sup> in the USA and 1111 m<sup>3</sup> in China. It may touch 400 m<sup>3</sup> 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
<b>TOTAL</b>	<b>375.5</b>	<b>100.0</b>	<b>593</b>	<b>100</b>

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.

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## 27.4 WATER REQUIREMENT

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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 $\text{bm}^3$ (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
<b>TOTAL</b>	<b>813</b>	<b>843</b>	<b>1180</b>

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.

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## 27.5 EMERGING PROBLEMS AND RESPONSES

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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**

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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 Brahmaputra, 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**

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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:

- 1 Completion of dam/head works ahead of canals;
- 1 Dilapidated irrigation systems;
- 1 Unlined canal systems with excessive seepage;
- 1 Lack of field channels;
- 1 Lack of canal communication network;
- 1 Lack of field drainage;
- 1 Improper field levelling;
- 1 Absence of volumetric supply;
- 1 Inadequate extension services;
- 1 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.

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## **27.8 ON-FARM WATER MANAGEMENT**

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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.

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## **27.9 MEETING INDUSTRIAL WATER NEEDS**

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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.

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## **27.10 RURAL AND URBAN DRINKING WATER**

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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 unsustainable 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.

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## **27.11 FLOOD MANAGEMENT**

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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**

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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.

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### **27.13 NATIONAL WATER POLICY**

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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.

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## 27.14 LET US SUM UP

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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).

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## 27.15 KEY WORDS

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<b>Bio-sphere</b>	: Regions of the surface and atmosphere of the earth occupied by living organisms.
<b>Aquifer</b>	: A body of permeable rock able to hold or transmit water.
<b>MIS (management information system)</b>	: Refers to the group of information management methods related to the automation (or support) of human decision making.
<b>Weirs, Rule Curves &amp; Sluices</b>	: 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.

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## 27.16 SOME USEFUL BOOKS

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Kaushik Basu (ed.)	<i>The Oxford Companion to Economics in India</i>
M.C. Chaturvedi	<i>Second India Series, Water</i>
A . Agarwal and S. Narain	<i>State of India's Environment</i>
Government of India	<i>Economic Survey</i>
Planning Commission	<i>Eleventh Five Year Plan 2007-12</i>

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## **27.16 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES**

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### **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

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## 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

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## 28.0 OBJECTIVES

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After going through this unit you will be able to:

- 1 trace the origins of the current global economic crisis;
- 1 assess the impact of the crisis on developing economies like India;
- 1 describe the measures that have been taken to deal with the crisis; and
- 1 articulate the elements of an international coordinated action demanded by the crisis.

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## 28.1 INTRODUCTION

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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.

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## 28.2 ORIGIN OF THE CRISIS

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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 collateralised 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.

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## 28.3 WEB OF CRISIS

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The global crisis is an interwoven web of three crises:

**First: The collapse of the consumer spending:** American consumers

represent 70% of the economy. Traumatized 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**

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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.

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## 28.5 IMPACT OF THE CRISIS

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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.

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## 28.6 WHAT IS TO BE DONE

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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

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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 matters 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

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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.

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## 28.9 KEY WORDS

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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).

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## 28.10 ANSWERS/HINTS TO CYP EXERCISES

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### 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.



