



Indira Gandhi National Open University
School of Social Sciences

BECE-016
ECONOMIC DEVELOPMENT:
COMPARATIVE ANALYSIS AND
CONTEMPORARY ISSUES



**Emerging Challenges and Issues of
Development in the 21st Century**

5

“शिक्षा मानव को बन्धनों से मुक्त करती है और आज के युग में तो यह लोकतंत्र की भावना का आधार भी है। जन्म तथा अन्य कारणों से उत्पन्न जाति एवं वर्गगत विषमताओं को दूर करते हुए मनुष्य को इन सबसे ऊपर उठाती है।”

— इन्दिरा गांधी

“Education is a liberating force, and in our age it is also democratizing force, cutting across the barriers of caste and class, smoothing out inequalities imposed by birth and other circumstances.”

— Indira Gandhi

Block

5

EMERGING CHALLENGES AND ISSUES OF DEVELOPMENT IN THE 21th CENTURY

UNIT 18

Globalisation, Liberalisation and Privatisation 5

UNIT 19

International Economic Issues 15

UNIT 20

Current Issues of Sustainable Development 41

UNIT 21

Technological Challenges (ICT Developments) 56

UNIT 22

Governance and Decentralisation 75

Expert Committee

Prof. V.P. Tripathi
Professor of Economics & Director
DDU Institute of Rural Development
Dr. B.R. Ambedkar University
Paliwal Park
Agra (U.P.)

Prof. H.S. Yadav
Head
Department of Regional Planning and
Economic Growth
Barkatullah University
Bhopal

Prof. P. Ramaiah
Professor of Economics
405, Lumbini Apartment
Dharam Karam Road
Ameer Pet
Hyderabad

Prof. G.Nancharaiya
Deptt. of Economics
University of Hyderabad
Hyderabad, A.P

Prof. Ashok Mittal
Professor of Economics
Aligarh Muslim University
Aligarh (U.P.)

Prof. Rajendra Gupta
Professor and Head
B-34, New University Campus
Jammu University
Jammu Tawi

Prof. Sudarshan Rao
Professor of Economics
Department of Economics
Andhra University
Vishakhapatnam (A.P.)

Prof. Vishwanatha
Professor of Economics
Mangalore University
Mangalagangothri

Dr. Manjushri Gupta
F-25, UIT Scheme
Near Govt. Dispensary
Dhoola Bhata, Ajmer
Rajasthan,

Prof. A. K. Singh
Director
Giri Institute of Development studies
Sector 'O', Aliganj Housing Scheme
Lucknow U.P.

Prof. Pulin B. Nayak
Department of Economics
Delhi School of Economics
Delhi University
Delhi

Prof. P. K. Chaubey
Professor of Economics
Indian Institute of Public Administration
Indraprastha Estate
Ring Road, New Delhi

Dr. B. Mahavir
S-389, New Rajendra Nagar
New Delhi

Prof. V.R. Panchmukhi
D-4/2, Welcome Group
CGHS, Sector-III
Plot No. 6, Dwarka
New Delhi

Prof. Gopinath Pradhan
School of Social Sciences
IGNOU, New Delhi

Prof. Anjila Gupta
School of Social Sciences
IGNOU, New Delhi

Prof. Narayan Prasad
School of Social Sciences
IGNOU, New Delhi

Prof. Madhu Bala
School of Social Sciences
IGNOU, New Delhi

Dr. K. Barik
School of Social Sciences
IGNOU, New Delhi

Dr. B. S. Prakash
School of Social Sciences
IGNOU, New Delhi

Sh. Saugato Sen
School of Social Sciences
IGNOU, New Delhi

Course Coordinator

Prof. Anjila Gupta
Prof. of Economics
IGNOU
New Delhi

Course Editor

Prof. P. K. Chaubey
Professor of Economics
Indian Institute of Public Administration
New Delhi

Block Coordinator

Prof. Anjila Gupta
Professor of Economics
IGNOU
New Delhi

Block Preparation

Unit 18, 19, 20, 21 and 22
Prof. O.P. Shukla
Professor & Head
Department of Economics
National Defence Academy
Khadagwasla, Pune

Production

Mr. Manjit Singh
Section Officer (Pub.)
School of Social Sciences
IGNOU, New Delhi

Cover Design

ADA Graphics
New Delhi

Word Processing

Mr. Manas Piyush

January, 2011

© Indira Gandhi National Open University, 2011

ISBN-978-81-266-5149-8

All rights reserved. No part of this work may be reproduced in any form, by mimeograph or any other means, without permission in writing from the Indira Gandhi National Open University.

Further information about the School of Social Sciences and the Indira Gandhi National Open University courses may be obtained from the University's office at Maidan Garhi, New Delhi-110068.

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

Laser typeset by Mctronics Printographics, 27/3 Ward No. 1, Opp. Mother Dairy, Mehrauli, New Delhi-30

Printed at : Vijayalakshmi Printing Works Pvt. Ltd., B-117, Sector-5, Noida-201301

BLOCK 5 EMERGING CHALLENGES AND ISSUES OF DEVELOPMENT IN THE 21st CENTURY

The present block is, as part of the course Economic Development : Comparative Analysis and Contemporary Issues, on the five units as mentioned below:

Unit 18, Globalisation, Liberalisation and Privatisation, explains the meaning of globalisation and discusses its impact. This also makes an attempt to analyse the linkages of liberalisation, privatisation and globalisation.

Unit 19, International Economic Issues discusses the debt crisis, terms of trade across different groups of countries and the different aspect of exchange rate regime. It describes the pertinent issues in the light of fast changing global economic environment. It also discusses the emerging challenges and their optimum solutions.

Unit 20, Current Issues of Sustainable Development deals with the policy approach that has gained quite a lot of popularity in recent years, especially in international circles. The overriding approach to development has become to protect the environment. It discusses the real purpose of sustainable development, various facets of sustainable development. This unit also explains the various strategies for sustainable development. In India various efforts have been made under different five year plans. The same has been explained in this section.

Unit 21, Technological Challenges (ICT Developments) deals with the role of Information Technology (IT) in the new millennium which is instrumental in enhancing efficiency, competitiveness and growth in over all economies. It also deals with the contribution of IT towards development. The various issues and problems of ICT are also discussed. The exports of IT services and contribution to employment and GDP growth have been explained. The role of e-governance and various models of development are also described.

Unit 22, Governance and Decentralisation deals with the issues of democratisation and good governance, the system of delivery of public goods and the very role of democratic institutions. It also deals with the various issues relating to good governance. The recent initiatives taken by the government to promote good governance and decentralisation have also been analysed.

UNIT 18 GLOBALISATION, LIBERALISATION AND PRIVATISATION

Structure

- 18.0 Objectives
- 18.1 Introduction
- 18.2 Internationalisation
- 18.3 Transnationalisation
- 18.4 Universalisation
- 18.5 Globalisation in Economic Terms
- 18.6 Impact of Globalisation
- 18.7 Let Us Sum Up
- 18.8 Key Words
- 18.9 Answers and Hints to Check Your Progress
- 18.10 Further Readings

18.0 OBJECTIVES

After going through this unit, you should be able to:

- understand the meaning of globalisation.
- find out linkage of globalisation.
- find out linkage of liberalisation privatisation and globalisation.
- examine the impact of globalisation.

18.1 INTRODUCTION

Broadly speaking, the term 'globalisation' means integration of economies and societies through cross country flows of information, ideas, technologies, goods, services, capital, finance and people. The essence of globalisation is connectivity. Cross border integration can have several dimensions— cultural, social, political and economic. The term globalisation is used in the more limited sense of economic integration which can happen through the three channels of (a) trade in goods and services, (b) movement of capital and (c) flow of finance. Besides, there is also the channel through movement of people.

Globalisation is defined as a higher stage of internationalisation. It can be considered as the predominance of world market orientation in trade, investment and other transactions, the special and institutional integration of the markets and the emergence of global problems, like environmental degradation, population growth, the management of which requires global cooperation. In the spearhead of globalisation process are these international money capital and information flows, over which the national legislations have little or no control in the era of liberalisation.

In order to understand the different opportunities and conflicts claimed to be the consequences of globalisation one can find the analytical disintegration of the

process into internationalisation, transnationalisation and universalisation, more relevant and scientific than the use of the globalisation concept as an overall intellectual strait jacket.

18.2 INTERNATIONALISATION

The historical roots of globalisation are in the internationalisation process for the perspectives of the countries, internationalisation developed in two main directions. The inward direction of the process has been the increase (or penetration) of the external sources of goods, capital, services, technology, information etc. in the domestic consumption of any given country, the outward direction of the process has been the predominance of world market orientation countries and global expansion of firms in trade, investment and other transaction. Internationalisation in the essence promotes economic progress. It increases the exchange of material and intellectual values and has been beneficial to contacts among peoples.

18.3 TRANSNATIONALISATION

A very important component of the internationalisation process and one of the main sources of globalisation is transnationalisation, in the framework of which the given proportion of output, consumption, exports, imports, and income distribution of a country subordinated to the decision of international centers, outside the frontiers of the country. The central forces of the process are the transnational corporations, which are the results and at the same time the main actors of the internationalisation through foreign direct investments, global production and sourcing. The process of globalisation of the world economy accelerated during the past decades as the diverse markets, particularly capital, technology and goods but also to a certain extent of labour became increasingly inter-connected and integrated into the multiplier networks of international corporations. These are the most important organisations, which are constantly creating a number of new linkages, in out-put, product development, design, product universalisation and marketing. These transnational economic centers of powers are pushing for constant expansion for new markets and for relatively liberal and uniform values for the environment of business. They are also serving as important instruments for the globalisation of the markets with the spread of the information infrastructure, which increases the speed and reduces the cost of transactions. While a certain number of trans national corporations are in the traditional commodity sector, the international firms contributed to the industrial structuring countries, through the establishment of new industries, particularly car manufacturing, petrochemicals, machinery, electronics, etc. and to the modernisation of traditional industries, like textile and food processing.

18.4 UNIVERSALISATION

Universalisation is characterizing on one hand the growing identity or similarity of national economic regulations, institutions and also the convergence of policies across national boundaries due to multilaterally agreed patterns or the spread of certain values and mode of doing things, including the identical postulates of the new technology and homogenisation and standardisation of production and consumption. Another dimension of universalisation is the increasingly universal approach to human rights, the universalisation of culture by mass media. The latter is in serious conflicts with the diverse culture of the globes.

Globalisation in economic terms, in fact is nothing more than integrating national markets with global markets. It has some very clear implications.

- 1) Globalisation puts an emphasis on consumer concern, delivering to the consumer the very best quality in the most cost efficient manner possible.
- 2) Globalisation therefore encourages competition within or beyond the nation to earn consumer support. It is this competition that results in continuous global search for what the consumer needs and in going programme as how to create and deliver the best products. In other words, it is based on Darwinian Selection and Survival of the Fittest Theory.
- 3) In search or existence, globalisation leads to partnership and network ultimately leading to identifying who can do what best thereby building on each other's strengths. Globalisation, therefore, becomes a cooperative venture also where organisations and people complement and supplement each other in the service of the consumer. As a result globalisation helps to synergies the roles of each country.
- 4) Globalisation leads to quality assurance and it is as a guarantee of their quality that manufacturers brand their products trying continuously to upgrade quality at reduced unit costs.
- 5) Globalisation, therefore, relies on the quality of the people, their vision and their commitment happen to be the very foundation of globalisation as all initiatives, innovations, solutions ultimately rest on the outstanding quality of the people.
- 6) Globalisation really means a borderless world where there is a free exchange of money, ideas and expertise, fostering partnerships and alliances to serve consumer best.
- 7) Globalisation thus means least interference by the government in economic activities so that the talents of the people get their fruition.
- 8) In the ultimate analysis globalisation leads to consumerism.

18.6 IMPACT OF GLOBALISATION

Globalised economic system has an inherent bias in favour of the large, the global, the competitive, the resource extractive and the short-term. But our challenge is to create a global system that is biased towards the small, the local, the cooperative, the resource-conserving and the long term. The crisis of deepening poverty, growing inequality, environmental devastation and social disintegration in the developing and developed countries for the world to survive. Surely a rational system of truly free global trade can be built only upon the free and equitable use of all global natural resources including land and minerals, the free global movement of all factors of production including labour and capital, and the global allocation of resources and benefits by a democratic and just global authority.

It is true that the market, national and international, is a gigantic voluntary mechanism of choice, rejection, and adjustment, another kind of democracy in which people of all strata vote with their money. But it has serious limitations and imperfections. To moderate its imperfections, to help bring about economic justice, to regulate the market's negotiations, the polity and state need to play: (a) regulatory role, not that of a failed monopolist and an unproductive drainer of wealth; (b) a promoter of infrastructures to enable the people's efficient participation in the

market; (c) to promote human development in education and health to enable more millions to enter the market as employers and employees, and as consumers with a higher quality of life and (d) provide law and order for the people and market to grow in peace. Polity and society also need to encourage the growth of intermediate organisations between state and market for the growth of a civic society.

It must be noted that in different roles, the market and the polity have complementary roles, especially in democratic politics. Both are imperfect human institutions; only the market is more easily correctable in a functioning democracy—not state capitalisation—than the state of most polities in the real world.

There is the inherent efficacy and efficiency of the market-mechanism. No world state exists to match the world market. However, imperfect, the market provides the world with a better-coordinated supply of a thousand goods and services than the U.N.'s services to peace, international order, security or health and culture. No government or international organisation can match the systematic coordination of millions, which goes to make the market, that silent, unsung institution. Indeed, we cannot close our eyes to the wonders of the market.

It is however, preposterous to say that it benefits all in the economy equally and equitable and is flawless. It has its own quota of ills. What we need to-day is a clear perception about the roles of the two—the state and the market. This need not be mutually exclusive; their roles may in fact be complimentary. We must not forget that the market benefits the “haves” alone, and hence the state must come forward to take care of the “have-nots”. Hence, there has been a synthesis of state control and marketisation and liberalisation.

The emphasis on free trade widened to include flow of investment and finance. The world economy became more and more structurally inter dependent that the use of the concept ‘global’, as distinct from ‘international’, became acceptable and justifiable.

Technological developments in computing and tele-communications have reduced transaction costs and these costs will continue falling further. Globalisation is thus a super-national phenomenon, which transcends national frontiers. It has shrunk the world through the enmeshing bonds of new technology in the context of ‘global neighbourhood’, ‘global village’ or the ‘world without borders’. It is not the same as increasing degree of openness of countries witnessed earlier. It involves fast growth of trade in goods and services, much higher growth in international financial transactions, very fast growth in foreign direct investment, deeper form of internationalisation resulting from production networks of multinationals, emergence of global markets, rapid diffusion of knowledge and technology, globalised communication and transport networks and changes in thinking and model of operation of international institutions.

18.7 LET US SUM UP

The process of globalisation has continued and will intensify further. At micro-level, there is more and more pressure on business enterprises, from both competitors and consumers, to continuously innovate and improve quality of products. As the product life-cycle has reduced, there is need for more expenditure on R and D and searching for new markets. For increasing the core competencies, there is need for combining it with those of others through mergers and acquisitions. As the consumers reorient their choices to superior products and services, the producers also have the capacity for continuous product and process innovation through technological and organisational improvements, especially through computer aided manufacturing, and the link between the producers and consumers is quickly established through electronic media, internet and E-commerce. At macro-

huge and unbearable. Information technology has made it impossible to keep national barriers. Actions of the government are becoming increasingly interdependent. The increased international economic interdependence further reduces the scope of individual nations to pursue independent economic objectives. Therefore the need for effective and accountable global governance has become increasingly obvious. The dictum that 'poverty anywhere is threat to prosperity ever where' has become all the more relevant under the globalised poverty regime. 'Bigger my neighbour' approach has to be abandoned. There is need to change the situation. 'Winners and losers' to 'win-win' situation. The global awareness about common issues like environmental pollution, ozone depletion, climatic changes, loss of biodiversity, infectious diseases, drug smuggling and other such public goods which have cross border spillover effects is increasing, which also require global cooperation. IMF, World Bank and WTO have to play the role of international public sector for equitable distribution of the benefits of globalisation. All economic ills like poverty, unemployment, childlabour have also to be globally owned. Let international society make contributions to eliminate child labour and improve the environment rather than imposing bans on imports of commodities produced by child labour or on the basis of environmental standards. The workers in developing countries strive for livelihood, whereas of developed countries enjoy decent standard of living. Let some benefits of globalisation trickle down to the developing countries also. The developed countries should not treat third world only a market and 'reverse economic dependence' should become 'mutual economic dependence'. The marginalisation of developing countries and the poor within these countries have to be avoided for the success of the globalisation. All countries must coordinate to minimize the demerits of globalisation.

As the developing countries only account for 5% of the R and D expenditure of the world, they can benefit from globalisation through transfer of technology. However, these countries should be permitted to invite multinationals and FDI as per their requirements and Trade Related Investment Measures (TRIMS), Most Favoured Nation Treatment (MFN) and other clauses may have to be relaxed.

A revisionist school, called post-Washington consensus' advocates a dynamically changing mix of state-market interactions, in which government play a significant role in investment, finance, human capital formation, acquisition of technology, institution building and reforms. 'Just liberalise and go home' policy will not work in case of developing countries. Governments will have to encourage that pattern of growth, which makes productive use of labour- the most abundant assets of the poor- through market incentives, social and political institutions, infrastructure and technology, etc. Well targeted transfers, safety nets, investment in sectors directly relevant for the poor including rural and urban infrastructure, primary and secondary education, basic health, social assistance and micro-finance, all have pro-poor effects. The 'invisible hand' has to be supplemented through public policies so that the losers from the market forces are compensated by the gainers. The losers are also to be helped to adjust to technological changes through retraining programmes. State has to play market friendly role by conducting surveys to know 'where the shoe pinches', promoting institutions, and increasing capabilities of private sector to prevent market failures. There is need for clear and better understanding of the functioning of the markets, incentives, property rights and organisational changes, etc.

As the process of globalisation is accelerating, society is feeling more insecure and crisis of confidence is building up. Therefore, credibility of the policies and economic reforms has become the keyword for the success of globalisation.

One of the reasons globalisation is being attacked is that it seems to undermine traditional values. The conflicts are real and to some extent unavoidable. Economic growth including that induced by globalisation will result in urbanisation, undermine

traditional rural societies. Unfortunately, so far, those responsible for managing globalisation, while praising these positive benefits, all too often have shown an insufficient appreciation of this adverse side, the threat to cultural identity and values. This is surprising, given the awareness of the issues within the developed countries themselves. Europe defends its agricultural policies not just in terms of those special interests, but to preserve rural traditions. People in small towns everywhere complain that large national retailers and shopping malls have killed their small businesses and their communities.

The pace of global integration matters: a more gradual process means that traditional institutions and norms, rather than being overwhelmed, can adopt and respond to the new challenges.

One equal concern is what globalisation does to democracy. Globalisation, as it has been advocated, often seems to replace the old dictatorship of national elites with new dictatorship of international finance. Countries are effectively told that if they do not follow certain conditions, the capital markets or the IMF will refuse to lend them money. They are basically forced to give up part of their sovereignty, to let capricious capital markets, including the speculators whose only concerns are short-term rather than the long term growth of the country and the improvement of living standards, "discipline" them, telling them what they should and should not do.

Today, globalisation is being challenged around the world. There is discontent with globalisation, and rightfully so. Globalisation can be a force for good: the globalisations of ideas about democracy and of civil society have changed the way people think, while global political movements have led to debt relief and the treaty on land mines. Globalisation has helped hundreds of millions of people attain higher standard of living, beyond what they, or most economists thought imaginable but a short while ago. The globalisation of the economy benefited country that took advantage of it by seeking new markets for its exports and by welcoming foreign investment. Even so, the countries that have benefited the most took change of their own destiny and recognised the role government can play in development rather than relying on the notion of a self-regulated market that would fix its own problems. For millions of people globalisation has not worked. Many have actually been made worse off, as they have seen their jobs destroyed and their lives become more insecure. They have felt increasingly powerless against forces beyond their control. They have seen their democracies undermined, their cultures eroded.

If globalisation continues to be conducted in the way that it has been in the past, if we continue to fail to learn from our mistakes, globalisation will not only succeed in promoting development but will continue to create poverty and instability. Without reform, the backlash that has already started will amount and discontent with globalisation will grow.

This will be a tragedy for all of us, and especially for the billions who might otherwise have benefited. While those in the developing world stand to lose the most economically, there will be broader political ramifications that will affect the developed world too.

Today, the system of capitalism is at a crossroads just as it was during the Great Depression. In the 1930s capitalism was saved by Keynes, who thought of policies to create jobs and rescue those suffering from the collapse of global economy. Now, millions of people around the world are waiting to see whether globalisation can be reformed so that its benefits can be more widely shared.

Thankfully, there is a growing recognition of these problems and increasing political will to do some things. Almost everyone involved in development, even those in the Washington establishment, now agrees that rapid capital market liberalisation

without accompanying regulation can be dangerous. They agree that the excessive tightness in fiscal policy in the Asian crisis of 1997 was a mistake.

The developing countries must assume responsibility for their well-being themselves. They can manage their budgets so that they live within their means, meager though that might be, and eliminate the protectionist barriers which, while they may generate large profits for a few, force consumers to pay higher prices. They can put in place strong regulations to protect themselves from speculators from the outside or corporate misbehaviour from the inside. Most important, developing countries need effective governments, with strong and independent judiciaries, democratic accountability, openness and transparency and freedom from the corruption that has stifled the effectiveness of the public sector and the growth of the private.

Development is not about helping a few people get rich or creating handful of pointless protected industries that only benefit the country's elite. Development is about transforming societies, improving the lives of the poor, enabling everyone to have a chance at success and access to healthcare and education.

This sort of development will not happen if only a few people dictate the policies a country must follow. Making sure that democratic decisions are made means ensuring that a broad range of economists, officials, and exports from developing countries are relatively involved in the debate. It also means that there must be broad participation that goes well beyond the experts and politicians.

It is not easy to change how things are done. Bureaucracies, like people, fall into bad habits, and adopting to change can be painful. But the international institutions must undertake the perhaps painful changes that will enable them to play the role they should be playing to make globalisation work, and work not just for the well-off and the industrial countries, but for the poor and the developing nations.

Check Your Progress

1) What do you mean by globalisation?

.....
.....
.....
.....

2) How does globalisation lead to higher stage of internationalisation?

.....
.....
.....
.....

3) What is the relevance of universalisation in the process of globalisation?

.....
.....
.....
.....
.....

4) Explain economic implications of globalisation.

.....
.....
.....
.....

5) Examine economic implications of globalisation for a country such as India.

.....
.....
.....
.....

18.8 KEY WORDS

- Transnationalisation** : expansion of transnational (Multinational) Companies
- Liberalisation** : diluting stringent normal and regulations.
- Privatisation** : withdrawal of Government from some of the public sector undertakings through disinvestment.
- Clean activities** : research and Development, Invention, Innovation. Activities without creation of pollution and use of non renewable sources of energy.
- International Competitiveness** : achievement of comparative advantage based on inherited resources (natural resources), Created resources (Infrastructure) and Institutional reforms by a country at the global level.

18.9 ANSWER AND HINTS TO CHECK YOUR PROGRESS

- 1) Refer to Introduction
- 2) Refer to 18.2
- 3) Refer to 18.3 and 18.4
- 4) Refer 18.5
- 5) Refer to 18.6 and 18.7

18.10 FURTHER READINGS

Baldev Raj Nayar, *Globalisation and Nationalism* (Sage Publications, 2001, New Delhi),

Clem Tisdell, "Economic Globalisation: Background and An Overview" *Indian Journal of Quantitative Economics*, (Vol-14, No1, 1999),

Joseph Stiglitz, *Globalisation and its Discontents* (Penguin Books, 2002),

K.R.Gupta, edit *Liberalisation and Globalisation of Indian Economy* (Atlantic Publishers, 2002, New Delhi),

P. Jegadish Gandhi, ed. *Globalised Indian Economy* (Deep and Deep Publisher, 2004, New Delhi).

UNIT 19 INTERNATIONAL ECONOMIC ISSUES

Structure

- 19.0 Objectives
- 19.1 Introduction
- 19.2 The Scale of the Debt Crisis
- 19.3 Causes of the Debt Crisis
 - 19.3.1 A Continuing Legacy of Colonialism
 - 19.3.2 Mismanaged Lending
 - 19.3.3 The World's Poor are Subsidising the Rich
 - 19.3.4 Backbone to Globalisation
- 19.4 What are the Costs of the Debt Crisis?
- 19.5 Terms of Trade
 - 19.5.1 Concepts and Significance
 - 19.5.2 Foreign Trade in India
 - 19.5.3 India's Trade with Different Countries/Alliances and Terms of Trade
 - 19.5.4 India's Trade with Different Countries/Alliances
 - 19.5.5 India-Europe Trade and Terms of Trade
 - 19.5.6 Globalisation and Emerging Trends in Terms of Trade
 - 19.5.7 Trade and Inequality
 - 19.5.8 Emergence of North American Free Trade Agreement (NAFTA)
- 19.6 Exchange Rate Volatility
 - 19.6.1 Exchange Rate Risk for Traders
 - 19.6.2 Volatility and the Choice of Exchange Rate System
- 19.7 Let Us Sum Up
- 19.8 Self Assessment Questions
- 19.9 Key Words
- 19.10 Answer and Hints to Check Your Progress
- 19.11 Further Readings

19.0 OBJECTIVES

After going through this unit, you should be able to:

- understand the key international economic issues like debt crisis, terms of trade deterioration, volatile exchange rates and capital flows; and
- explain causes and remedial measure of debt crisis, terms of trade deterioration and volatile exchange rates.

19.1 INTRODUCTION

To be fully accurate, one should refer to the multiple debt crises that exist in the world today because of different reasons. For our purposes, however, the “debt crisis” will refer to the external debt, both private and public, of developing countries, which has been growing enormously since the early 1970s. Our focus

should obscure, however, the other debt crises that trouble much of the global economy: the budget deficits of the United States government, its balance trade deficits, and the insolvency of many of its savings and loans institutions. These crises are highly interconnected, particularly as they relate the issues of interest rates, export values, and confidence in the international banking system. The “debt crisis”, then, is a global phenomenon, and an attempt to understand it fully needs a global perspective. Thus, when a nation finds it difficult to meet its repayment obligations on continued basis leads to the stage of debt crisis.

19.2 THE SCALE OF THE DEBT CRISIS

Consider the following:

- In 1970, the world’s poorest countries (roughly 60 countries classified as low-income by the World Bank), owed \$25 billion in debt. By 2002, this was \$523 billion.
- For Africa, In 1970, it was just under \$11 billion By 2002, that was over half, to \$295 billion.
- Debts owed to the multilateral institutions such as the IMF and World Bank is currently around \$153 billion.
- For the poorest countries debts to multilateral institutions is around \$70 billion.

\$550 billion has been paid in both principal and interest over the last three decades, on \$540bn of loans, and yet there is still a \$523 billion dollar debt burden.

For poor countries, third world debt is a crucial issue. Crippling third world debt kills:

- Rich countries have pressured these poor countries to sacrifice health and education spending and prioritise on debt repayment;
- Rich countries have protected their agricultural markets while forcing poor countries to open theirs, leading to dumping and flooding of products, driving local people out of businesses and livelihoods.
- For rich countries, the debt figures involved are tiny;
- For poor countries, these same figures are a matter of life and death:
 - Extrapolating from UNICEF data, as many as 5,000,000 children and vulnerable adults may have lost their lives in sub-Saharan Africa as a result of the debt crunch since the late 1980s.
 - The United Nations fears another 3 million children will die in the poorest countries of sub-Saharan Africa by 2015, the target for the Millenium Development Goals to cut poverty by half.
 - Some 11 million children die each year around the world, not just Africa, due to similar conditions of poverty and debt.
 - These statistics typically define children as those under the age of five. What about 6, or 7, for example?

Check Your Progress 1

- 1) For poor countries, third world debt is a crucial issue. Why?

.....
.....

19.3 CAUSES OF THE DEBT CRISIS

Third world debt has long been recognised as a major obstacle to economic, social and human development. Many other problems have arisen because of the enormous debt that third world countries owe to rich countries. Debt has impeded sustainable human development, security and political or economic stability. This has happened because of the following things:

19.3.1 A Continuing Legacy of Colonialism

The history of third world debt is the history of a massive siphoning-off by international finance of the resources of the most deprived peoples. This process is designed to perpetuate itself thanks to a diabolical mechanism whereby debt replicates itself on an ever greater scale, a cycle that can be broken only by canceling the debt.

Many poor countries today have started their independent status with heavy debt burdens imposed by the former colonial occupiers. South Africa, as an example, has found that now has to pay for its own past repression: the debts incurred during the apartheid era are now to be repaid by the new South Africa.

Check Your Progress 2

- 1) Give an example to show that a Continuing Legacy of Colonialism is a cause of debt crisis.

.....

.....

.....

.....

19.3.2 Mismanaged Lending

Further debt resulted from mismanaged spending and lending by the West in the 1960s and 1970s.

1960s saw the US spends more than it had, resulting in the printing of more dollars.

- Oil-producing countries, pegged to the dollar were affected as the value of the dollar decreased.
- In 1973, the oil-producing countries hiked their prices as a result, earning a lot of money, which they put into western banks.
- Interest rates started to plummet resulting in more lending by banks to try and prevent a crisis.
- A lot of the borrowed money went to western-backed dictators, resulting in little benefit for most people.
- In 1982 Mexico defaulted on its debt payment, threatening the international credit system.
- The IMF and World Bank stepped in to help Mexico and other nations facing similar problems, prescribing their loans and structural adjustment policies to ensure debt repayment.

- The poor have suffered the most as a result of the harsh conditions of structural adjustment.

Most loans to the third world have to be paid back in hard currencies (which do not usually change too much in value, e.g. the Japanese Yen, the American Dollar, etc.)

- Poor countries have soft currencies (values of which can fluctuate).
- Debt crises can also occur just by the value of the developing country's money going down, which can be due to a variety of other inter-related factors.
- Paying off loans implies earning foreign exchange in hard currencies.
- Combined with falling export prices for many poor countries, debts become even harder to pay off.
- Refinancing loans implies taking on new debts to service the old ones.
- Structural adjustment advice in the past from the IMF and others, has led to the cut back on important spending such as health, education, in order to help repay loans. This has implied a downward spiral and further poverty.

19.3.3 The World's Poor are Subsidising the Rich

Another cause for large scale debt has been the corruption and embezzlement of money by the elite in developing countries (who were often placed in power by the powerful countries themselves). These moneys are often placed in foreign banks (and used to loan back to the developing countries). Many loans also come with conditions, that include preferential exports etc. In effect then, more money comes out of the developing countries than is given in. This depresses wages even further due to the spiraling circle downwards to ensure that enough exports are produced.

The world's poor are subsidising the rich. The net gain to the over-capitalized countries (loss to the under-capitalized ones) of \$418 billion between 1982 and 1990 is more than double what was spent to rebuild Europe after World War II. Capital flight from Mexico between 1979 and 1983 alone was \$90 billion – an amount greater than the entire Mexican debt at that time.

Check Your Progress 3

- 1) How is corruption and embezzlement of money by the elite in developing countries leading to large scale debt?

.....
.....
.....
.....

19.3.4 Backbone to Globalisation

The economic decisions and influence in various international agreements, treaties and institutions by the wealthy and powerful nations also help form the backbone of today's globalisation. That such immense wealth and prosperity for some have come at a time when most nations in the world have steeped into further poverty and debt is no coincidence. The policies of those who have the power and influence have been successful to help raise standards for some in their own nations, but at a terrible cost.

Rich nations as well as poor incur debts, but often the wealthier and more powerful ones are able to use various means to avoid getting into the dilemmas and problems the poor nations get into.

19.4 WHAT ARE THE COSTS OF THE DEBT CRISIS?

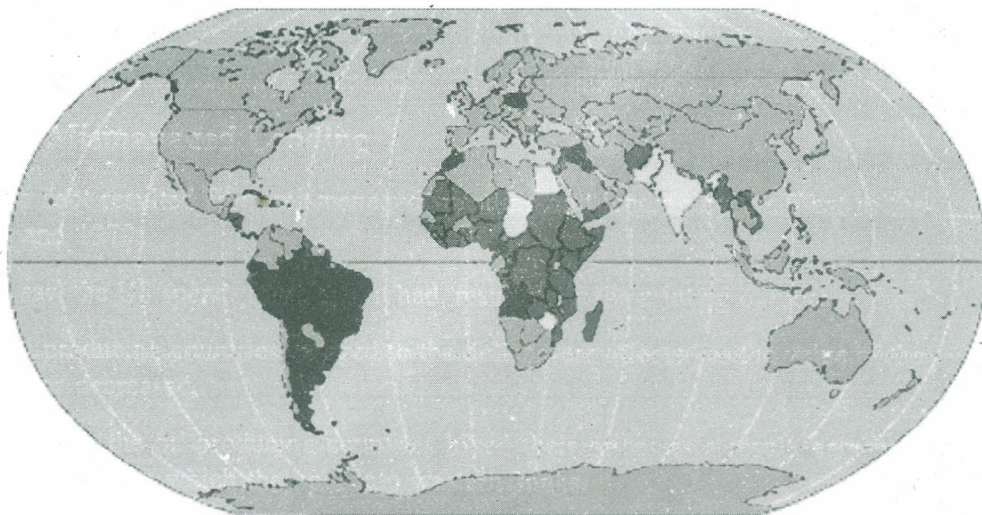
This explosion of debt has had numerous consequences for the developing countries, here we focus on only three consequences: the decline in the quality of life within debtor countries, the political violence associated with that decline, and the effects of the decline on the developed world. The first, and most devastating, effect of the debt crisis was, and continues to be, the significant outflows of capital to finance the debt. According to the World Bank: "Before 1982 the highly indebted countries received about 2 percent of GNP a year in resources from abroad; since then they have transferred roughly 3 percent of GNP a year in the opposite direction." In 1988, the poorer countries of the world sent about \$50 billion to the rich countries, and the cumulative total of these transfers since 1984 is nearly \$120 billion.

Per capita consumption in the highly-indebted countries in 1987, as measured by national accounts statistics, was no higher than in the late 1970s; if terms of trade losses are taken into account, there was a decline. Per capita investment has also fallen drastically, by about 40 percent between 1980 and 1987. It declined steeply during 1982-83, but far from recovering subsequently, it has continued to fall. In the nineties the situation has somewhat improved.

Jeffrey Sachs portrays the situation in even starker terms:

As for the debtor countries, many have fallen into the deepest economic crisis in their histories. Between 1981 and 1988 real per capita income declined in absolute terms in almost every country in South America. Many countries' living standards have fallen to levels of the 1950s and 1960s. Real wages in Mexico declined by about 50 percent between 1980 and 1988. A decade of development has been wiped out throughout the debtor world.

Debt is tearing down schools, clinics and hospitals and the effects are no less devastating than war.



Map courtesy of *For a Change*, (1980s)

Key

- SILIC: Severely indebted low-income country (or HIPC: Highly indebted poor country)
- SIMIC: Severely indebted middle-income country
- MILIC: Moderately indebted low-income country

Each year developing countries pay the West nine times more in debt repayments than they receive in grants.

- The UK Charity Comic Relief raised £26 million in 1997. Africa paid this back in debt service in just over a day.
- Each person in the Third World owes about £250 to the West - much more than a year's wage for many.
- Of the 32 countries classified as severely indebted low-income countries, 25 are in sub-Saharan Africa.
- Africa spends four times as much on debt repayment as she does on healthcare.
- In 1960, the income of the wealthiest 20 percent of the world's population was 30 times greater than that of the poorest 20 percent. Today it is over 60 times greater.
- For a billion people, development is being thrown into reverse. After decades of steady economic advance, large areas of the world are sliding back into poverty.
- In the 1990s and onward the debt problem is moderately improving in the developing world. The reason for this is the acceleration in the economic growth of the country.

Thus, there are some genuine issues of responsibility that deserve to be made explicit. The debt "crisis" is only a symptom of an international economic system that tolerates growing and abysmal poverty as a normal condition. This need not, and should not, be the case. The developed countries have a responsibility to create conditions whereby the poorer countries can interact more productively in international economic activities: their single most important contribution to this end might be in the area of reducing trade restrictions on the products of poorer countries. Similarly, the developing countries have a responsibility to see that money is more effectively utilised within their own borders. The obscene personal profits accumulated by such leaders as Marcos of the Philippines and Mobutu of Zaire should not be fostered by the strategic interests of other countries. The banks should also face up to the fact that their single-minded pursuit of profits almost led them to the brink of bankruptcy. The lesson to be learned from this experience is that for economic growth to be sustained, close attention must be paid to the mutual interests of all parties involved.

Check Your Progress 4

- 1) Explain the consequences of the explosion of debt for the developing countries.

.....
.....
.....
.....
.....

- 2) The debt "crisis" is only a symptom of an international economic system that tolerates growing and abysmal poverty as a normal condition. What responsibilities do developed nations and the developing nations hold to control the situation?

.....
.....
.....
.....

19.5 TERMS OF TRADE

19.5.1 Concepts and Significance

The terms of trade receive considerable attention in the discussion of international economic problems at least for two reasons: (a) the gains from trade depend upon the terms of trade, (b) the Third World countries feel that their products have suffered a secular deterioration in their terms of trade as a result of which there has been an unjust transfer of income (from the poor) to the rich countries who have improved their terms of trade at the expense of the poor countries. Terms of trade are of immense use and significance notwithstanding all the ambiguities obscuring their use.

19.5.2 Foreign Trade in India

After independence, India's initial price policy could be characterised as serving the interests of the consumers, particularly where food grains were concerned, and most of all in regard to wheat. Food prices were kept low to provide cheap food for urban consumers under the theory that a cheap and easy supply of wage goods—of which food grains formed the main component—would inhibit inflationary pressures on the economy. This policy, buttressed with imports under the United States Public Law 480 Food for Peace Program, kept prices at a low level during the late 1950s and early 1960s but did not provide incentives for Indian farmers to invest or increase production. The terms of trade vis-à-vis manufacturing were favorable to agriculture in FY 1959 and then on a par with other sectors for three years. Thereafter, when manufacturing prices went up faster than agricultural prices as a result of government policy, terms of trade favored manufacturing and turned against the agricultural sector. This change led to a food crisis in the mid-1960s when agricultural production fell.

From about 1965, the need to guarantee remunerative prices to farmers was stressed to ensure self-sufficiency in food-grain production as soon as possible. The Agricultural Prices Commission—in 1993 called the Commission for Agricultural Costs and Prices—was set up to advise the government on agricultural prices, keeping in view the interests of both the consumer and the producer. Of particular concern were prices for wheat, rice, coarse grains, pulses, sugarcane, oilseeds, cotton, and jute. In the late 1980s and early 1990s, the commission was supplied with cost of production data, compiled through sample surveys, to improve its effectiveness in setting prices. The commission was reasonably successful in providing remunerative prices for farmers. It used the price mechanism to increase the production of commodities in demand, such as oilseeds at the end of the 1980s, and to keep prices at a reasonable level for consumers.

Check Your Progress 5

- 1) What do you know about the terms of trade?

.....

.....

.....

.....

India's Terms of Trade: An analysis of the extent to which bilateral trade has led to a net increase in India's exports. However in order to evaluate the benefit of this export growth in particular and of trade with the socialist countries, in general, it is necessary to examine the terms of trade obtained from the socialist countries under bilateral agreements.

We have shown that the terms of trade are directly dependent on the prices paid for imports and the prices received for exports. A detailed investigation of the prices paid by India for the commodities imported from the eastern bloc countries would be quite complex, and is beyond the scope of this chapter. Hence we shall rely on available evidence on this point. Information for import prices is scarce but all the studies so far have shown that the prices of goods imported from the socialist countries have generally been lower and very rarely higher than the prices of similar goods imported from the rest of the world. According to a study (1962), '.....a study of about 100 unit values of imports of chemicals, fertilizers, newprint, and iron and steel products from these countries for three years 1957-9 suggests that no higher prices were charged(and),...the finding indicate that except for some days, chemicals and high grade steel, prices charged by these countries were less than the multilateral prices. For the period 1961-2 to 1965-6, also computed average unit values of selected imports viz., base metals, paper, petroleum products, organic and inorganic chemicals, and iron and steel products, and found that, except in one year, the prices charged by the socialist countries were significantly lower than the prices India, paid to convertible currency countries. However these selected imports constituted only 35% of India's total imports from the East European countries in the first half of the 1960s.

In a more recent study relating to the period 1958-9 to 1969-70, compared the average unit value of 24 items, which accounted for 60% of India's import from USSR, with the unit value of the same imports from western countries. The study concludes that except in a few cases the prices charged by the Soviet Union were definitely lower than those charged by other countries. Nevertheless a sizeable proportion of total imports is constituted by machinery and transport equipment, for which it is quite impossible to obtain comprehensive price data; and unit value comparisons are meaningless because of wide quality variations. It is suggested that ".....a significant proportion of imports of machinery and equipment from the East European countries has been financed by tied credits." Therefore even if price comparisons were possible, it would not be appropriate to compare these prices with the prices from the cheapest source.

There is a widely held view that the machinery and capital equipment imported from the socialist countries was of relatively inferior quality and, what is more, India may have paid excessively high prices for it. Evidence in support of such a view is extremely hard to find, and whatever statements of this kind are made, they are rarely documented. As we have stressed before and quality comparisons for machinery over a large range are well nigh impossible. However it is worth pointing out that in any market for manufactured goods, low prices are often a substitute for adequate quality. Thus it is unlikely that bilateral agreements lumbered India with poor quality imports that were also overpriced. Clearly importers in the private sector would not have entered into such transactions. Available evidence suggests that the government too was careful on this account. And if capital goods bought from the socialist countries did not have the same the same quality as the equivalent from western countries, it may well have been the result of a conscious decision to buy lower price equipment. Of course the decision not to purchase the latest, most sophisticated, equipment from the west may also have been a wise one, and the machinery supplied by the socialist bloc may have been more 'appropriate' for india's needs.

Although the evidence adduced above is not exhaustive and it is not possible to say anything definite about the prices or quality of machinery imports, to a limited extent it does indicate that imports under bilateral agreements were sometimes cheaper and usually not any dearer than in the world market. As such it would be reasonable to assume that the purchasing power of Indian exports under rupee trade varied directly with the prices received for them.

Data on export prices are extremely hard to come by. Thus we have to resort to a comparison of the average unit value of exports to the socialist countries and the average unit value of the same exports to the rest of the world. The major drawback of this method is that it does not take any account of quality differences. However it is only way by which one can get some idea of the terms of trade.

For a comparison of unit values we have selected ten commodity groups which constituted about two-thirds of India's exports to the eastern bloc countries during the period under study. These are; jute manufactures, tea, cashew kernels, oilcakes, iron ore, coffee, pepper, manganese ore, lack, and unmanufactured tobacco. Admittedly, there are quality differences within each of our selected commodity groups, but they are much less than in the case of non traditional manufactured exports. Data outlines the trend in the average unit value of the selected exports and brings out the differences between the prices received from socialist countries and the prices received from the rest of the world. It shows except for jute manufactures, cashew kernels and tobacco, the Eastern bloc countries paid consistently higher prices than the convertible currency countries. In the case of the tobacco and jute manufactures the price difference is almost certainly attributable to the quality composition. It is generally accepted that as compared to the rest of the world, the Eastern bloc countries bought relatively low quality Virginia tobacco from India. This fact was bound to be reflected in the average unit value. As for the jute manufactures the bulk of the socialist countries imports consisted of jute bags and sacking whereas a large proportion of India's exports to the western countries consisted of carpet backing. We know the gunny bags fetch a much lower price per unit of weight as compared to carpet backing. Thus it is not surprising that the average unit value works out slightly lower for the socialist countries, even they paid higher prices than the rest of the world for jute bags. In case of cashew kernels however the rupee payment countries did pay lower prices than the convertible currency countries.

In view of the fact that the differences in the quality composition of exports can significantly affect the average unit values, it might be useful to compare the unit prices of more specifically defined qualities in some of these products. Data does just that and also compares the unit values obtained in selected exports of chemicals during the years 1970-71 and 1971-72. In all the selected qualities and products the socialist countries were important buyers. Although these figures relate to only a few products in two particular years, they do suggest that the socialist countries paid better prices than the rest of the world even in some comparable quality products.

One might ask if it is at all possible to make an overall comparison of export prices obtained in the world market. A weight average of the price differentials provides one obvious solution. Starting from the data on the quantity and value of exports, from which data is derived, we computed an index of the unit value obtained from socialist countries expressed as a percentage of the unit value obtained from the rest of the world, for each commodity in each year. These indices were then weighted by the corresponding share of each commodity in the total exports to socialist countries in that particular year and finally averaged for each year. This weighting method eliminates the importance of large price differentials in individual commodities which might have constituted only a small proportion of total rupee trade exports. It also provides us with one overall relative price index for each year. The results of the statistical exercise are out lined in data, which reveals that except for 1968-9, when the prices received from socialist countries were marginally lower than those obtained from other countries. India obtained higher prices for her exports under bilateral rupee trade than she did it in the world market, throughout the period under study. It must be noted that the rupee payment countries offered much higher prices in the early 1960s, but once trade flows through the bilateral agreements became regular, the price differential registered a market decline.

Although price data are not available for about one third of India's exports to the East European countries, the evidence that we have examined does show that, in general they paid higher prices than the rest of the world. A comparison of import prices is even more difficult, because machinery and equipment accounted for more than half of India's imports under rupee trade. However available evidence does suggest that the rupee paid for imports to the socialist countries were no higher than those paid to the rest of the world. Hence, it is quite reasonable to infer that India obtained some what better, and at any rate no worse, terms of trade from the socialist countries.

The main conclusions emerging from the analysis in the previous sections can be summed up as follows: India's trade with the socialist countries increased most rapidly after 1960. This rapid growth occurred in framework of bilateral agreements, the distinct feature of which was that payments for all transactions were made in rupee. The USSR was by far the largest market for Indian goods as well as the principal source of imports although Czechoslovakia, East Germany, Poland and Yugoslavia were also important trading partners.

The growth in exports was quite remarkable and continued throughout the period under study. To begin with the bulk of India's exports to the Eastern bloc countries consisted of raw materials and primary or semi-processed agricultural products. Gradually however the commodity composition shifted towards manufactured goods. Import under bilateral agreements increased a little faster than exports until the mid 1960s. Among other things this was attributable to the development credit extended by the socialist countries. The expansion of imports did not continue at the same pace thereafter. To some extent of course official statistics understate the value of imports because they exclude defence imports which were indeed significant in the period 1965-6 to 1972-3. Besides it was inevitable that India should generate an export surplus to compensate for the balance of trade deficits in past years. In this context it should be stressed that imports from the socialist countries were predominantly constituted by capital goods and intermediate products that were essential to India's development programme.

An analysis of bilateralism showed that if the imports purchased under rupee trade were high priority items, the benefits derived by India from its trade relations with the socialist countries would depend upon the net increase in exports and the terms of trade obtained.

The estimation of net export growth raised several conceptual and statistical difficulties. However a detailed examination of available evidence showed that except in the case of oilcakes and to some extent leather, tea, coffee and pepper India did not divert any scarce exportable supplies away from convertible currency areas in order to meet her export commitments under the bilateral agreements. In fact, in the case of traditional exports like manganese ore and mica and non-traditional exports such as clothing, engineering goods and chemicals the socialist countries provided welcome new markets. As for the resale of Indian products by the Eastern bloc countries in convertible currency markets, the problems of measurement were even more acute. Although there were some instance of switch trading and re-exports by the socialist countries, they did not take place on any significant scale. A comparison of Indian and Eastern European trade statistics revealed almost no evidence of switch trading. We also found that there was little possibility of the socialist countries having re-exported Indian manufactured goods. The lack necessary data prevented a complete commodity-wise analysis of the remaining primary product and raw material exports. However we did examine some commodities on the basis of available statistical information and found that the Eastern bloc countries did not re-export any pepper, coffee, tobacco, or tea to the convertible currency markets. On the other hand it is quite possible that they re-exported some of the cashew nuts and oilcakes imported from India to western countries, but no quantification was possible.

On the whole it is clear that the diversion of export supplies by India and the re-export of Indian products by the socialist countries constituted relatively small proportion of India's exports under bilateral rupee trade. It is evident that precise estimates of net export growth are extremely difficult and putting a figure on it would be conjectural. Nevertheless on the basis of evidence examined it appears that about 80% of the increase in India's exports to the socialist countries was a real one.

The terms of trade under bilateral agreements were, on balance probably favourable to India and at any rate no worse than those obtained from other countries. Existing work on the subject suggests that the prices of a significant proportion of goods imported from the socialist countries were not higher than prices of similar goods imported from the rest of the world. On the other hand the evidence that we examined clearly showed that socialist countries paid higher prices for Indian exports as compared to the rest of the world.

Bilateral rupee trade provided India with imports that were essential for its development programme and was also responsible for a little more than 40% of the growth in India's total exports over the period under study. In view of the fact that a large proportion of it constituted a net increase in exports and was probably at better terms of trade, the benefit derived by India was unquestionable.

Check Your Progress 6

- 1) Explain the India's terms of trade.

.....

.....

.....

- 2) Illustrate the salient features of India's foreign trade.

.....

.....

.....

19.5.3 India's Trade with Different Countries/Alliances and Terms of Trade

Trade with African Countries

Since independence India has had cordial and friendly trade relations with Africa in general. Trade relations expanded considerably since 1947, particularly after the transition into 2nd millennium. India's trade with Africa since 2005-06 is given below:

India Africa Trade (Value in Millions)			
Year	Exports**	Imports*	Total Trade
2005 - 2006	6,993.53	4,878.56	11,872.09
2006 - 2007	10,263.96	17,726.67	24,990.63
2007 - 2008*	14,196.09	20,497.65	34,693.74
2007 - 2008(April 07 - Feb 08)*	12,716.42	18,789.23	31,505.65
2008 - 2009 (April 07 - Feb 08)*	12,857.06	22,853.51	35,710.57

* Including Oil in Import figures

** Including Petroleum Product exports from India

Total trade (including oil) with Africa during 2007-08 amounted to US \$34693.74 million with exports amounting to US \$14196.09 million and imports at US \$20497.65 million. The oil inclusive trade turnover during April 2008–February, 2009 has been US \$35710.57 million with exports at US \$12857.06 million and imports amounting to US \$22853.51 million. The corresponding figures during April 2007–February 2008 were US \$31505.65 million (total trade), \$12716.42 million (exports) and \$18789.23 million (imports) respectively. If oil is factored out, India enjoys a positive trade balance with Africa.

During 2007-08, the total commodity trade (excluding oil) between India and African countries was US \$16,586.60 million as against US \$12,445.36 million in 2006-07, thereby registering a growth of 33.27%. India's exports to the African countries increased by 33.42% from US \$ 7,668.81 million in 2006-07 to US \$10,231.75 million in 2007-08. India's imports from the African countries also increased by 33% from US \$4,776.55 million in 2006-07 to US \$6,354.85 million in 2007-08.

Major items of exports

- Cotton yarn, fabrics made ups etc.
- Drugs, pharmaceuticals and fine chemicals
- Manufactures of Metals
- Machinery and Instruments
- Man made Yarn, Fabrics Made ups
- Transport equipment
- Primary and Semi finished iron and steel
- RMG cotton including accessories
- Plastic and linoleum products
- Inorganic/organic/agro chemicals

Major items of imports

- Gold
- Cashew Nuts
- Inorganic Chemicals
- Wood & Wood Products
- Metalifers ors & Metal Scrap
- Iron & Steel
- Cotton raw. Comb/uncombed/waste
- Coal, coke & Briquettes etc.
- Pulp and waste paper

- Non ferrous metals
- Organic chemicals
- Machinery except elect. & electronic
- Fertilizer crude
- Electronic goods
- Pearls precious semiprecious stones.

Check Your Progress 7

- 1) Explain the characteristics of India's trade with Africa.

.....

.....

.....

.....

Focus Africa Programme

The "Focus Africa" Programme was initially launched with focus on seven countries of Sub-Saharan African (SSA) Region, viz., South Africa, Nigeria, Mauritius, Tanzania, Kenya, Ghana and Ethiopia. With a view to further widen and deepen India's trade with Africa, the scope of this Programme was further extended to include Angola, Botswana, Ivory-Coast, Madagascar, Mozambique, Senegal, Seychelles, Uganda, Zambia, Namibia and Zimbabwe, along-with the six countries of North Africa, viz., Egypt, Libya, Tunisia, Sudan, Morocco and Algeria. Under this Programme, the Government extends assistance to exporters and Export Promotion Councils etc. to visit countries in Africa and organize trade fairs and also sponsors African trade delegations to visit India. A number of export promotion activities were conducted by various Export Promotion Councils and Apex Chambers with grant under MDA and MAI Scheme. The Focus Africa Programme is continuing for the seventh year during 2008-09.

Preferential Trade Agreement (PTA) with SACU

The Southern African Customs Union (SACU), the oldest Custom Union of the world, comprises South Africa, Lesotho, Swaziland, Botswana and Namibia. India and SACU have expressed their intent to enter into a Preferential Trade Agreement (PTA) with the aim of promoting expansion of trade between the two parties and providing mechanism to negotiate and conclude a comprehensive Free Trade Agreement within a reasonable time. India and SACU have commenced negotiations for PTA in October, 2007 and three meetings of the negotiating teams have taken place so far. India and SACU signed a Memorandum of Understanding, an enabling instrument to facilitate negotiations, during the third round of negotiations held in New Delhi on 25-27 November 2008.

CECPA with Mauritius

A Comprehensive Economic Cooperation and Partnership Agreement (CECPA) aimed at boosting bilateral trade, investment and general economic cooperation between India and Mauritius is being negotiated.

During the visit of PM of India to Mauritius from March 30-April 2, 2005 both the countries agreed for a Comprehensive Economic Cooperation and Partnership Agreement (CECPA) to boost bilateral trade, investment and general economic cooperation. Accordingly an Empowered Negotiation Team consisting of

representatives from both the sides for working out the necessary modalities were constituted. Seven Rounds of talks on CECPA have been held so far. The 7th round of talks were held in New Delhi on the 7th July 2006.

Check Your Progress 8

- 1) What is Focus Africa Programme?

.....
.....
.....
.....

19.5.4 India's Trade with Different Countries/Alliances

India's total external trade (exports plus imports including re-exports) in the year 1990-91 stood at Rs. 91,893 crore. Since then, this has witnessed continuous increase with occasional downturns. During 2008-09 the value of India's external trade reached Rs. 20,72,438 crore.

India's exports during 2008-09 reached a level of Rs. 7,66,935 crore registering a growth of 16.9 per cent. In US \$ terms, exports reached a level of US \$168.7 billion, registering a growth of 3.5 percent as compared to a growth of 29.1 per cent during the previous year. The growth of exports during the year has exhibited a significant slow-down from September 2008 onwards. While, during the first half of the year 2008-09, April-September, exports increased by 31.3 percent with almost all the major commodity groups, except marine products, handicrafts and carpets, recording significant growth. In the second half of the year 2008-09, October-March, exports recorded a decline of (-) 19.2 percent with almost all the commodity groups recording significant negative growth.

During 2008-09 imports increased to Rs. 13,05,503 from the level of Rs. 10,12,312 crore in 2007-08 registering growth of 29.0 per cent in rupee terms. In US \$ terms, imports reached a level of US \$287.8 billion in 2008-09 registering a growth of 14.4 percent. Oil imports were valued at US \$93.2 billion, which was higher by 16.9 percent over the previous year. Non-Oil imports increased to US \$194.6 billion, which was higher by 13.2 percent. Items which registered significant growth are Pearl, Precious & Semi-Precious Stones, Crude & Manufactured Fertilizer, Coal, Inorganic Chemicals, Project Goods, etc. Import of Gold and Transport Equipment registered significant decline.

The Trade deficit during 2008-09 increased to Rs. (-) 538568 crore as against Rs. (-) 356449 crore during 2007-08. In US \$ terms, trade deficit increased to US & 119.1 billion from a level of US & 88.5 billion during 2007-08.

India has trading relations with all the major trading blocks and geographical regions of the world. During the period 2008-09 (April-February), the share of Asia and ASEAN region comprising South Asia, East Asia, Mid-Eastern and Gulf countries accounted for 51.4 percent of India's total exports. The share of Europe and America in India's exports stood at 23.8 percent and 16.5 percent respectively of which EU countries (27) comprises 22.3 percent. During the period, USA (12.0 percent), has been the most important country of export destination following by United Arab Emirates (10.8 percent), China (5.1 percent), Singapore (4.7 percent), Netherlands (3.7 percent), Hong Kong (3.7 percent), U.K. (3.6 percent), Germany (3.4 percent), Saudi Arabia (3.0 percent), Belgium (2.6 percent) and Italy (2.2 percent).

Asia and ASEAN accounted for 61.7 per cent of India's total imports during the period followed by Europe (18.7 percent) and America (10.1 percent). Among individual countries the share of China stood highest at (10.7 per cent) followed

by Saudi Arabia (7.1 percent), UAE (6.4 percent) and USA (6.0 percent), Iran (4.3 percent), Switzerland (4.2 percent), Germany (3.6 percent), Kuwait (3.4 percent), Nigeria (3.2 percent), and Iraq (2.8 percent).

(P) Provisional Figures

External Trade With Other Countries During 2007-08 and 2008-09				
Region	Exports (April-Feb)		Imports (April-Feb)	
	2007-08	2008-09(P)	2007-08(P)	2008-09(P)
1. Europe	1,33,151	1,65,925	1,75,335	2,23,813
1.1 EU countries 27	1,23,219	1,55,266	1,27,315	1,61,593
1.2 Other WE countries	9,553	10,123	47,881	62,115
1.3 East Europe	379	536	138	106
2. Africa	38,062	44,922	51,519	60,151
2.1 Southern Africa	13,058	12,393	17,868	29,377
2.2 West Africa	12,851	13,204	35,614	48,514
2.3 Central Africa	934	1,372	189	632
2.4 East Africa	15,126	18,687	1,158	1,158
3. America	98,900	1,14,966	79,780	1,21,381
3.1 North America	79,880	89,476	56,281	80,825
3.2 Latin America	10,019	45,490	23,498	40,556
4. Asia and Asean	2,96,287	3,57,982	5,43,551	7,39,622
4.1 East Asia	5,070	6,719	30,783	40,230
4.2 ASEAN	56,663	75,357	82,289	1,06,418
4.3 WANA	1,08,920	1,44,039	2,58,645	3,56,716
4.4 NE Asia	92,974	96,846	1,64,030	2,28,746
4.5 South Asia	32,659	35,020	7,805	7,513
5. CIS & Baltics	6,101	7,623	14,238	28,793
5.1 CARs Countries	826	1,047	419	1,157
5.2 Other CIS Countries	5,275	6,577	13,818	27,636
6. Unspecified Region	1,482	4,346	2,666	4,710
Total	5,77,889	6,96,498	8,70,399	11,98,360

Check Your Progress 9

1) India has salient characteristics of Its trade with different Nations. Explain them.

.....

.....

19.5.5 India-Europe Trade and Terms of Trade

European countries account for about 21.5 per cent of India's total trade while India's exports to Europe during 2006-07 were US \$28.87 billion. During this year, bilateral trade increased by 26 percent over 2005-06. While India's export to Europe recorded a growth of 17 percent, India's import from Europe grew by 33 percent. The top five items of India's exports to Europe are ready-made garments including accessories, gems & jewellery, machinery & instruments, petroleum (crude & products) and transport equipment. The top five items of India's imports from Europe are machinery (except electrical & electronics), pearls/precious, semi-precious stones, electronic goods, transport equipments and iron & steel.

Trade and Investment Relations with European Union

The European Union (EU) presently consists of 27 countries. These countries are Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, UK, Bulgaria and Romania.

India and EU enjoy healthy economic relations. These relations have been built on the foundation of (i) India-EU Cooperation Agreement on Partnership and Development which came into effect in August, 1994 and (ii) India-EU Strategic Partnership which was announced in September, 2005. India also has bilateral economic Agreements with a number of individual EU countries in the areas of trade, investments and avoidance of double taxation. India has agreements for investments and promotions/protections with 22 countries of Europe, including 17 countries of EU. Similarly, agreements for avoidance of double taxation exist with 26 countries in EU.

India-EU bilateral relations are reviewed at the official level by the India-EC Joint Commission. This had its last meeting in July 2008. Three Sub-Commissions on Trade, Economic Cooperation and Development Cooperation and nine Joint Working Groups on agriculture and marine products, textiles, information technology & communications, consular matters, environment, steel, food processing industries, pharmaceuticals & bio-technology and technical barriers to trade (TBT)/sanitary and phytosanitary (SPS) issues are functioning and their reports are considered by Joint Commission

Check Your Progress 10

- 1) How are the terms of trade affected as a result of India's European trade?

.....
.....
.....
.....

19.5.6 Globalisation and Emerging Trends in Terms of Trade

An important aspect of the globalised trading system is the export of non primary products from the poor countries of the south to the rich industrialised 'North'. There are three factors which can be attributed for this which are as such:

- 1) A reduction in protective trade barriers in the North.
- 2) The removal of gross anti-export distortions in the south, such as controls and tariffs on intermediate inputs.
- 3) The policy related changes in the North that facilitate outsourcing. For example motor-vehicle assembly is more disaggregated, and techniques have been developed that make it possible to have Indonesian workers making jeans to a precise kalvin klein specification for sale in the U.S.

Simple economic analysis by itself will never resolve Africa's trading problems. At best it offers partial insights. The economic geography of sub-Saharan Africa is particularly unfriendly to external trade, with huge sparsely populated territories, poor transport networks, and landlocked countries. That said, the Arab world including North Africa, mentioned above, does not suffer from those particular problems to the same extent, yet equally does not participate much in export trade. South Africa is an interesting case in point. Against the background of sub-Saharan Africa, South Africa appears as a success. Viewed more broadly its performance is less impressive.

19.5.7 Trade and Inequality

Trade is an engine of economic growth. Trade enhances growth and development. However, there are two widespread presumptions which are not very much correct. One holds that increased globalisation over the last two decades has been accompanied by a great increase in inequality in the world. We have seen that the evidence does not support this opinion. The second idea is that the rise in international trade particularly the increased involvement in trade of countries that previously had little involvement.

This view sits oddly with the observation that those initially poor countries that have been growing rapidly notably China have been doing so because of their increasing involvement in international trade. On the other hand the countries that have been stagnating over the same period, or even going backwards, as in parts of SSA region, have extremely low involvement in international exports are excluded from consideration. Primary exports are important and they have been growing in some cases. This is not a recent development, however and it has not saved the region from the lowest growth of per capita incomes of any region in the world. Of course globalisation means more than just non primary trade. Capital markets have not been good for Africa. African countries have allowed heavy borrowing of funds that have been wasted at best, and corruptly misappropriated at worst. In emerging countries, china and India converge towards OECD levels of per capita income, they will cease to be motors of declining inequality. In that case what then happens to inequality will depend upon the performance of the remaining poor countries. If that is largely SSA, with a higher population weight by that time, and continuing negative growth rates, then world inequality will be rising. If that happens it will not be because of globalisation and free trade.

Because trade lends itself well to economic analysis, it is tempting for trade theorists to give to trade the leading role in explaining trends in equality and inequality across the world. That approach is particularly appealing to the globalisation itself because it makes capitalism in its globalised form the accused, required to defend itself. Our world is more complex and disordered than that story allows. Take SSA yet again. Its trade involvement has been low and what involvement it has experienced has been heavily biased towards primary product exports, with the numerous problems that this implies.

Check Your Progress 11

- 1) Globalisation has affected the terms of trade different countries in different ways. Explain them.

.....

.....

.....

.....

19.5.8 Emergence of North American Free Trade Agreement (NAFTA)

From the mid-1950's to the early 1970s, the growth in trade between the east and the south was extremely rapid; it experienced a deceleration thereafter. Bilateral payments arrangements and complementarities in demand between the east and the south were the principal factors underlying the growth in trade as well as the major sources of the gains from such trade for both sets of countries. Available evidence suggests that from the viewpoint of the south, the distribution of gains from trade with the east was no worse than that in the case of trade with the west and probably as favorable as that in the case of intra-east trade.

The composition of East-South trade was not significantly different from the traditional pattern of trade between the industrialised and developing countries in so far as the south exported largely raw materials and primary commodities to the east mostly in exchange for manufactured goods. In the phase from the mid 1950s to the early 1970s, there was a significant diversification in the composition of East-South trade, but this trend was reversed thereafter; the share of manufactures in exports from the south to the East was much lower than the corresponding proportion in total exports from the South to West or the centrally planned economies of Asia to the East, as the beginning of the 1980s. Such traditional patterns of trade, it should be recognized can neither transform the structure of production in the south nor make for a new international division of labour.

Sustained growth and dynamism in East-South trade over the next decade would also depend on a successful transition from a complementary to a competitive pattern of trade, so that inter-sectoral trade is gradually replaced by intra sectoral or intra-industry trade and specialisation. The scope for such a new international division of labour between East and south appears limited in short run, but there is a potential that can be realised by planning for structural change possibly through bilateral arrangements. The prospects for structural change in the composition of East-South trade would, of course depend not only on how trade is incorporated into the wider sphere of economic co-operation but also on political factors in East-South relations.

The experience of the world economy during the second half of the twentieth century suggests that there are free forms of trade liberalisation. First trade liberalisation can be 'unilateral', where a country pursues it unmindful of what other countries do, based on the fundamental prescription of orthodox economic theory that free trade is free trade is efficient. Second trade liberalisation can be 'multilateral', where countries negotiate market access and reductions in tariffs or in non tariff barriers on a reciprocal basis, through bargaining among major trading partners, which is then multilateralised through the MFN clause in the GATT system. Third, trade liberalisation can be 'bilateral' or 'plurilateral' where a pair or a group of countries adopt it among themselves.

For much of this period the US has been a strong advocate of unilateral trade liberalisation, although reality has not confirmed to its preference. If anything, the

belief in the free trade doctrine was stronger in the nineteenth century and the early twentieth century. Yet the international trading system that was created in the late 1940s with GATT as its centre piece, was on this premise mostly because of European reluctance. Universal free trade was perceived as the ultimate objective but the conceived transition path was characterised by an implicit reciprocity principle that was almost contractual framework of GATT did provide the modus operandi of multilateral trade liberalisation among the industrialised countries at a rapid pace.

The mid 1970s brought about a change as the industrialised world resorted to increasing protectionism when growth slowed down, recession persisted and unemployment mounted. Large segments of world trade related to agriculture and textiles were excluded from GATT discipline. Non tariff barriers proliferated and multiplied: some misused GATT rules (anti dumping or countervailing duties) other circumvented GATT rules (grey area measure like VERs and OMAs), while a few were not even in the realm of trade (laws about standards or health regulations). The outcome was a steady erosion in the principle of non-discrimination. In the world of trade, multilateralism and liberalisation were both at risk. The Uruguay Round of multilateral trade negotiations was launched in September 1986, after an increase debate about its agenda in an attempt to resolve the mounting crisis in the international trading system.

The US however was no longer satisfied with a reliance on multilateral trade liberalisation even if the rules and the credibility of the system could be resorted. It launched two other almost simultaneous initiatives during the mid 1980s. Both represented a fundamental departure from the concept of unilateral trade liberalisation. The first initiative was the introduction of section 301 in the trade and tariffs act of 1984. this was replaced by the much stronger successor provisions, special 301 and super 301 in the omnibus trade act of 1988. such legislation gave the united states a bilateral means of twisting the arms of trading partners to provide market access, for its economic strength was now combined with a legal right to retaliate. The second initiative was a search for bilateral or plurilateral trade arrangements. This process began with the US-Israel tariff agreement of 1984. it developed into the US-Canada free trade agreement of 1989. The process culminated in the formation of a trilateral NAFTA which to Mexico.

It is striking that the birth of NAFTA in January 1994 coincided with the conclusion of the Uruguay Round of multilateral trade negotiations in December 1993 and its ratification at the ministerial meeting, in April 1994. the NAFTA initiative is perhaps best described as an example of the new trend towards multilateralism in the international trading system. Such regional economic arrangements which constitute *de facto or de jure* trade blocs, conform to the letter but not to the spirit of the GATT law. The requirements of Article XXIV in the GATT are satisfied if (a) these bloc formation do not lead to an increase in tariff or non tariff barriers vis-à-vis the rest of the world; and (b) the transition to a free trade area or a customs union is complicated within a reasonable period of time. Most attempts at economic integration among groups of countries meet the first stipulation but do not quite meet the second. Yet the formation of these blocs is an act of discrimination, at best in conception and at worst by design, for the simple reason that the privileges of members are not available to non- members.

The main conclusion to emerge from the proceeding discussion is that the formation of NAFTA would not have any significant economic impact, either in the positive or in the negative, on the trade flows of, and the investment flows to South-Asia, at least in the medium term. However, the longer-term implications of NAFTA may be adverse for South-Asia if; a) the membership of NAFTA is enlarged to include other industrialised countries and developing countries; or (b) the plurilateralism embodied in NAFTA and other such regional economic arrangements

erodes the basic principle of non discrimination in the multilateral trading system. The probability of the former is low but that of latter is higher. Let me elaborate. Consider a situation in which NAFTA is enlarged to include other industrialised countries, say Japan or other developing countries, say in Latin America or even in South-East Asia. The formation of such larger free trade area would almost certainly lead to a much greater diversion of trade flows and investment flows away from, non member countries, which in turn would have a significant on developing countries in the Asian and Pacific region and this impact would extent to South-Asia. The probability of this event, however, is low for economic as also political reasons. In terms of economics, there are relatively few other countries that would satisfy the condition for deriving the large economic gains from joining NAFTA. Countries would benefit from economic integration with NAFTA essentially if a large proportion of their exports destined for the US and a large proportion of their import originate in the US even before they enter the free trade area. Most countries except for some in the Caribbean Basin or Central America, would not meet this test. For others, where the US is a significant but not dominant partner in trade, the economic costs of restructuring as a subsequence of joining NAFTA would be as large as the burden of adjustment that would follow unilateral or multilateral trade liberalisation. There is no reason for them to prefer plurilateral trade liberalisation. In terms of politics, the conclusion of the Uruguay Round and the creation World Trade Organisation (WTO) would make it awkward for the US to enlarge the free trade area just as potential new entrants would be deterred by the possibilities of retaliation, particularly from other industrialized countries.

There is distinct possibility, however that the NAFTA syndrome may reproduce itself elsewhere in the world economy,. The probability of this out come is higher because countries that do not belong to a trade bloc may, as a strategic or tactical response, seek to create their own trade blocs. Consider, for a example, Japan which is a lead player in the game of international trade, but not yet part of any regional or extra-regional coalition. The initiatives for Asia-Pacific economic co-operation and East-Asian Economic caucus become easier to understand in this context. In my judgment the plurilateralism embodied in actual or potential, intraregional or interregional economic arrangements would erode the foundation of multilateralism. For economic integration among groups of countries, whether it becomes deeper or spreads wider, strengthens or extend, discrimination against non member countries. In this case, the whole is not the sum total of the parts. Trade liberalisation i.e. plurilateral, where each bloc turns into a fortress, may increase rather than decrease barriers to trade in the world as a whole. A strong rule based multilateral trading system, which is opened to all and non discriminatory, is the beat for of protection for poor countries or small countries, such as those in South-Asia.

The reality may turn out to be different. In a world where there are two large trade blocs, say the European Union (EU) and an enlarged NAFTA, the countries in South-Asia as also the large countries in Latin America and Africa, would be possible losers. This is so far two reasons. For one, their political links with the dominant blocs are weak if not slender. For another their trade patterns are characterized by a considerable geographical diversification. Consequently, these countries may face the worst of both worlds, as they could be discriminated against when compared with other developing countries that may be incorporated de facto or de jure into these large trade blocs made up of OECD countries. What is more, if there is a third trade bloc in Asia, possibly with Japan at its apex, the situation may turn out to be worse. This is because South-Asia, along with Central Asia and West Asia, is some how always excluded from the contemplated regional or intra-sub regional economic arrangements in Asia and the Pacific. Such exclusion has political dimension. It also has economic implications. The world economy may, then, be progressively carved out into trade blocs with US, Western Europe, and Japan at the apex of the three dominant formations. It could possibly create a

triadic system with the spheres of influence, so that even non member countries either belong or do not belong.

The scenario outlined here is plausible even if non probable. What are possible options for South-Asia in response to, or in anticipation, of, such an outcome? First best option for South Asian countries would be towards a stronger multilateral trading system, preferably one that is more equitable than the Final Act embodying the results of the Uruguay Round of multilateral trade negotiations. The second best option for South-Asian countries would be to explore the possibilities of a regional economic initiative that would include South-Asia, Central-Asia, West-Asia, and southern Africa or of a strategic alliance among selected countries from these sub regions including, if possible, china. The latter set of options, however, is much more in realm of politics than in the sphere of economics.

Check Your Progress 12

- 1) What do you understand by NAFTA? Discuss its role in terms of trade context.

.....

19.6 EXCHANGE RATE VOLATILITY

Probably the most important characteristic of alternative exchange rate systems is the feature used to describe them, namely fixed or floating. Fixed exchange rates, by definition, are not supposed to change. They are meant to remain fixed for, ideally, a permanent period of time. Floating rates do just that, they float up and down, down and up, from year to year, week to week, and minute by minute. What a floating exchange rate will be a year from now, or even a week from now, is often very difficult to predict.

Volatility represents the degree to which a variable changes over time. The larger the amplitude of a variable change, or the more quickness, it changes over time, the more volatile it is.

Since fixed exchange rates are not supposed to change – by definition – they have no volatility. However, the fixed exchange rates are quite frequently devalued or revalued, implying that they can and do indeed change. A floating exchange rate may or may not be volatile depending on how much it changes over time. However, since floating exchange rates are free to change, they are generally expected to be more volatile.

Exchange rates make international trade and investment decisions more difficult because volatility increases exchange rate risk. Exchange rate risk refers to the potential to lose money because of a change in the exchange rate. Below are two quick examples of how traders and investors may lose money when the exchange rate changes.

Check Your Progress 13

- 1) What does Volatility of Exchange Rate represent?

.....

-
.....
2) Differentiate between fixed exchange rate and floating exchange rate.

.....
.....
.....
.....
.....
19.6.1 Exchange Rate Risk for Traders

First consider a business that imports soccer balls into the US. Suppose 1000 soccer balls purchased from a supplier in India costs 300,000 rupees. At the current exchange rate of 50 Rs/\$ it will cost the importer \$6000 US dollars or \$5 per soccer ball. The importer determines that transportation, insurance, advertising and retail costs will run about \$5 per soccer ball. If the competitive market price for this type of soccer ball is \$12, he will make a \$2 profit per ball if all balls are sold.

Suppose the shipment is scheduled to occur in 3 months and that payment for the shipment need not be made until that time. Let's assume the importer waits to convert currency until the payment is made and that in 3 months time the Indian rupee has changed to a new value of 55 Rs/\$. The shipment cost in rupees remains the same at 300,000 Rs, but the dollar value of the shipment rises to \$5,454 or \$5.45 per soccer ball. Assuming the same \$5 of extra costs and a \$12 final sale price, the importer will now make only \$1.45 profit per soccer ball, if all balls are sold. While this is still a profit, it is about 25% less than expected when the decision to purchase was made 3 months prior.

This is an example of the risk an importer faces because of a change in the currency value. Of course, it is true that the currency value could have changed in the opposite direction. Had the rupee value risen to 65 Rs/\$, the shipment value would have cost just \$4,615, or \$4.62 per ball, generating a profit of \$2.38 per soccer ball. In this case the currency moves in the importer's favour. Thus, a volatile exchange rate will sometimes lead to greater losses than expected, and at other times to greater gains.

There are several methods to protect oneself from this type of currency risk. The importer could have exchanged currency at the time the deal was struck and held his 300,000 rupees in an Indian bank until payment is made. However, this involves a substantial additional opportunity cost since the funds must be available beforehand and become unusable while they are held in an Indian bank account. Alternatively the importer may be able to find a bank willing to write a forward exchange contract, fixing an exchange rate today for an exchange to be made 3 months from now.

In any case, it should be clear that exchange rate fluctuations either increase the risk of losses relative to plans or increase the costs to protect against those risks.

Thus fluctuating exchange rates make it more difficult for investors or traders to know where to invest or exports/imports. One cannot merely look at what the interest rate is across countries, but must also speculate about the exchange rate change. Make the wrong guess about the exchange rate movement and one could lose a substantial amount of money.

There are some ways to hedge against exchange rate risk. For example, with short term deposits, an investor can purchase a forward contract or enter a futures market. In these cases the investor would arrange to sell in the future when the deposit is expected to be converted back to dollars. Since the future exchange rate is predetermined on such a contract, the rate of return is guaranteed as well. Thus, the risk of floating exchange rates can be reduced. However, for long term investment, such as foreign direct investment, these types of arrangements are more difficult and costly to implement.

Check Your Progress 14

- 1) Mention some ways to hedge against exchange rate risk.

.....

.....

.....

.....

19.6.2 Volatility and the Choice of Exchange Rate System

On the face of it floating exchange rates would appear to be riskier than fixed rates since they are free to change regularly. For this reason countries may choose fixed exchange rates in order to reduce volatility and thus to encourage international trade and investment.

The problem with this perception is that it has not worked out this way in practice. A 2004 IMF study notes that on average, during the 1970s, 1980s and 1990s the volatility of fixed exchange rates was approximately the same as that of floating rates. There are two reasons this can occur. First, a currency fixed to another reserve currency will continue to float against other currencies. Thus, when China pegged its currency to the US dollar, it continued to float with the dollar vis-à-vis the Euro. Secondly, it is common for fixed exchange currencies to be devalued or revalued periodically, sometimes dramatically. When this happens the effects of volatility are concentrated in a very short timeframe and can have much larger economic impacts.

The second thing is that volatility had only a small effect on bilateral international trade flows suggesting that the choice of exchange rate system on trade flows may be insignificant. However, the IMF study does not consider the effects of volatility on international investment decisions. Some other studies do show a negative relationship between exchange rate volatility and foreign direct investment. But if these results are true and fixed exchange rates are just as volatile as floating rates, then there is no obvious exchange system “winner” in terms of the effects on volatility. Nevertheless, volatility of exchange rate systems remains something to worry about and consider in making the choice of exchange rate systems.

Check Your Progress 15

- 1) Which Exchange rate system would you favour and why?

.....

.....

.....

.....

.....

19.7 LET US SUM UP

We have analysed the various aspects of the international economic issues like issues of terms of trade and the exchange rate determination. The terms of trade are still against the developing economies because they are primarily exporters of primary commodities and importers of high value added manufactured commodities. Though in the era of globalisation, the ratios are changing in positive direction. We have also analysed the multifaceted role of various trade blocks and regional groups across the globe. In the context of India, the foreign trade is the most important for earning scarce foreign exchange and employment growth, and increase in GDP.

19.8 SELF ASSESSMENT QUESTIONS

- 1) What do you mean by the debt crisis?
- 2) Explain the causes of the debt crisis.
- 3) Discuss the meaning of 'Terms of Trade' and its various types.
- 4) What do you know by the Exchange rate volatility?

19.9 KEY WORDS

- Debt Crisis** : "Debt crisis" will refer to the external debt, both private and public, of developing countries, which has been growing enormously since the early 1970s. The "debt crisis", then, is a global phenomenon, and an attempt to understand it fully needs a global perspective. Thus, when a nation finds it difficult to meet its repayment obligations on continued basis leads to the stage of debt crisis.
- Terms of Trade** : relationship between the prices at which a country sells its exports and the prices paid for its imports. If a country's export prices rise relative to import prices, its terms of trade are said to have moved in a favourable direction, since, in effect, it now receives more imports for each unit of goods exported. The terms of trade, which depend on the world supply of and demand for the goods involved, indicate how the gains from international trade will be distributed among trading countries.
- Exchange Rate Volatility** : the tendency of change in exchange rate which may or may not be volatile depending on how much it changes over time. However, since floating exchange rates are free to change, they are generally expected to be more volatile. Volatile exchange rates make international trade and investment decisions more difficult because volatility increases exchange rate risk.

19.10 ANSWER/HINTS TO CHECK YOUR PROGRESS

Check Your Progress 1

See section 19.2 and answer.

Check Your Progress 2

See section 19.3 and answer.

Check Your Progress 3

See section 19.3.3 and answer.

Check Your Progress 4

See section 19.4 and answer.

Check Your Progress 5

See section 19.5 and answer.

Check Your Progress 6

See section 19.5.3 and answer.

Check Your Progress 7

See section 19.5.5 and answer.

Check Your Progress 8

See section 19.5.6 and answer.

Check Your Progress 9

See section 19.5.7 and answer.

Check Your Progress 10

See section 19.5.8 and answer.

Check Your Progress 11

See section 19.5.9 and answer.

Check Your Progress 12

See section 19.5.10 and answer.

Check Your Progress 13

See section 19.6 and answer.

Check Your Progress 14

See section 19.6.1 and answer.

19.11 FURTHER READINGS

Ahluwalia, I.J. and I.M.D. Little (eds) (1999). *India's Economic Reforms and Development* (Essays in honour of Manmohan Singh) New Delhi Oxford University Press.

Rsu, Kaushik (ed.) (2004), *India's Emerging Economy*. New Delhi; Oxford University Press.

Reddy, Y.V. (2006). Dynamics of Balance of Payments in India. Diamond Jubilee Lecture Osmania Univeristy Hyderabad

Singh, Kulwinder (2005) Foreign Direct Investment in India A Critical Analysis of FDI from 1991,2005, New Delhi: Centre for Civil Society.

Reserve Bank of India (1997) Report on the Committee on Capital Account Covertability Mumbai RBI (2006) Report on the Committee on Fullar Capital; Account Convertability. Mumbai RBI.

Sivasubramonian S. (2004) The Sources of Economic Growth in India, 1950_51 to 1999-2000. New Delhi Oxford University Press.

Rao, S.L.(1994) Industry & Economic Reforms 1991-94 New Delhi NCAER.

UNIT 20 CURRENT ISSUES OF SUSTAINABLE DEVELOPMENT

Structure

- 20.0 Objectives
- 20.1 Introduction
- 20.2 Sustainable Development and its Linkages
- 20.3 Steps and Strategies to Achieve Sustainable Development
- 20.4 Policy Proposals in the 11th Five Year Plan
- 20.5 Environmental Issues in Sustainable Development
- 20.6 Issues in Sustainable Development
- 20.7 State of India's Environment
- 20.8 Challenges to India's Environment
- 20.9 Let Us Sum Up
- 20.10 Self Assessment Questions
- 20.11 Key Words
- 20.12 Answer and Hints to Check Your Progress
- 20.13 Further Readings

20.0 OBJECTIVES

After going through this unit, you should be able to express:

- the meaning of sustainable development;
- sustainable development and its linkages;
- various steps and strategies to achieve sustainable development;
- policy recommendations in the XI plan; and
- environment and sustainable development.

20.1 INTRODUCTION

Sustainable development is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for future generations. The term was coined by the Brundtland Commission which coined what has become the most often-quoted definition of sustainable development. It is defined as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs”.

Sustainable development ties together concern for the carrying capacity of natural systems with the social challenges facing humanity. As early as the 1970s “sustainability” was employed to describe an economy “in equilibrium with basic ecological support systems”. Ecologists have pointed to *The Limits to Growth*, and presented the alternative of a “steady state economy” in order to address environmental concerns.

According to the Brundtland Commission:

“Sustainable development is a policy approach that has gained quite a lot of popularity in recent years, especially in international circles. By attaching a specific interpretation to sustainability, population control policies have become the overriding approach to development, thus becoming the primary tool used to “promote” economic development in developing countries and to protect the environment.”

Mary Jo Anderson suggests that the real purpose of sustainable development is to contain and limit economic development in developing countries, and in so doing control population growth. It is suggested that this is the reason that the main focus of most programmes is still on low-income agriculture.

Edward Barbier defined sustainable development as one which is directly concerned with increasing the material standards of living of the poor at the grass root level. This can be quantitatively measured in terms of increased income, real income, educational services, health care, sanitation, water supply, etc., or a fall in absolute poverty, environmental degradation, cultural disruption and social instability. Sustainable development implies meeting the basic needs of everyone and extending to all, the opportunity to satisfy their aspirations for better life, without compromising on the needs of future. The strategies for sustainable development imply the use of non-conventional sources of energy to minimise the adverse environmental impacts.

The Brundtland Commission emphasises on protecting the future generations. This is in line with the argument of the environmentalists who emphasize that we have a moral obligation to hand over the planet earth in good order to the future generations, i.e. the present generation should give better environment to the future generations, no less than what we have inherited.

According to the United Nations Conference on Environment and Development (UNCED) sustained development is “Development that meets the needs of the present generation without compromising the ability of the future generation to meet their own needs.”

On the other hand a condition of “unsustainability” in an environment occurs when natural capital (the sum total of nature's resources) is used up faster than it can be replenished; when ecosystem functions are systematically decaying; or when toxins and pollutants dangerous to human and other forms of life are systematically increasing.

Sustainability requires that human activity only uses nature’s resources at a rate at which they can be replenished naturally. Inherently the concept of sustainable development is intertwined with the concept of carrying capacity. Theoretically, the long-term result of environmental degradation is the inability to sustain human life. Such degradation on a global scale could imply extinction for humanity.

Check Your Progress 1

- 1) Explain the meaning of Sustainable Development.

.....

.....

.....

.....

.....

2) What is the significance of Sustainable Development?

.....

.....

.....

.....

20.2 SUSTAINABLE DEVELOPMENT AND ITS LINKAGES

Consumption level of renewable Resources	State of environment	Sustainability
More than nature's ability to replenish	Environmental degradation	Not sustainable
Equal to nature's ability to replenish	Environmental equilibrium	Steady state economy
Less than nature's ability to replenish	Environmental renewal	Environmentally sustainable

20.3 STEPS AND STRATEGIES TO ACHIEVE SUSTAINABLE DEVELOPMENT

According to Herman Daly, a leading environmental economist, to achieve sustainable development, the following needs to be done:

- Limiting the human population to a level within the carrying capacity of the environment.
- Technological progress should be input efficient and not input consuming.
- Renewable resources should be extracted on a sustainable basis, i.e, rate of extraction should not exceed the rate of regeneration.
- For non-renewable resources, the rate of depletion should not exceed the rate of creation of renewable substitutes.
- Inefficiencies arising from the pollution should be corrected.

Steps and strategies to achieve sustainable development in our country are:

1) Use of non-conventional sources of energy

India is hugely dependent on thermal and hydro power plants to meet its power needs. Both of these have adverse environmental impacts. Thermal power plants emit large quantities of carbon dioxide which is a greenhouse gas. It also produces fly ash which, if not used properly, can cause pollution of water, land and environment. Hydroelectric projects inundate forests and interfere with the natural flow of water in catchment areas and the river basins. Wind power and Solar rays are good examples of conventional but cleaner and greener technologies which can be effectively tapped to replace thermal and hydro-power. There are other non-conventional sources which can be used once cheap technologies are developed.

2) **LPG, Gobar gas in rural areas**

- a) Households in rural areas generally use wood, dung cake or other biomass as fuel. This practice has adverse effect like deforestation, reduction in green cover, wastage of cattle dung and air pollution.
- b) To rectify the situation, subsidised LPG is being provided.
- c) Also, Gobar Gas Plants are being provided through easy loans and subsidy. For the gobar gas plant to function, cattle dung is fed to the plant and gas is produced which is used as fuel while the slurry which is left over is a very good organic fertilizer and soil conditioner.
- d) Liquefied Petroleum Gas (LPG) is a clean fuel. It reduces household pollution to a large extent.

3) **CNG in urban areas**

In Delhi, the use of Compressed Natural Gas (CNG) as fuel in public transport system has significantly lowered air pollution and the air has become cleaner in the last few years.

4) **Wind power**

In areas where speed of wind is usually high, wind mills can provide electricity without any adverse impact on the environment. Wind turbines move with the wind and electricity is generated. Although initial cost is high yet the benefits are more than the cost.

5) **Solar power through photovoltaic cells**

- a) India is naturally endowed with a large quantity of solar energy in the form of sunlight. With the help of photovoltaic cells, solar energy can be converted into electricity. These cells use special kind of materials to capture solar energy and then convert the energy into electricity.
- b) This technology is extremely useful for remote areas and for places where supply of power through grid or power lines is either not possible or proves very costly.
- c) This technology is totally free from pollution.

6) **Mini-Hydel plants**

- a) In mountainous regions, streams can be found almost everywhere.
- b) Mini-hydel plants use the energy of such streams to move small turbines. The turbines generate electricity which can be used locally.
- c) Such power plants are environment-friendly as they do not change the land use pattern in areas where they are located. Also, they generate enough power to meet local demands.

7) **Traditional Knowledge and Practices**

- a) Traditionally, Indian people are close to their environment.
- b) Various animals and birds helps controlling pests for example, snakes are one of the prime group of animals which prey upon rats, mice and various other pests. Similarly, large varieties of birds like owls and peacocks, prey upon vermin and pests. If these are allowed to dwell around. The agricultural areas, they can clear large varieties of pests including insects. Lizards are also important in this regard. We need to protect these animals and birds.

Check Your Progress 2

1) Explain, in brief, the meaning of sustainable development and its linkages.

.....
.....
.....
.....

2) Putting yourself in the position of an executive in a company, list out the major steps that you would like to initiate regarding the sustainable development.

.....
.....
.....
.....

20.4 POLICY PROPOSALS IN THE 11th FIVE YEAR PLAN

Growth increases the environmental load irrespective of the rate of economic growth. Rapid economic growth can intensify environmental degradation. The solution does not lie in slowing growth since slow growth also leads to its own form of environmental deterioration. With rapid growth we can have the resources to prevent and deal with environmental problems but we must also ensure that rapid growth is environmentally benign. This can be achieved through greater awareness, starting with school children, and appropriate policies. The 11th Plan makes an effort to integrate development planning and environmental concerns. It paves the way for the use of economic instruments based on the 'polluter pays' principle, supplemented by command and control policies where these are more appropriate.

Some Thrust areas for the 11th Plan are:

1) Improving air and water quality

- a) Real time monitoring of air and water quality is crucial for devising programmes and policies related to pollution management. The existing 300 monitoring stations for air and 850 for water quality need augmentation in number and technology. Establishing a reasonably adequate monitoring network with contemporary technology will be a priority.
- b) The objective of river cleaning is to restore the water quality of all the major rivers to the designated best use. We are very far from archiving this objective. The National River Conservation Plan needs a critical review of the present strategy of central assistance to states for creation of facilities. Sustainability and operational issues remain unresolved in most cases. The goal should be to ensure that by the end of the 11th Plan, no untreated sewage or effluent flows into rivers from cities and towns, and that rivers become clean encouraging riverfront development in cities on the river banks.

- c) The demand for river cleaning increases with population and expansion of townships and success depends on the efforts of all stakeholders. Civic bodies should have a pivotal role to play in this context. This must be ensured through policy/legislative means. The impact on water quality by the "Water Quality Assessment Authority (WQAA)" constituted in June 1991, in different states is yet to be ascertained. A workable mechanism will be developed for monitoring the early warning symptoms for improving water quality.

2) Solid waste management

The increasing generation of solid waste is a growing problem in all cities. Uncollected garbage not only causes diseases but it is also visually ugly. Dumping garbage into landfills is not an attractive option. Most industrial countries now require their citizens to segregate wastes at home into recyclable products. While recycling is done by rag pickers in India, their lives can be made less unpleasant if citizens sort out organic and inorganic waste and dispose off organic waste in local compost or vermiculture pits. Cities and towns must be encouraged to evolve systems with citizen participation, for segregation of waste at point of origin, maximizing recycling, and safe disposal of the rest.

3) Preservation of wildlife and biodiversity

- a) Management planning for the Protected Areas will be a priority and each sanctuary/national park will be enabled to maintain a database of vital information on its biodiversity and habitat status.
- b) Important wildlife habitats of the country will be conserved and protected with participation of people. While an interface with communities will be developed, communication and surveillance of forests and wildlife will be augmented through Integrated Forest Protection scheme.
- c) People living in deep forests will be encouraged to shift to fringes voluntarily for providing inviolate space for wildlife. To facilitate this process, an appropriate programme including provision for livelihood opportunities will be formulated as suggested by the Tiger Task Force.

4) Mitigating land degradation through green cover

- a) Overuse of resources has been identified as a major cause of land degradation. Creation of forest biomass resources in all the culturable vacant lands will be taken up for strengthening life support system of communities and maintaining soil water regimes. A programme for social forestry will support development and sustainable management of the common property resources through Panchayati Raj Institutions.
- b) Encouraging agro farm forestry and building interface between industry and farmers is an important strategy suggested in the National Forest Policy, 1988. An enabling environment will be created for encouraging tree growing by farmers. Subsidised supply of raw material to industries from government forests will be discouraged. Forest management will be encouraged to withdraw from raising farm forestry plantations in government forests to provide better market opportunities to the farmers.

5) Increasing the green cover

- a) Satellite data for 2002 indicate green cover of 23.68%, representing a net improvement of 0.65% since 2000. This is a welcome development and if the trend continues, the 11th Plan target of 28% will be fulfilled by 2012. However, it is a matter of concern that the quality of green cover has deteriorated. There has been a 6.3% reduction in dense forests

indicating degradation. State forest management would need to work for attaining productivity potential of the forests. Timber and nontimber benefits must be optimized with adequate investment for regeneration. The 12th Finance Commission has also supported this cause through grants-in-aid for forest maintenance.

- b) Joint Forest Management (JFM) evolved in 1990s aimed at involving communities in improving degraded forests. This was largely based on benefit sharing. It failed where the forests managed by the communities were so degraded that no significant benefits accrued to the communities. However, there was success in places where leadership was in the hands of highly motivated individuals and significant benefits could be generated.
- c) The emphasis in the 11th Plan is on consolidation of JFM through augmenting productivity and linking forests with livelihood and gainful employment generation.
- d) Among the initiatives to be pursued in the 11th Plan are the following:
 - i) Encourage PRIs to revive common property resources through social afforestation.
 - ii) Rationalise forest regulations to allow industry to partner farmers in undertaking agro-forestry for augmenting the raw material base for forest based industries like paper and pulp.
 - iii) Encourage the corporate sector to participate in development of degraded land for forestry, without compromising communities priorities.
 - iv) Rationalise rules and procedures under environmental laws to expedite investment, production and employment growth.

Environmental clearances

As we put in place a policy of environmental protection, we must also pay attention to the danger creating a new license permit system which will replicate all the ills associated with the old licensing regime. A comprehensive review of environmental clearance procedures is necessary to ensure that the system is transparent and avoids unnecessary delay. Unless this is done, the large increases in investment required for accelerated growth will not fructify.

Thus, the targets of 11th Plan are:

- Increase forest and tree cover by 5% points.
- Attain WHO standards of air quality in all major cities by 2011-12.
- Treat all urban waste water by 2011-12 to clean river waters.
- Increase energy efficiency to 20% points by 2016-17.

To sum up, our concern for environmental issues is growing along the lines of global concern. In past, environmental considerations have been neglected. The threat of climatic change poses a real challenge to future generations. Our development strategy therefore, has to be sensitive to these concerns and should ensure that threats and trade offs are appropriately evaluated.

Check Your Progress 3

- 1) With rapid growth we can have the resources to prevent and deal with environmental problems but we must also ensure that rapid growth is environmentally benign. How is this ensured through 11th Plan?

-
.....
.....
.....
- 2) Throw light on the thrust areas of the 11th plan.

20.5 ENVIRONMENTAL ISSUES IN SUSTAINABLE DEVELOPMENT

As we have seen that the sustainable development and environment is related to each other. The environment is related to the total planetary inheritance and the totality of all resources. It includes all the biotic and abiotic factors that influence each other. Biotic elements are all living elements – the birds, animals and plants, forests, fisheries, etc. Abiotic elements are like air, water, land, rocks, sunlight, etc. A study of the environment then calls for a study of interrelationship between biotic and abiotic components of the environment.

Functions and Role of environment

Environment performs four vital functions:

- 1) **Environment supplies resources:** Re-sources include both renewable and non-renewable resources. Renewable resources are those which can be used I. without the possibility of the resource becoming depleted or exhausted. In other words, a continuous supply of the resource remains available. Examples of renewable resources are trees in the forest and fish in the ocean. Nonrenewable resources are those which get exhausted with extraction and use. Example, fossil fuels.
- 2) **Environment sustains life:** Environment includes sun, soil, water and air which are essential ingredients for the sustenance of human life. The carrying capacity of the environment implies that the resource extraction is not above the rate of regeneration of the resources and the waste generated are within the assimilating capacity of the environment. Carrying capacity of the environment helps to sustain life. Absence of carrying capacity of environment means absence of life.
- 3) **Environment assimilates waste:** Production and consumption activities generate waste. This occurs mostly in the form of garbage and pollution. Environment works as a sink to absorb much of the wastes.
- 4) **Environment enhances quality of life:** Environment includes oceans, mountains, deserts, etc. Man enjoys these surroundings, adding to the quality of life.

20.6 ISSUES IN SUSTAINABLE DEVELOPMENT

There are many global issues in sustainable development linked to environment issues. These are;

Global Warming

Ozone Depletion

Environmental Crisis

Rise in Opportunity Cost of Negative Environmental Impacts

Supply Demand Reversal of Environmental Resources

Massive Overuse and misuse of environment resources

1) **Global warming**

Global warming is a gradual increase in the average temperature of the earth's lower atmosphere as a result of the increase in greenhouse gases due to industrialisation in recent times. Most of the global warming has been caused by man-made increases in carbon dioxide and other greenhouse gases through the burning of fossil fuels and deforestation.

Global warming is mainly caused by:

- Burning of coal and petroleum products
- Deforestation
- Release of methane gas from animal waste

In 1992, the Earth Summit had a framework convention on climate changes. Few warnings have been seriously ignored. Climatic changes pose what may be an unparalleled threat to human development. Much of that threat will be transmitted through shifts in hydrological cycles and rainfall patterns and the impact of higher surface temperature on water evaporation. While outcomes to global warming will vary across regions and within countries, some long-term results of global warming, which can be predicted, are:

Melting of polar ice caps with a resulting rise in the sea level and coastal flooding.

Extinction of species.

Frequent tropical storms and tropical diseases.

Agriculture and rural development will bear the brunt of climate risk.

A UN Conference on Climate Change, held in Kyoto, Japan, in 1997, resulted in an international agreement to fight global warming which called for reduction in emissions of greenhouse gases by industrialised nations (called Kyoto Protocol).

2) **Ozone depletion**

Ozone depletion refers to the phenomenon of reduction in the amount of ozone in the stratosphere. Ozone layer protects the earth from the ultraviolet rays of the sun. The depletion of ozone layer has been caused by high levels of chlorine and bromine compounds in the stratosphere. The origin of these compounds is chlorofluorocarbons (CFCs). CFCs are used as cooling agents in air conditioners or refrigerators, or as aerosol propellants, and bromofluorocarbons (halons) used as fire extinguishers.

Long-run effects of ozone depletion are:

- i) It causes skin cancer in human beings.
- ii) It lowers the production of phytoplankton and other aquatic organisms.
- iii) It lowers the growth of terrestrial

The Montreal Protocol is an international treaty designed to protect the ozone layer by phasing out the production of a number of substances believed to be responsible for ozone depletion. It banned the use of compounds containing ozone depleting chemicals.

3) Environmental crisis

Today, the world is facing environmental crisis. The rising population of the developing countries and the affluent consumption and production standards of the developed world have put a great stress on the environment in terms of its functions of supplying resources and assimilating waste. Many resources have become extinct and the waste generated are beyond the absorptive capacity of the environment. Absorptive capacity means the ability of the environment to absorb degradation. The result is that today we are at the threshold of environmental crisis.

4) Rise in opportunity cost of negative environmental impacts

Opportunity cost is the cost of alternative opportunity given up. The country has to pay huge amount for damages done to human health. The health cost due to degraded environmental quality have resulted in diseases like asthma, cholera, etc. Huge expenditure is incurred in treating these diseases.

5) Supply demand reversal of environmental resources

The demand for resources for both production and consumption has gone beyond the rate of regeneration of the resources increasing the pressure on the absorptive capacity of the environment. This reversal of the supply-demand relationship with demand for resources exceeding the supply has led to degeneration of the environment.

6) Massive overuse and misuse of environmental resources

There is massive overuse and misuse of environmental resources. Examples of overuse of environmental resources are deforestation and land degradation. Example of misuse of environmental resources are ozone depletion and global warming.

20.7 STATE OF INDIA'S ENVIRONMENT

- 1) **Rich natural resources in India:** India has rich quality of natural resources in plenty. It is clear from the following points:
 - a) India has rich quality of soil, hundreds of rivers and tributaries, lush green forests, abundant mineral deposits under the land surface, vast stretch of the Indian Ocean, mountain ranges, etc.
 - b) The black soil of the Deccan Plateau is particularly suitable for cultivation of cotton. It has lead to concentration of textile industries in this region.
 - c) The Indo-Gangetic plains-spread from the Arabian Sea to the Bay of Bengal-are one of the most fertile, intensively cultivated and densely populated regions in the world.
 - d) India's forests provide green cover for a majority of its population and natural cover for its wildlife.
 - e) Large deposits of iron-ore, coal and natural gas are found in the country. India alone accounts for nearly world's total iron-ore reserves.
 - f) Bauxite, copper, chromate, diamond, gold, lead, lignite, manganese, zinc, uranium, etc. are also available in different parts of the country.

The developmental activities in India have resulted in pressure on its finite natural resources, besides creating impacts on human health and well-being. The threat to India's environment poses a dichotomy threat of poverty-induced environmental degradation and, at the same time, threat of pollution from affluence and a rapidly growing industrial sector. Air pollution, water contamination, soil erosion, deforestation and wildlife extinction are some of the most pressing environmental concerns of India.

Check Your Progress 4

- 1) There are many global issues in sustainable development linked to environment issues. What are these?

.....
.....
.....
.....

- 2) Throw light on the state of India's Environment.

.....
.....
.....
.....

- 3) Analyse the effects of global warming.

.....
.....
.....
.....

20.8 CHALLENGES TO INDIA'S ENVIRONMENT

Major challenges to India's environment are:

- 1) **Land degradation**
 - a) Land in India suffers from varying degrees and types of degradation arising from unstable use and inappropriate management practices.
 - b) Some of the factors responsible for land degradation are:
 - i) Loss of vegetation occurring due to deforestation
 - ii) Unsustainable fuel wood and fodder extraction

Shifting cultivation

Encroachment into forest lands

Forest fires and over grazing

Non-adoption of adequate soil conservation measures

Improper crop rotation

Indiscriminate use of agro-chemicals such as fertilizers and pesticides

Improper panning and management of irrigation system

Extraction of ground water in excess of the recharge capacity

Open access resource

Poverty of the agriculture-dependant people.

2) Biodiversity loss

- a) India has approximately 20 percent of livestock population on a mere 2.5 percent of the world's geographical area. The high density of population and livestock and the competing uses of land for forestry, agriculture, pastures, human settlements and industries exert an enormous pressure on the country's finite land resources.
- b) The people have tried to prevent indiscriminate cutting of trees through silent revolutions. Chipko and Appiko are two such movements. The seeds of Chipko popularly known as the 'tree huggers' - were sown in the early 1980s in northern India and the forests of the Himalayas. The name of the movement comes from a word meaning 'embrace'. The villagers hugged the trees, saving them by interposing their bodies between them and the contractors' axes. In India, the Chipko movement, which has been active since 1973, is one of the most successful examples of people-orientated environmental restoration in parts of the Himalayan region. The main aim of this movement is tree protection and plantation. Like the Chipko movement, the Appiko movement was launched to save the tropical forests of the Western Ghats. This simple non-violent action became popular and people joined the movement spontaneously.
- c) Estimates of soil erosion show that soil is being eroded at a rate of 5.3 billion tonnes a year for the entire country as a result of which the country loses 0.8 million tonnes of nitrogen, 1.8 million tonnes of phosphorus and 26.3 million tonnes of potassium every year. According to the Government of India, the quantity of nutrients lost due to erosion each year ranges from 5.8 to 8.4 million tonnes.

3) Air pollution

- a) In India, air pollution is widespread in urban areas where vehicles are the major contributors. Vehicular emissions are of particular concern since these are ground level sources and, thus, have the maximum impact on the general population. The number of motor vehicles has increased from about 3 lakh in 1951 to 67 crores in 2003.
- b) India is one of the ten most industrialised nations of the world. It has led to unplanned urbanisation, pollution and the risk of accidents. The CPCB (Central Pollution Control Board) has identified 17 categories of industries which are significant polluters.

4) Management of fresh water and solid waste

- a) Many states in India are on the edge of famine. Whatever water is available, it is polluted or contaminated. It causes diseases like diarrhoea and hepatitis.
- b) Also, there is lack of planned management of solid waste compost. Uncollected garbage not only causes diseases but it is also visibly ugly. Dumping garbage into landfills is not an attractive option.

Causes of Environmental Degradation

Various factors leading to environmental degradation are:

Increasing population density: The high rate of growth of population adversely affects the environment. It certainly leads to soil and water pollution.

According to Todaro and Smith in their book Economic Development:

“In many of the poorest regions of the globe, it is clear that increasing population density has contributed to severe and accelerating degradation of the very resources that these growing populations depend on for survival.”

Urbanisation: Whenever there is large migration of population from rural to urban areas, it leads to fast growth of slum areas. There is excess of load on the existing infrastructural facilities. It causes environmental degradation and ill health.

According to Todaro and Smith in their book Economic Development:

“Congestion, vehicular and industrial emissions and poorly ventilated household also inflate the tremendously high environmental costs of urban crowding. Lost productivity of ill and diseased workers, contamination of existing water sources, and destruction of infrastructure, in addition to increased fuel expenses incurred by people having to boil unsafe water, are just a few of the costs associated with poor urban conditions.”

Use of high yielding variety of seeds: Farmers and workers suffer health problems due to increased use of poisonous insecticides, pesticides and fertilizers. Also, consumers consume food grains which have too much undesirable chemical element as compared IO international standard. Overuse of fertilizers, insecticides, etc. lead to ill health.

Rise in economic activity: With rise in national income or economic activity, there is rise in industrialisation and urbanisation. This raises pollution of air, water and noise. There are accidents, shortage of water, housing problems, etc. In other words, with rise in national income there is ecological degradation which reduces welfare of the people.

Check Your Progress 5

1) What are the Major challenges to India's environment ?

.....
.....
.....
.....

2) What are the Causes of Environmental Degradation ?

.....
.....
.....
.....

3) What are the factors responsible for land degradation ?

.....
.....

20.9 LET US SUM UP

We have analysed the issues relating to Sustainable development in this part. Sustainable development is the key agenda point these days at every national and international forum. We have seen that what is sustainable development and how is it linked to environment? what are the factors which enhances the sustainable development. How this issue is being resolved across the world? We have also seen the negative externalities which have emerged across the world. In India's context we have seen the various development plans and the strategies which are being formed for the sustainable development.

20.10 SELF ASSESSMENT QUESTIONS

- 1) What is sustainable development? What are the various steps and strategies involved in sustainable development? (see section 20.2 and section 20.3)
- 2) How are the environment and sustainable development linked? (See section 20.5)
- 3) What are the environmental issues in sustainable development? (see section 20.5)
- 4) What are the policies being pursued in the 11th five year plan? (see section 20.4)
- 5) What are the specific issues in Sustainable Development? (see section 20.6)
- 6) What are the challenges' to India's environment ? (see section 20.7)

20.11 KEY WORDS

Sustainable Development : A pattern of resource use that aims to meet the needs of existing population without compromising the resource availability and ability of future generations, to meet their needs.

Steady State Economy : When the consumption of renewable resources are equal to the nature's. Ability to replenish, leading to environmental equilibrium, it is called a steady state economy.

Environmental Degradation : The consumption of renewable resources at a rate higher than the nature's ability to replenish the same, results in environmental degradation, which if continued in the long term, leads to sustainable economic development.

Environmental Crisis : The increasing pressure on environment in terms of supply of resources and assimilation of wastes; and the inability of environment to cope with the increasing rate of use of these resources is leading to a situation of environmental crisis.

Resources are becoming extinct or exhausted and wastes generated are beyond absorptive capacity, making us reach the threshold of environmental crisis.

20.12 ANSWERS AND HINTS TO CHECK YOUR PROGRESS

Check Your Progress 1

See section 20.1 and answer.

Check Your Progress 2

See section 20.3 and answer.

Check Your Progress 3

See section 20.4 and answer.

Check Your Progress 4

See section 20.6 and answer.

Check Your Progress 5

See section 20.7 and answer.

20.13 FURTHER READINGS

Brahmananda, P.R. & V.R. Panchmukhi(eds.) (2001). Development Experience in the Indian Economy: Inter-state Perspectives. New Delhi Bookwell.

_____ (1987). The Development Process of Indian Economy . Mumbai : Himalaya Publishing House.

Census of India -2001 (2006). General Population Tables Part-I New Delhi : Controller of Publication.

Dandekar, V.M. (1994) Indian Economy 1947-92, Volume I & II. New Delhi: Sage Publication Government of India (n.d.(2007)) Economic Survey (Annual), various issues: New Delhi Ministry of Finance.

Jalan, B. (1992) The Indian Economy- Problems and Prospects New Delhi; Viking.

Sury M.M (ed.) (2006), Economic Planning in India 1951-52 to 2006-07 New Delhi, Tax Foundation.

UNIT 21 TECHNOLOGICAL CHALLENGES (ICT DEVELOPMENTS)

Structure

- 21.0 Objectives
- 21.1 Introduction
- 21.2 Information Technology Industry in India
- 21.3 Performance of IT Software and Service Export
- 21.4 Contribution to GDP and Employment
- 21.5 IT-enabled Services (ITES) and Broad-based Development
- 21.6 Some Problems and Challenges
- 21.7 E-Governance Programmes
- 21.8 Sustainable Model of E-Governance
- 21.9 E-Governance and IT
- 21.10 Role of Information Technology in India's Financial Sector
 - 21.10.1 Financial Sector Technology Vision Document
 - 21.10.2 Electronic Banking
 - 21.10.3 E-Banking and RBI
- 21.11 Information Technology in Indian Agriculture
 - 21.11.1 IFFCO-ISRO Cooperation
 - 21.11.2 Cyber Dhabas
 - 21.11.3 E-Choupal
- 21.12 Let Us Sum Up
- 21.13 Self Assessment Questions
- 21.14 Key Words
- 21.15 Answer and Hints to Check Your Progress
- 21.16 Further Readings

21.0 OBJECTIVES

After going through this unit, you will be able to:

- describe the development of ICT in India;
- explain the performance of ICT and its contribution to economic development;
- explain the e-governance programme in India;
- describe the ICT related challenges in India;
- explain the role of ICT and latest technological development in India's financial sector;
- illustrate the contribution of ICT in Indian agriculture; and
- list few concluding observations.

21.1 INTRODUCTION

It is generally perceived that Information Technology (IT) is the General Purpose Technology of the new millennium that could be instrumental in enhancing efficiency, competitiveness and growth in all economies and help achieving the millennium development goals by the developing countries. Analytically, the contribution of IT towards development could be viewed at two, different but interrelated, levels;

- a) on account of the growth of IT industries and
- b) on account of the diffusion/use of IT.

The former refers to the contribution in output, employment, export earning etc. on account of the production of IT goods and services and are often more visible than those from use. The latter refers to IT induced development through enhanced productivity, competitiveness, growth and human welfare on account of the use of this technology by the different sectors of the economy and society. Studies on technology diffusion have shown that greater domestic availability of technology acts as a catalyst in the process of diffusion. As has been rightly remarked that enhancing the diffusion of IT, however, does not imply a neglect of IT production. Both hang together and need each other. No wonder, there is hardly any developing country that has not undertaken policy measures and institutional interventions to develop IT industries and harness the new technology as a short cut to prosperity. The outcomes of these initiatives so far have been unevenly distributed; IT production capabilities, by large, are concentrated in the developed countries and sharp divides characterise the digital world order.

The strategy remained more or less the same in essence for a decade or so. In a general environment wherein the economy has been faced with diminishing returns to increased restrictions, the Government acted on the recommendations of the Sondhi Committee and Menon Committee (Government of India, Department of Electronics, 1981). The result was a gradual, but steady, move towards a market-oriented policy regime in the 1980s through a series of policy changes marking the second phase. These policy changes sought a liberal climate, both internally and externally, through dilution of the industrial licensing, relaxations of MRTPA and FERA provisions, liberalisation of imports and greater access to foreign capital and technology. Moreover, considerable relaxations were effected in the fiscal regime including reduction in direct taxes and reduction in excise duties to provide a more propitious economic climate for private sector in the Indian industrial economy.

Check Your Progress 1

- 1) What is the contribution of IT towards development?

.....
.....
.....
.....
.....

- 2) What role does government play for the development of IT industries in the country?

.....
.....

21.2 INFORMATION TECHNOLOGY INDUSTRY IN INDIA

The new industrial policy of July 1991 set the beginning of the third phase marked by further liberalisation in industrial licensing and greater outward orientation. In general, the 1990s witnessed the removal of industrial licensing for most of the products except a few products of strategic significance and further liberalisation with respect to Foreign Direct Investment (FDI) and technology import along with series of fiscal and trade policy reforms to facilitate production and outward orientation. Further, as signatory to the Information Technology Agreement of WTO, import duties on all the ITA goods have been phased out by 2005. The policy reforms were based on the basic premise that there is an inexorable link between trade and investment, which is apparently much stronger in electronics as compared to most other industries. To be more specific, in the global production network, which today characterizes electronics, production of each of the component or sub assembly is made across different countries according to their comparative advantage such that the over all cost of production is minimized. Hence, if the production, and therefore, investment, in IT to take place in any country, the trade regime needs to be the one wherein the free flow of inputs into and outputs out of the economy is ensured.

Over the years the ownership profile of the industry has changed and its evolution in the computer hardware industry provides a broad indication of the way in which electronics industry evolved over the years. Broadly, one could discern following phases in its evolution. The first phase was marked by foreign domination followed by a period when the public sector controlled the commanding heights. During the third phase the private sector firms began to dominate and in the final phase which coincided with the globalisation phase, the foreign firms again had taken control over the industry.

Today there are over 3500 firms in India's electronics industry that comprises of 11 central public sector units with 31 manufacturing establishments, 46 units in the state public sector, about 500 units in the organised private sector and more than 2900 units in the small scale sector. Over the years, with policy reforms, the share of organised private sector and the small-scale sector increased at the cost of public sector units. Today, the public sector accounts for only about 16 percent of the total output, which was as high as nearly 35 percent in 1981. The organised private sector, that also includes foreign firms with considerable share in computers and television, today accounts for about 46 percent of the total output, recording an increase of over 16 percent points since 1981. The increase in their share took place mostly during the last decade. Similarly, the small-scale sector also increased their share in output by about 10 percent during the last decade to reach a level of 38 percent in 2002.

Broadly, the output performance of electronics industry since 1985 could be analysed, based on policy changes, in two periods – with 1991 as the cut off. The post 1990s may be again divided into two sub-periods with 1997 as the cut off because there has been a number of institutional interventions and new policy initiatives since 1997 like the formation of a separate ministry for IT & electronics, reorganisation and merger of DoE/DIT autonomous bodies, attempts at hardware promotion, fiscal incentives, etc. In a recent study that covered period up to 2002 found that during the first phase the recorded output growth of total electronics

output was substantially higher (28.6 percent) as compared to the second period (13.8 percent). As we move to the period since 1997, series of institutional interventions and policy reforms notwithstanding, there has not been any marked increase in the recorded rate of output growth but a marginal decline (11.2 percent).

Similar to the trend in production, there has been a deceleration in exports, while the recorded export growth during 1985-90 (32.8 percent) was higher than the output growth, the subsequent period recorded not only a decline in export growth rate but the recorded export growth rate turned out to be lower than that of growth in production. The total electronic hardware exports from the country increased almost four fold during 1985-90 to reach a level of over 400 million dollars and thereafter exports declined during the first half of 1990s (Table 21.1). Notwithstanding the better performance during the mid-1990s, total exports in 1999 were less than their level in 1990. Since 2000 an upward trend appears to have set in and as a result during 1999-05 there has been more than four-fold increase in the export earning to reach a level of over US\$ 1.9 billion in 2005-06.

21.3 PERFORMANCE OF IT SOFTWARE AND SERVICE EXPORT

The performance in software and IT enabled service exports, on the other hand, has been remarkable by any standard where it has been doubling in almost every alternative year. The recorded annual compound growth rate has been over 50 percent in the 1990s and 38 percent since 1997-98 and such a record has been unprecedented in independent India. As of now the software and service exports is over 20 percent of merchandise exports and even higher than one of India's principal commodity in India's exports viz. textile and textile products. (see Table 21.1)

Table 21.1: Software and Hardware: Trends in Exports (US\$ million)

Year	Software	Share (percent)	Electronics Hardware	Share (percent)	Total
1985-86	27.79	22.01	98.51	77.99	126.30
1986-87	38.35	20.42	149.47	79.58	187.82
1987-88	54.37	22.59	186.32	77.41	240.70
1988-89	69.74	21.26	258.26	78.74	328.00
1989-90	94.28	20.02	376.65	79.98	470.93
1990-91	111.47	21.50	406.97	78.50	518.44
1991-92	134.84	36.67	232.91	63.33	367.75
1992-93	163.24	39.21	253.03	60.79	416.27
1993-94	286.94	50.08	285.98	49.92	572.92
1994-95	430.27	52.47	389.83	47.53	820.10
1995-96	702.55	53.74	604.79	46.26	1,307.33
1996-97	985.92	58.61	696.34	41.39	1,682.26
1997-98	1,641.34	67.79	780.04	32.21	2,421.38
1998-99	2,495.80	84.59	454.71	15.41	2,950.52
1999-00	3,692.36	89.08	452.55	10.92	4,144.91
2000-01	5,910.11	85.32	1,016.54	14.68	6,926.65
2001-02	7,129.09	85.43	1,216.14	14.57	8,345.23
2002-03	10,032.29	89.17	1,218.67	10.83	11,250.97

2003-04	12,961.95	88.32	1,713.72	11.68	14,675.67
2004-05	18,110.16	90.93	1,806.95	9.07	19,917.11
2005-06	23,243.24	92.39	1,914.41	7.61	25,157.66

Note: Data for the year 2005-06 are estimates

Source: Department of Electronics, Guide to Indian Electronics (different years), Nasscom Strategic Review (different years).

The Table 21.1 shows that the trends in exports of software and hardware have increased over the period of time. However share composition between software and hardware has turned more towards the software exports.

21.4 CONTRIBUTION TO GDP AND EMPLOYMENT

The IT and ITES industry in India in value terms, according to the estimates by NASSCOM, has reached US\$ 64 billion in 2007-08. This indicates an almost ten fold increase from US\$ 4.8 billion in 1997. As a result, the share of IT sector (defined by NASSCOM as comprising of IT hardware, software and services) in GDP increased from about 1.2 percent in 1997-98 to 5.4 percent in 2006-07. By way of comparison, Chandrasekhar (2006) finds that IT revenues in 2004-05 were about 20 percent higher than construction sector and almost three times higher than in mining and in electricity, gas and water supply. What is more, gross revenue from IT services exceeded 12 percent of GDP generated in India's service sector that accounts for about 54 percent of the GDP. These estimates, however, appears to involve a gross underestimate because it does not include telecommunication (both equipment and services), mass communication output like Television and some of the other electronic products that are integral part of IT sector. Viewed thus the real contribution of IT to the GDP would be much higher.

According to NASSCOM (National Association of Software and Service Companies) Surveys, the software industry employed 284,000 people in 1999-00 as compared to 160,000 professionals in 1996-97 and reached a level of 1.63 million in 2006-07 recording an annual compound growth rate of more than 35 percent. It is shown that the industry is creating job opportunities for highly qualified (majority with an engineering degree) young graduates with a relatively short experience. It is especially notable that though the ITES accounts for only about 27 percent of the total exports, the employment generation is almost on par with the Software sector.

During the last ten years the industry has been generating more than a 0.1 million employment every year and the total number of jobs created during the last decade exceeded one million. The observed performance of the software and service sector in employment generation appears highly impressive when considered against the fact that employment generation by the organised manufacturing sector has been on the decline during the last decade and according to NSS statistics during 1999-00 to 2004-05 growth in employment in the rural and urban areas has been only of the order of 1.97 percent and 3.22 percent respectively.

Check Your Progress 2

- 1) How does IT sector contribute to GDP of the country?

.....

.....

.....

.....

2) To what extent does the IT sector generates employment. Comment.

.....
.....
.....
.....

21.5 IT-ENABLED SERVICES (ITES) AND BROAD-BASED DEVELOPMENT

Having established the credibility in the export of software services, of late the Indian firms have emerged as the major players in business process outsourcing (BPO) through Internet or the so-called IT Enabled Services (ITES). In 1999-00 the total ITES exports was only of the order of US\$ 565 million but as per the estimates by Nasscom (2006), the ITES exports increased from US\$ 3.1 billion in 2003-04 to US\$ 4.6 billion in 2004-05 recording a growth rate of 48 percent and are estimated to reach US\$ 8 billion by 2006-07. As a result, the share of ITES in total software and service exports increased from about 14 percent 2000 to 25 percent in 2006-07. Hence, but for the rise of ITES exports, the growth of IT exports would be even lower than what was observed earlier.

The recent growth in ITES exports from India has been facilitated by a number of factors. From the supply side, India with 350 and above universities and about 14000 colleges produces about 2.46 million graduates and about 290,000 engineering degree and diploma holders every year. English is widely used as a medium of instruction, which in turn provides an ample supply of manpower for ITES services at a much lower cost as compared to other countries. In general the operating cost per employee in India is only about 20 percent of that in US and the comparable cost in Philippines is about two percent higher than in India. From the demand side, in the competitive world of today, substantial cost advantage is accrued by the firms resorting to off-shoring and outsourcing of services. Mckinsey shows that there are very large differences in the wages paid for equivalent skills between the US and developing countries like India and Philippines. For example, the equivalent of a software developer who costs US\$ 60 an hour in the US costs only US\$ 6 an hour in India. These wage differences resulting at least 45 to 55 percent savings for firms resorting to off shoring. In addition improvement in the telecom infrastructure leading to improved connectivity coupled with reduction in the cost of communication inter alia on account of increased competition also facilitated the ITES boom.

The ITES/BPO services, experiencing a boom at present, have certain characteristics that could contribute to broad based development. While employment in the Software sector has been mainly for the highly skilled IT professionals, the ITES sector generates more broad based employment including the arts and science graduates. It is also found that ITES sector is more employment intensive with employment per million dollars of exports as high as 70, which is more than twice that of the software sector. No wonder with 27 percent of the total exports ITES sector generates as much employment as the software sector. Thus, viewed ITES/BPO appears to have the potential of generating substantial employment for the growing number of educated youth in the country. While software industry in India is shown to have led to an enclave type development, the ITES is found geographically diffused across different regions in the country and generating more linkages with rest of the economy. Hence, for those regions, which were not successful in attracting software investment, ITES offer an alternative. Accordingly,

different state governments have initiated policy measures to attract ITES activity into their states with considerable success.

Besides these demonstration effects, the role played by MNCs in software development in India has been quite limited. Although all the big software companies have established development base in India, their overall share in India's exports of software is rather small. The MNEs however, have been recording a faster growth rate in the recent years and they account for over 20 percent of the total exports. Yet, even in 2004-05 MNCs do not figure among the top seven software companies in India, ranked either on the basis of overall sales or the exports. Among the top twenty software companies too, no more than four are MNC affiliates or joint ventures. MNCs, however, are important clients of Indian software companies. There are hardly any Fortune 500 MNCs that do not resort to outsourcing of software from India.

Indian companies are enhancing their innovative capabilities and competitiveness through a combination of green field initiatives, cross border mergers and acquisitions and global partnerships with foreign firms. The sectoral distribution of overseas investment by Indian firms reveals that services sector, mostly led by the software, accounted for the highest share of acquisitions made. Of the 594 acquisitions during 2000-07 valued at US\$51 billion, 224 (37.7 percent) were in the field of IT and ITES. Notably the US and UK that together accounts for over 80 percent of India's IT exports accounted substantial portion of the outward investment by the Indian firms. This tends to suggest that that the underlying strategy of the Indian firms has been to get access to the new markets and other complimentary assets needed by them from the firms in the developed countries into different sectors of the economy.

Check Your Progress 3

- 1) "Indian firms have emerged as the major players in business process outsourcing (BPO) through Internet or the so-called IT Enabled Services (ITES)." Comment.

.....
.....
.....
.....

- 2) How are Indian companies enhancing their innovative capabilities and competitiveness?

.....
.....
.....
.....

21.6 SOME PROBLEMS AND CHALLENGES

There are common set of **problems** faced by ICT sectors in India. These problems include:

- 1) limited access to ICT technologies and low tele-density especially in rural areas,

- 2) inadequate quality and skills of graduates,
- 3) rising salaries not commensurate with increase in productivity,
- 4) weak infrastructure which result in frequent power shortages,
- 5) low level of personal computer (PC) use and internet penetration,
- 6) low level of domestic technology development, limited bandwidth, inadequate availability of venture capital for the small scale units (taxed in India), high attrition rates in BPO companies, esecurity, improper content design of e-governance programmes, and limited domestic market for knowledge based technology and products.

Check Your Progress 4

- 1) Throw light on the problems faced by ICT sectors in India.

.....

.....

.....

.....

.....

21.7 E-GOVERNANCE PROGRAMMES

The E-Governance role could be:

- Technical role, in terms of automation of tedious tasks earlier done by humans.
- Facilitating role, leading to participatory and all encompassing decision-making and implementation processes.
- Innovative role, involving new services and mechanisms to deliver these services.

Computerisation of the Indian Railways' Passenger Reservation System one form of e-governance may be branded a success . Not only did it significantly increase the efficiency of the reservation process, but it also reduced corruption (though did not eliminate it), increased rail staff morale and improved the quality of customer service. Beyond these reform components, it also gave Indian Railways (and India more widely) a more modern image and it helped to build information age capabilities within the country.

Various works of other government ministries and departments is made accessible to the general public in India through their own web sites . These include, allocation of Permanent Account Number (PAN) for income tax payers, processing of passport application, conduct of public examination, custom clearance, Regional Transport Offices, schemes under implementation by the NGOs, vigilant information, VSAT (Very Small Aperture Terminal)-based money orders under the Department of Post, Supreme Court, land records, Parliament questions, debates and deliberations, among others (see www.mit.gov.in for more details of computerization in the Central and State governments).

There are more than 800 e-governance programmes running all over India. These projects are at different stages of their implementation (see for details: www.egovdatabase.gov.in)

21.8 SUSTAINABLE MODEL OF E-GOVERNANCE

The Department of Information technology in India recently embarked on a programme under its National E-Governance Plan to establish 100,000 telecentres which are called community service centres. The connectivity will be provided by State Wide Area Network (SWAN) and the content will be provided by various public sector agencies as well as private players. The structure is three tiered one, with the village level entrepreneur at the bottom, a service agency centre managing a cluster of community service centres (for one or more districts), and the state designated agency in charge of providing the requisite policy content and support to the service centre agency.

IT TRAINING

In this regard, the Indian Government set up a Task Force on Human Resource Development for the IT sector, whose main objective was to prepare a long-term strategy to increase the number of trained IT professionals. In addition, initiatives by the All India Council of Technical Education (AICTE) include industry-institute interactions through collaboration with industry associations, and revision of curriculum to ensure quality and industry relevance. The initiatives taken by the University Grants Commission (UGC) include establishing digital repository of research and training material, information, communication and computer education, teaching innovations and career-oriented education programmes. Indian Institutes of Information Technology (IIITs) have also been set up by the Central and State governments together with the private sector to provide qualified IT professionals to the industry and more such institutes and central universities are likely to be set up in the coming time (Manmohan Singh, 2007).

National Employment Database

There seems to be lack of skilled people in IT Industry in India. According to a report on talent pool by NASSCOM-KPMG, 2004 India had a requirement of 1.12 million qualified workers for the IT software and service areas in 2009 and the estimates of supply indicate the availability of only about 885,000 by then. Also, only 25 percent of the engineering graduates are employable. Identification and selection of talent in this scenario becomes critical. Therefore assessments are important. National registry of entrants need to be made at the level of national association of software companies in the respective countries and this information should be made available to government for planning and implementation of their IT programmes. University Grants Commission, university academia along with the national associations need to develop IT course curricula which helps students orient themselves better for jobs in the IT Industry.

Provision for Stable and Quality ICT Infrastructure

Reliable electric power, efficient and inexpensive telecommunications and access to venture capital are essential infrastructures for the IT sector. Although telecommunications infrastructure has vastly improved in South Asia in the last decade or so, there are still regulatory issues relating to the pricing and content of wireless technologies (including mobile, internet telephony, broadband policies) and issue of broadening spectrum and enhancing commercial interest vs national

The National E-Governance Action Plan has suggested a list of core policies which are:

- Vision, Mission, Strategies, Policies, guidelines, frameworks, roadmaps.
- E-Governance Technology Architecture, framework, guidelines.
- Funding Strategy.

- Human Resources Strategy for project leadership, implementation, operations.
- Security Policy, framework, guidelines.
- Policy on front ends (kiosks, integrated service centres, etc. - ownership, funding/subsidy, types of services, charges etc.).
- Policy on middleware (portals, vans, data centres, etc. - ownership, exclusivity, interconnect, charges, etc.), Policy on backends (department automation - role of private sector, role of government, safeguards, right to information, privacy, etc.).
- Policy on integrated services (ownership, responsibility etc.).
- Process Re-engineering - policies, guidelines.
- Policy on GIS-guidelines.
- Policies and guidelines on electronic payment mechanisms.
- Policies on employment generation through Employment Guarantee Schemes.
- Prioritisation policy.
- Policy on interoperability.
- Policy on spread of access.
- Policies, strategies and guidelines for outsourcing of Employment Guarantee projects.
- Policies and guidelines on managing content.

The National E-Governance Action Plan has given a list of core infrastructure which are:

- National E-Government Intranet (NICNET, ERNET, other service providers).
- State-wide Intranets.
- National E-Government Data Center.
- State Data Centers.
- Security Infrastructure & Resource Centre for E-Governance (PKI, etc.).
- GIS - National Spatial Data Infrastructure, and
- Language Resource Centre.

Human resource development has following action plan:

- Training for EG Policy Makers.
- Training for CIOs.
- Training for specific projects.
- General IT skills.
- Special training programmes for specialists: Security, Languages etc.
- Advanced courses on HLD, architecture, language technologies, etc.
- Equipping National/State Institutions of Public Administration for E-Governance training.

Check Your Progress 5

1) What are the essential infrastructures for the IT sector?

.....
.....
.....
.....

2) What are the core policies of The National E-Governance Action Plan?

.....
.....
.....
.....

21.9 E-GOVERNANCE AND IT

E-Governance can use IT as a vehicle to create a knowledge society leading to the improvement in life of a common man. The only handicap in the e-governance system is that in India, there are a large number of illiterates and even a large number of computer illiterates. Technology is a tool in this effort. In the modern age, the latest technology and scientific knowledge has become imperative for maximizing social welfare of the people. Undoubtedly, a lot of progress has been made within the last decade or so in the realm of innovations and their applications. However, much is left to be done in our rural areas. We are not losing sight of the fact that unless life in the rural areas is improved with the help of modern technology, it would not be correct to say that India has been progressing in improving its social welfare.

21.10 ROLE OF INFORMATION TECHNOLOGY IN INDIA'S FINANCIAL SECTOR

Information and Communication Technologies (ICTs) are playing increasingly important roles in the day-to-day lives of people, revolutionising their work and leisure and changing rules of doing businesses. Development of ICT leads up to E-Governance, which has now become the most talked word around the world over. It has bridged the gaps in terms of the reach and the coverage of systems and enabled better decision-making based on latest and accurate information, reduced costs and overall improvement in efficiency. In the Indian context, the financial sector, especially the banking sector, has been a major beneficiary from the inroads made by IT. Many new processes, products and services offered by banks and other financial intermediaries are now IT centered. Effective integration of technology with sound business practices requires business process re-engineering and banks in India need to follow up on the beginnings made in this regard. Newer delivery channels to customers Automated Teller Machines (ATMs), and the networking of ATMs in the form of Shared Payment Networks, Internet Banking - and implementation of Core Banking solutions by most banks are some examples.

The RBI has played a proactive role in the implementation of IT in the banking sector. IT based initiatives are focused on meeting the three pronged objective of better house keeping, improved customer service and overall systemic efficiency. The RBI has come out with a Financial Sector Technology Vision Document

outlining the approach to be followed for IT implementation for the medium-term period of about three years. This document will help banks in finalising their IT plans in tandem with the overall approach for the banking sector, as envisioned by the RBI.

Most of the initiatives regarding technology are aimed at providing better and more efficient customer service by offering multiple options to the customer. The death of distance, which is a by-product of technology, has become a reality in the banking sector. Technology is also playing a key role in banks' strategy for gaining a competitive edge.

Many banks have commenced the process of setting up core banking solutions, which are at various stages of implementation. While such systems are already in place in respect of new private sector banks, a few old private sector banks and public sector banks are also quickly moving to set up such processes. This would benefit the customer in the banking sector. Computerisation of the business of banks has been receiving high importance. The public sector banks have already crossed the 70 percent level of computerisation of their business. The directive from the Central Vigilance Commission (CVC) to achieve 100 per cent computerisation has resulted in renewed vigour towards computerisation of branches.

Networking has been receiving focused attention by banks. This activity is also being monitored by the RBI. Most banks have their own corporate networks to facilitate inter-branch and branch-controlling office communication in an electronic mode. Inter-bank and inter-city communication takes place through the Indian Financial Network (INFINET). As part of the INFINET, the terrestrial lines have been augmented to provide for increased data transfer capabilities. All these have resulted in the dependence of banks on network-based computing which has benefited the customer.

INFINET also provides for safe and secure transmission of electronic messages with the use of Public Key Infrastructure (PKI) which has the legal backing of Information Technology Act, 2000. It also provides for messages to flow in a structured environment, using the Structured Financial Messaging Solutions (SFMS), which provides for inter-operability of messages so that straight through processing (STP) is achieved.

Another major development witnessed in recent years is the growth in multiple delivery channels to customers such as internet-based banking, mobile banking and anywhere banking. This has benefited the customers and the banks alike. While customers have now a wide variety of options to choose from, banks have been able to reduce costs which have had a positive impact on their profitability.

These developments have, however, also posed certain challenges. In a world where geographical barriers are losing significance, it is essential that security is given prime importance in a trans-national scenario where large sums of money are at stake. While the challenges relating to physical security could be confronted with relative ease, the position is much more complicated in respect of IT security. The RBI has, therefore, provided guidelines on information system (IS) security as also IS audit which banks can use for their benefit. These are generic in nature and do not have any prescriptive tones.

Check Your Progress 6

- 1) How does the development of ICT leads up to E-Governance ?

.....
.....

.....
.....
2) How is technology and banking interrelated?

.....
.....
.....
.....

3) What challenges have been posed by the technological advancements?

.....
.....
.....
.....

21.10.1 Financial Sector Technology Vision Document

The RBI released the draft Financial Sector Technology Vision document on May 6, 2005. It provides a broad overview of the thrust areas of the direction provided by the RBI in respect of IT for the financial sector for more than two decades and sets out a roadmap for 2005-08. The Vision document focuses on the following:-

- 1) IT for regulation and supervision,
- 2) IT for the Financial Sector, and
- 3) IT for Government related functions.

The Vision Document envisages emerging challenges in the form of implementation of standardisation across a variety of hybrid systems at different financial entities, need for decision support systems and the technology to facilitate risk based off-site supervision. It envisions common inter-operable web-based structures for transmission of data relating to regulatory functions and the use of a single centralised database for all information, apart from hiving off the operation of non-critical functions by the RBI.

The Vision Document also visualises Institute for Development and Research in Banking Technology (IDRBT) which is to be a premier research institute, concentrating on research and development for the banking and financial sector, providing educational training facilities and hiving off business related activities.

Recognising the requirements of IT for the financial sector, the Vision Document elucidates the thrust areas of the RBI by providing generic information on various standards and approaches, IS Audit and requisite focus on business continuity plans. The Vision Document proposes that specific attention would be devoted to percolation of technology efforts to all types of banks and all sections of the customers in the banks with specific reference to the rural areas and the use of affordable technology products which can be easily used by the target clientele with inter-shareable resources.

The document also details the use of IT in the Government sector transactions (which has the largest potential to grow significantly in the years to come), with specific attention on the need for business process re-engineering, changes in rules and procedures for aligning them with e-governance in a manner so as to achieve implementable objectives.

21.10.2 Electronic Banking

Electronic banking (E-Banking) is a generic term encompassing internet banking, telephone banking, mobile banking etc. In other words, it is a process of delivery of banking services and products through electronic channels such as telephone, internet, cell phone etc. The concept and scope of E-Banking is still evolving.

Several initiatives taken by the Government of India as well as the Reserve Bank of India (RBI) have facilitated the development of e-banking in India. As a regulator and supervisor, the RBI has made considerable progress in consolidating the existing payment and settlement systems, and in upgrading technology with a view to establishing an efficient, integrated and secure system functioning in a real-time environment, which has further helped the development of e-banking in India. The Government of India enacted the IT Act, 2000 with effect from October 17, 2000, which provides legal recognition to electronic transactions and other means of electronic commerce.

21.10.3 E-Banking and RBI

The RBI has been gearing up to upgrading itself as a regulator and supervisor of the technologically dominated financial system. In 1998, it availed the technical assistance project of Department for International Development (DFID), UK for upgrading its supervisory system and adaptation of its supervisory functions to the computerised environment. It issued guidelines on 'risks and control in computer and telecommunication system' in February 1998 to all the banks advising them to evaluate the risks inherent in the systems and put in place adequate control mechanisms to address these risks, which can be broadly put under three heads, viz., IT environment risks, IT operations risks and product risks.

The existing regulatory framework over banks has also been extended to internet banking. These guidelines cover various issues that would fall within the framework of technology, security standards and legal and regulatory issues. Virtual banks, which have no offices and function only on line are not permitted to offer e-banking services in India and that only banks licensed under the Banking Regulation Act and having a physical presence in India are allowed to offer such services. Further, banks are required to report to the RBI every breach or failure of security systems and procedures in Internet banking, while the RBI at its discretion may decide to commission special audit/inspection of such banks.

As per recent guidelines, banks no longer need any prior approval of the Reserve Bank for offering the internet banking services. Nevertheless, banks must have their internet policy and they need to ensure that it is in line with parameters as set by the Working Group on Internet Banking in India (2001).

Check Your Progress 7

- 1) What does The Vision Document focuses on?

.....
.....
.....
.....

- 2) Write a note on E-Banking.

.....
.....

21.11 INFORMATION TECHNOLOGY IN INDIAN AGRICULTURE

India has emerged over the last decade as the most preferred destination for outsourcing of IT services. The vibrant IT industry is contributing immensely by providing information about latest technology and international business practices. Various sectors of the Indian economy such as industry, finance, insurance, communications and transport have adopted information technology in a big way. However, agricultural sector of the economy is lagging behind in utilising IT services. Some efforts have been made in this regard but they are by no means adequate.

The rapid strides that the country has registered in the IT field will remain incomplete unless IT is fully utilised to ensure more efficient and productive Indian agriculture. Practically there is no area in agriculture in which IT has no role to play. The immense scale and diversity of Indian agriculture provides the ultimate challenge to the potential of information technology.

The adoption of IT services in agriculture depends on the main functionaries involved in Indian agriculture. These functionaries can make a big contribution to the growth of agriculture with the assistance of IT. For this purpose, the following functionaries can be considered (a) farmers, (b) industries providing inputs to agriculture, (c) industries dealing with agricultural output, (d) central and state governments and (e) NGOs working for the benefit of farmers and agricultural universities and research centres.

Indian farmers, for whose welfare a huge government machinery is devoted, still suffer from the absence of right information at the required time. The farmers require timely information on weather conditions, sowing time, availability of inputs including credit, expert advice on maintaining his crop in healthy condition, information on markets and on all other areas of interest to him and his family.

In spite of the best efforts and expenditure, the conventional apparatus has not been able to deliver the goods satisfactorily. Herein lies the role of IT which can efficiently address the concerns of farmers stationed at even remote locations. Low literacy levels, cost of computers, poor communication infrastructure make it impossible for individual farmers, particularly small farmers, to directly adopt IT. This calls for institutional efforts to provide IT-based services to farmers.

In order to keep pace with the state-of-the-art technologies, NIC has been conducting various training programmes on IT application on a regular basis from time to time for the user organisations of agriculture sector.

Agricultural Informatics Division of NIC has taken up various initiatives in bringing IT led development which includes Web-enabled applications, GIS-based applications, Multimedia applications, Database applications and E-Governance and training etc., in the Ministry of Agriculture.

Check Your Progress 8

- 1) How is agriculture benefited with Information Technology?

.....
.....

21.11.1 IFFCO-ISRO Cooperation

Recently, IFFCO has initiated IT-based services for farmers and cooperative societies. It has taken up a project in association with Indian Space Research Organisation (ISRO) to utilise satellite based remote sensing data and Geographical Information Systems (GIS). Developed countries have been utilising precision farming with the help of IT tools for a long time. While this will take a long time for our country due to small holdings, it is to be noted that GIS has an invaluable role to play even in the existing conditions. Remote sensing and GIS information can provide warnings on evolving crop stresses, crop vigour etc.

The IFFCO-ISRO GIS project extends support for efficient and timely availability of IFFCO's fertiliser to farmers through better logistics and efficient operations. Based on the experience gained from this project, more intensive services based on GIS are envisaged for the entire country. In addition to the GIS-based services, effort is being made to create databases that contain information of interest to the farmers. These include recommendation on package of practices for major cereals, pulses, horticulture, floriculture and animal husbandry etc. Information on various inputs such as seeds, fertilizers, credit is provided. An important service envisaged is to provide access to the nearest expert in case of stress or any other problem witnessed in the crops. Facilities are sought to be provided to encourage and share farm experiences by forging various crop forums. Many of the agricultural extension services are also proposed to be made online using multimedia facilities.

In order to encourage farmers to obtain best possible price, information regarding prices of various crops prevailing in approachable markets (mandies) is also being provided. Other areas of interest to farmers such as distance education, location specific news etc. are also planned.

21.11.2 Cyber Dhabas

To take IT to the doorsteps of the farmers, it is proposed that a large number of access points called cyber dhabas are setup. These cyber dhabas should be provided with a PC and a modem with telephone connection to connect to the databases. The farmers can take the assistance of the operator of cyber dhabas for a nominal charge.

The major bottleneck in spreading e-culture to rural areas is related to connectivity i.e. ensuring that the access points can get connected to the databases which are in selected locations. Since dialup lines are very slow, other viable options are required to be explored. Unfortunately, the alternatives are expensive and may not be feasible. One silver lining is that several private operators are connecting important cities with fiber optic which provides a very reliable and fast access. Since these will pass through rural areas, it is possible to explore the possibility of tapping this potential by laying the last mile connectivity. Once this is done, substantial segment of rural India can access the IT-based services.

Check Your Progress 9

- 1) What should be done to take IT to the door steps of the farmers ?

.....

.....

.....

.....

21.11.3 E-Choupal

E-Choupal, ITC's unique web-based initiative, offers farmers the information, products and services they need to enhance productivity, improve farm-gate price realisation, and cut transaction costs. Farmers can access the latest local and global information on weather, scientific farming practices, as well as market prices at the village itself through this web portal – all in Hindi. E-Choupal also facilitates the supply of high quality farm inputs as well as the purchase of commodities at the farm.

Given the literacy and infrastructure constraints at the village level, this model is designed to provide physical service support through a choupal sanchalak, himself a lead farmer, who acts as the interface between the system and the farmers. The contents of this site in their entirety are made available only to the registered sanchalaks.

Check Your Progress 10

- 1) Write a note on E-Choupal.

.....

.....

.....

.....

21.12 LET US SUM UP

The experience of India in the ICT sector and recent technological progress is a clear indication of the possibility of developing countries to participate successfully in the international division of labour in knowledge intensive sectors. Though India is one among the pioneering developing countries to initiate policy measures and institutional interventions towards evolving a broad based electronics industry, the performance in the IT hardware sector has been less remarkable because of its failure to reap the linkages between trade and investment in an assembly oriented industry like electronics. While hardware lagged behind, the software sector emerged as a major source of export earning and employment generation and there are indications to show that the industry has been moving up the value chain. The existence of a vibrant sectoral innovation system built up over the years, as evident from the highly competitive production and export network led by local firms with active participation of foreign firms, network of R&D institutions and firms in a conducive policy environment, seems to have facilitated an upward movement along the value chain. This is evident from the country's increasing participation in the global division of labour in R&D, embedded software development and other high value adding activities.

The other challenges that the industry needs to address include, but not limited to, lagging hardware sector that in turn cannot be de-linked from the increasing competition for skilled manpower between software sector and other sectors. The adverse impact on account of the resource movement effect is not confined to the hardware sector; all the sectors that require skilled manpower like teaching, research and other activities are getting adversely affected. The problem could be addressed at least partly by enhancing the supply of skilled manpower as the present rate of enrolment in higher education is at a very low level of seven percent. More importantly, India is yet to emerge as a major user of IT as the present level of IT diffusion into sectors like manufacturing remains at a very low level. In a context wherein international competitiveness is the key to survival, IT diffusion could play a significant role in promoting international competitiveness and both by

generating new opportunities and by averting potential losses. Hence it is high time for India to evaluate the social marginal product of a dollar worth of exports vis à vis domestic consumption and devise appropriate policies to promote the diffusion of IT.

21.13 SELF ASSESSMENT QUESTIONS

- 1) What is technological progress? Discuss the growth of IT industry in India.(see section 21.3)
- 2) Explain the contribution of IT sector to employment and economic growth.(see section 21.5)
- 3) Describe the technological issues and challenges in India.(see section 21.7)
- 4) Explain the role of ICT in India's financial sector.(see section 21.11)
- 5) Discuss the contribution of latest IT developments for the agriculture development in India.(see section 21.12)
- 6) What is e-governance? Describe the sustainable model of development for e-governance.(see section 21.9)

21.14 KEY WORDS

- E-Governance** : Electronic governance refers to the use of a range of modern information and communication technologies such as internet, local area networks, mobiles etc by government to improve effectiveness, efficiency, delivery and to increase transparency.
- Liberalisation** : Refers to relaxation of rules, regulations and bureaucratic controls of the government on trade and commerce. It may or may not include privatisation.
- Privatisation Policy** : key areas of investment-core policies , infrastructure, human resource development in IT etc.
- Policy on Interoperability** : The E-Governance architecture should be such that local-state-National and global architecture fit into each other.
- Process Re engineering** : Govt. process re engineering (GPR) is the fundamental rethinking and radical re designing of Govt. processes to achieve dramatic improvements in performance – cost, quality, service and speed, breaking away from conventional wisdom and organisational boundaries.

21.15 ANSWERS AND HINTS TO CHECK YOUR PROGRESS

Check Your Progress 1

See section 21.2 and answer .

Check Your Progress 2

See section 21.3 and answer.

Check Your Progress 3

See section 21.4 and answer.

Check Your Progress 4

See section 21.7 and answer.

Check your progress 5

See section 21.8 and answer.

Check Your Progress 6

See section 21.9 and answer.

21.16 FURTHER READINGS

Baweja, Yogesh (2005), "Does E-Governance means Good governance", 'Yojana' Vol. 49, Ministry of Information and Broadcasting, New Delhi, August.

Kaushiva, Anamika (2005), "E-Governance for Good Governance-The National E-Governance Action Plan", Kurukshetra Volume 53, No.5, March.

Taganas, Rey A.L. and Vijay Kumar Kaul (2006), "Innovation Systems in India's IT Industry-An Empirical Investigation", Economic and Political Weekly, Vol.- XLI, No.39, PP No. 41784185, September 30-October-6.

Vijayanand, K. and Ananda Sagar K. (2003), "Information and Communication Technology: An Indian Perspective", Paper of GIS Development. (Available on website: <http://www.gisdevelopment.net/proceedings/mapasia/2003/papers/i4d1i4d004.htm>).

WTO (2003), World Trade Report.

UNCTAD, 2005. Recent Developments in International Investment Agreements, UNCTAD/WEB/ITE/IIT/2005/1.

Tolba, M.K. (1987) Sustainable Development: Constraints and Opportunities, Guildford, Butterworth Scientific.

Elliot, J A (1994) An Introduction to Sustainable Development, London and New York, Routledge.

UNIT 22 GOVERNANCE AND DECENTRALISATION

Structure

- 22.0 Objectives
- 22.1 Introduction
- 22.2 Meaning of Governance and Good Governance
- 22.3 Decentralisation
- 22.4 Government Initiatives Towards Governance
- 22.5 The Role of Administrative Reforms Commission
- 22.6 Current Challenges to Governance
- 22.7 Decentralisation and Strengthening Panchayati Raj Institutions
- 22.8 The Concept of District Planning Committee
- 22.9 Participation and Harmonizing Community Based Organisations with Panchayati Raj Institutions
- 22.10 Let Us Sum Up
- 22.11 Self Assessment Questions
- 22.12 Key Words
- 22.13 Answers and Hints to Check Your Progress
- 22.14 Further Readings

22.0 OBJECTIVES

After going through this unit, you should be able to:

- explain the concept of good governance;
- describe the concept of good decentralisation;
- explain the current issues in governance and decentralisation; and
- describe decentralisation and Panchayati Raj Institutions.

22.1 INTRODUCTION

There has been increasing concern about the issues of democratisation and good governance. Because the system of delivery of public goods has not served very well and the very democratic institutions also could not correct this situation. In particular, the failure of efforts at encouraging democratic economic development within the framework of highly centralised states initially gave rise to much concern about issues of good governance. During the past decade, with increasing frequency, those concerns have resulted in growing attention being paid to issues of decentralisation and especially to the relationship between decentralisation and democratic governance.

22.2 MEANING OF GOVERNANCE AND GOOD GOVERNANCE

Governance relates to the management of all such processes that, in any society,

define the environment which permits and enables individuals to raise their capability levels on the one hand, and provide opportunities to realise their potential and enlarge the set of available choices, on the other. These processes, covering the political, social and economic aspects of life impact every level of human enterprise, be it the individual, the household, the village, the region or the nation. It covers the State, civil society and the market, each of which is critical for sustaining human development. The State is responsible for creating a conducive political, legal and economic environment for building individual capabilities and encouraging private initiative. The market is expected to create opportunities for people. Civil society facilitates the mobilisation of public opinion and people's participation in economic, social and political activities.

There are many different definitions of good governance but it is generally agreed that good governance must be broadly defined to cover all aspects of the interface between individuals and businesses on the one hand and government on the other.

The concept of governance is often used in two quite different ways: one at the international level and the other at the national level. Increasingly, among international organisations (such as the World Bank and the United Nations), governance is used as a concept to both provide a broad overview of and describe the way societies manage themselves. In the dialogue routinely engaged in by the United Nations and the World Bank "governance" is normally spoken of in terms of three systems - the political/administrative; the economic; and the civil society. When looking at governance from this perspective an important additional dimension is introduced into any discussion of the relationship between governance, democracy and decentralisation because one is forced to pay attention to the significance of decentralisation for economic development. At the national level the concept of governance is effective decentralisation of power among different strata.

Governance has also been described and dealt with, particularly in the past two decades, in terms of how to improve the functioning of the actual political/administrative system extant in a particular country. The term used has been "good governance." This has typically meant concern about civil service reform; the encouragement of efficient governmental organisation (which frequently means the downsizing of government bureaucracies); and the strong encouragement of transparency and accountability in government.

Good Governance and India

In Indian context, good governance should cover the following distinct dimensions:

- As a democratic country, a central feature of good governance is the constitutionally protected right to elect government at various levels in a fair manner, with effective participation by all sections of the population. This is a basic requirement for the legitimacy of the government and its responsibility to the electorate.
- The government at all levels must be accountable and transparent. Closely related to accountability is the need to eliminate corruption, which is widely seen as a major deficiency in governance. Transparency is also critical, both to ensure accountability, and also to enable genuine participation.
- The government must be effective and efficient in delivering social and economic public services, which are its primary responsibilities. This requires constant monitoring and attention to the design of our programmes. In our situation, where the responsibility for delivery of key services such as primary education and health is at the local level, this calls for special attention to ensuring the effectiveness and efficiency of local governments. Governments

at lower levels can only function efficiently if they are empowered to do so. This is particularly relevant for the PRIs, which currently suffer from inadequate devolution of funds as well as functionaries to carry out the functions constitutionally assigned to them.

- An overarching requirement is that the rule of law must be firmly established. This is relevant not only for relations between the government and individuals enabling individuals to demand their rights but also for relations between individuals or businesses. A modern economic society depends upon increasingly complex interactions among private entities and these interactions can be efficiently performed only if legal rights are clear and legal remedies for enforcing these rights are swift.
- There is a need that the entire system must function in a manner which is seen to be fair and inclusive. This is a perceptual issue but it is real nonetheless. Disadvantaged groups, especially the SCs, STs, minorities and others, must feel they have an equal stake and should perceive an adequate flow of benefits to ensure the legitimacy of the State.

Check Your Progress 1

1) What do you mean by governance ?

.....

.....

.....

.....

2) What features do good governance have ?

.....

.....

.....

.....

22.3 DECENTRALISATION

The basic instinct of human society seems to be towards centralisation and the implementation of a “centralising impulse”.

There are two other factors which have played a significant role in encouraging centralisation – particularly in the past half century. The first has been the result of most policy-makers’ desires to maintain the maximum feasible control over national economies and economic development. This is frequently used as an argument against decentralisation. Second, those politicians who are less than dedicated and honorable normally find centralisation a very handy strategy in the sense that it enables them to exploit more easily the resources of the society.

There are, however, far more fundamental reasons for and benefits deriving from organising government structures in a decentralised fashion than simply to avoid past failures. The most important such benefit is the fact that decentralized governance serves to fragment and disperse political power. While it often tends to be overlooked in an era of declining confidence in government (coupled with the rise of multi-national corporations and a growing preoccupation with complex economic institutions) the reality is that government still remains potentially, if

not in fact, the single most powerful institution in any society. Not only does it set the rules that govern the economic sector but government, and government alone, has the authority, capacity and power to legitimately take one's wealth, property, liberty and even one's life. In the face of this potentially awesome power, it is important to establish and maintain a system of checks and balances with regard to the exercise of governmental power.

Decentralised governance system represents one, if not the single most important means of implementing and exercising such checks and balances. In that regard, decentralisation has two manifestations. First, it is manifested in terms of decentralisation of the capacity to exercise power within a government. A second benefit of decentralisation is that it serves to create additional civic space. By generating more centres of power, there are inevitably more venues in which civil society organisations – interest groups, business associations, labour unions, the media, etc. – can develop and find sustenance. This is extremely important in terms of the promotion of democracy in that it contributes significantly to the creation of non-governmental centres of authority and power within a society.

Decentralised governance also helps to create opportunities for the emergence of opposition political groups and, in particular, create resources for opposition political parties.

Another benefit of decentralised governance is that it provides more options for individual citizens seeking a positive response from government. In essence, having alternative levels of governance provides options for individual citizens seeking the provision of a particular kind of governmental service or the redress of a particular problem.

A decentralised governance system more readily provides for diversity in response to popular demands. Obviously, in the case of many countries, different regions have different kinds of resources, different kinds of needs and are the home to different ethnic, regional or tribal groupings.

Decentralised resources and authority serves to provide much greater opportunities for meaningful and responsive economic development. One can get a good sense of the connection between economic development and the strength of sub-national governance in a country simply by examining the comparable figures regarding resources spent at the sub-national level in various parts of the world.

The relationship between the relative importance of the role of sub-national government and the level of economic development is actually quite understandable. High levels of local autonomy and governmental capacity (including revenue raising ability and the authority to enact relevant local legislation) are clearly necessary pre-conditions of successful local economic development. Putting in place the appropriate legal framework and the necessary physical infrastructure is an important pre-condition of economic productivity. In the absence of such capacity, it becomes difficult for entrepreneurs to initiate new economic activity.

Achieving a successful outcome in all these dimensions is not easy, and the effects of initiatives taken today will take time to manifest themselves. Nor is it easy to measure the extent of progress achieved. It is also important to recognise that perceptions are important and perceptions of the state of governance depend upon the expectations of the people.

Check Your Progress 2

- 1) What are the factors which have played a significant role in encouraging centralisation?

.....

.....
.....
.....

2) What are the benefits of decentralisation?

.....
.....
.....
.....

22.4 GOVERNMENT INITIATIVES TOWARDS GOVERNANCE

A number of steps have been taken by the government to improve the quality of governance. Some of them are as such:

- The RTI, 2005 was brought into force. This applies to Union and local agencies, local governments and societies which receive public funds, and empowers citizens.
- The All India Service Rules were amended, providing a certain fixed tenure for specified posts to be notified by the State and Central Government. It will help promote accountability.
- A new Value Added Tax regime was introduced which simplifies the tax systems and has enormous positive implications for major reforms in the tax structure.
- Electoral funding reforms were introduced, promoting transparency and fairness and creating tax incentives to donors and disclosure of antecedents of candidates contesting for public office.
- An E-Governance Plan for 27 major areas was adopted designed to assist, improve delivery of services and digitization of information.
- Initiatives on participatory governance were introduced under the NREGA, NRHM and other measures.
- A policy for voluntary organisations was announced by the Central Government, reflecting the importance of the voluntary sector in promoting participatory systems.

Check Your Progress 3

1) What are the steps taken in the Tenth Plan period aimed at improving the quality of governance?

.....
.....
.....
.....

22.5 THE ROLE OF ADMINISTRATIVE REFORMS COMMISSION

In 2005, the Second Administrative Reforms Commission (ARC) was constituted to prepare a detailed blue print for revamping the public administration system. The First ARC, was constituted in 1966 and subsequently several committees and commissions have examined and given recommendations on various aspects of reforming governance. The Second ARC has been given very comprehensive Terms of Reference and it has been asked to suggest measures to achieve a proactive, responsive, accountable, sustainable and efficient administration for the country at all levels of government. The Commission has already submitted six reports on different aspects of administration. It is also working on several other areas including civil service reforms, citizen centric administration, and reorganising the structure of the government.

The Department of Administrative Reforms and Public Grievances has proposed a framework for good governance in the form of a Code of Governance. The main components of this Code are:

- i) improving service delivery;
- ii) development of programmes for weaker sections and backward areas;
- iii) technology and system improvement;
- iv) financial management and budget sanctity;
- v) accountability and transparency;
- vi) public service morale and anti-corruption; and
- vii) incentivizing reforms.

The federal structure of the country provides an opportunity for measuring different States on an index of good governance. It is important to measure the performance of the States on developmental schemes apart from the indicators mentioned above, give them appropriate weightage and index them on this basis. The process could be finalised by a high-level independent expert group and it is important that it be part of the discussions with the States so as to bring to the centre stage issues relating to governance which, otherwise, in the absence of any specific financial outlays, go unrecognised. The index can also be used for giving incentives to the States.

22.6 CURRENT CHALLENGES TO GOVERNANCE

The Eleventh Five Year Plan has taken certain initiative and seek to achieve a decisive improvement in governance in the Plan period. Some of the major challenges are:

- The Plan accords priority to providing access to quality health care and education, particularly in the rural areas and for girls, minorities, SCs and STs, backward classes and BPL families. It also emphasizes programmes of employment under the Rural Employment Guarantee Programme. Access to clean and good quality water, sanitation, housing and electricity are also critical. These services are delivered at the local level and this calls for both empowerment and accountability of the relevant authorities and effective monitoring of service delivery, particularly for low income groups.
- Effective administration of the rule of law resulting in efficient criminal and

civil justice system delivering swift decisions and, particularly, ensuring access to the poor is of extreme importance. An effective security and policing system is required for Naxalite affected and communally sensitive areas.

The Plan relies heavily on a dynamic private sector to expand investment and create new employment opportunities. This requires developing a business friendly environment, enabling setting up and exiting of business and promoting efficiency, matching world standards.

- Finally, it is necessary to tackle the problem of corruption which is widely perceived as being all pervasive and is a major source of complaint about the quality of governance.

22.7 DECENTRALISATION AND STRENGTHENING PANCHAYATI RAJ INSTITUTIONS

The development programmes and schemes of the Government for rapid eradication of poverty and delivery of various services that are mostly in the realm of local government functions. Some of these are State sector schemes (SSS) led by the state government and others are Central Sector Scheme (CSS) led by the central government which are part of the Central budget, but deal with areas which are in the realm of the States. In spite of the massive flow of funds, there is widely shared concern that the results have not been commensurate with the investments. A comprehensive reform of how these schemes are implemented is necessary. A critical assessment of the performance of CSS reveals the following deficiencies:

- Most of them exist as silos planned and implemented as stand-alone schemes with little horizontal convergence or vertical integration, resulting in multiple sub-sectoral district plans, unrelated to each other. At times they are even mutually conflicting, prepared without any integrated vision or perspective of what is needed at the district level.
- The schemes are often too rigid and do not provide the flexibility needed for adaptation according to the different development needs at the local level. There is also too much micro management without any mechanism to understand the local situation and respond to it properly.
- There is no consistent approach in the design of delivery mechanisms. At times, independent structures are created for each scheme resulting in multiplicity of such structures at the local level with no interaction or coordination among them.
- The extent of professional support to the design, implementation and monitoring of these schemes is quite weak at the national, State and local levels. Often, line departments with generalist approaches control the implementation process without having the necessary competence.
- In spite of stated objectives aiming at the quality of outputs and outcomes, there is not enough outcome based evaluation and the programmes are mostly monitored on an expenditure basis.

Check Your Progress 4

- 1) In spite of the massive flow of funds, there is widely shared concern that the results have not been commensurate with the investments. Throw light on the critical assessment of the performance of CSS .

.....

.....

22.8 THE CONCEPT OF DISTRICT PLANNING COMMITTEE

In order to achieve the best outcome and good governance in terms of balanced development with convergence of resources, enforcement of inter-sectoral priorities, generate more of employment and better standard of living, it is necessary to shift to integrate planning at the grass roots level leading to the preparation of District Plans. The CSS which lend themselves to effective grass roots level planning are:

- Assignment of responsibilities to different levels of PRIs for planning, implementation and monitoring.
- Harmonization of existing planning and implementation arrangements and institutions with the Panchayati Raj setup.
- Evolution of criteria for allocation of funds to different levels of PRIs as may be appropriate.
- Introducing enabling provisions to make available technical support for planning and implementation.
- Introduction of a common planning process facilitating an integrated approach to the identification of problems and preparation of plans for tackling them by pooling resources from the relevant schemes. This has to be attempted in the Eleventh Five Year Plan.

Typically, the process of decentralised planning would involve the following steps:

- Needs assessment and priority setting through participatory fora like Gram Sabhas and SHG networks.
- Situation analysis using locally available data through simple methods supplemented by Participatory Rapid Appraisal techniques.
- Resource assessments from the various sources of funds available to them, including from various CSS.
- Formulation of a vision of development as well as strategies for attaining the vision by PRIs through a process of interaction with stakeholders and local experts.
- Development of project ideas based on need assessment and situation analysis by expert Working Groups at different levels of PRIs.
- Consolidation of development proposals of the Working Groups.
- Prioritisation of proposals and allocation of resources to the prioritised proposals.
- Preparation of project reports in detailed formats.
- Vetting of project reports on technical and financial aspects by Technical Advisory Groups of DPC. Integration of projects into plans by PRIs.
- Consolidation of PRI Plans into District Plans
- Clearance of the Plan by the DPC.

There will be areas where differences may arise on relative priorities but it is possible to evolve a reasonable consensus through dialogues and discussions which are then reflected in actual plan preparation. For decentralised planning to happen the following are essential:

DPCs, which are a constitutional requirement, need to be fully strengthened. They need to function not just as Committees but as full-fledged institutions.

- DPCs should be assisted by Technical Advisory Groups for different sectors consisting of professionals from Government, academic institutions and nongovernment organisations as well as civil society. It should be encouraged to network with academic and research institutions within the district.
- The Planning Commission, with the approval of line Ministries, should issue common guidelines for preparation of plans in a converged manner, utilising the resources of CSS in the functional area of local governments. State governments should issue detailed guidelines for decentralised planning leading to District Plans within the framework stipulated in the report of the Expert Group.

To support decentralised planning, the Planning Commission would consider the following:

Provide assistance to States to set up offices of the DPC as well as to provide technical support. Over a period of time, generate a local statistical system by increasing the sample size of National Sample Surveys so that interpretation is possible at least at the level of the Block, if not the village. Identify one expert institution in each State as was done for the preparation of the State Development Report, and assign it the task of preparation of pilot District Plans through action research, in partnership with the States and local governments.

Government and its interaction with the ordinary citizen. Several steps to ensure the centrality of Panchayats in planning and implementation of key CSS have been taken in the period leading up to the Eleventh Plan.

- The NREGA provides guaranteed employment in rural areas, with PRIs as the principal authorities for planning and implementation.
- The ambitious plans for universal elementary education and primary health care are to be delivered with full involvement of the local community through PRIs. BRGF is planned for and implemented by the Panchayats and Nagar Palikas in 250 backward districts.
- In the Eleventh Plan, in the agriculture and allied sectors, preparation of district and local level agriculture plans have been mandated for utilisation and resources available under all new programmes and schemes. To fulfill this ambitious mandate, Panchayati Raj will require substantial, enhanced backing by the Central Government, in association with State Governments, for training and capacity building of PRIs, as also the provision of attractive incentives to States for the empowerment of PRIs.

States can no longer delay or sidestep the devolution of functions, funds and functionaries to the Panchayats. Activity mapping, resulting in the assignment of activities relating to a function to each level of the Panchayats, is a critical trigger for effective devolution. There are two central principles that underlie a good activity mapping exercise. First, is the principle of subsidiarity, in terms of which tasks are placed at that level alone where it is best performed and no other. Second, is that activity mapping should touch all levels of the government and not merely the three levels of Panchayats. Constitution of the DPCs is mandatory under the Constitution. States must therefore quickly meet the obligations of completing activity mapping and constituting DPCs. will provide a repository within the

accounting structure which makes clear the financial resources that are placed with the Panchayats for them to efficiently perform the functions devolved upon them. The demarcation of a Panchayat sector in State and Central budgets will make it easier to ensure that there is no mismatch between functional and fiscal devolution.

Check Your Progress 5

- 1) Mention the steps involved in the process of decentralised planning.

.....
.....
.....
.....

- 2) To support decentralised planning, what should the Planning Commission consider?

.....
.....
.....
.....

- 3) Enlist the essentials required for decentralised planning to happen.

.....
.....
.....
.....

22.9 PARTICIPATION AND HARMONIZING COMMUNITY BASED ORGANISAIONS WITH PRIs

Decentralisation allows direct citizen participation in different aspects of development and governance. The Gram Sabha is, in a sense, the fourth tier of governance facilitating direct democracy and face-to-face accountability. This critical institution of Panchayati Raj has to be further strengthened through action, research and semi-structured processes of developmental dialogue, needs assessment, priority setting, oversight monitoring and social audit.

In addition to Gram Sabhas, several other fora such as SHGs, management committees, anganwadis and similar stakeholders' institutions enhance participation and accountability. In addition, the mechanism for securing transparency and accountability at all levels needs to be strengthened and made a critical component in implementation.

For PRIs to be effective, they have to reach out to communities, especially the poor, and involve them in the development process. So their relationship with various people's groups becomes important. Over the last two decades, several CBOs have sprung up, sometimes as spontaneous people's groups for developmental action or as consciously organised ones as part of a development project or programme.

- 1) "Decentralisation allows direct citizen participation in different aspects of development and governance". Comment.

.....

.....

.....

.....

- 2) The relationship of PRIs with various people's groups becomes important. Why?

.....

.....

.....

.....

22.10 LET US SUM UP

We have made an attempt to explain the concept of good governance, good decentralisation in the process of socio economic development of the country. There occurs better and timely delivery of the benefits of development to the people particularly the weaker sections of the society. We have also described the current issues in governance and decentralisation which have emerged in the recent past. Finally, there is an analysis of the Panchayati Raj Institutions, their roles and significance.

22.11 SELF ASSESSMENT QUESTIONS

- 1) "Good governance is the key to socio and economic development in the country." Comment.
- 2) What is decentralisation? The government has started many administrative reforms to implement the decentralised system in the country. Discuss in detail.
- 3) "Decentralisation allows direct citizen participation in different aspects of development and governance." Comment.
- 4) The relationship of PRIs with various people's groups becomes important. Why?

22.12 KEY WORDS

Governance : governance must be broadly defined to cover all aspects of the interface between individuals and businesses on the one hand and government on the other. Governance has also been described and dealt with, particularly in the past two decades, in terms of how to improve the functioning of the actual political/administrative system extant in a particular country.

Decentralisation : there is no standard model of decentralisation. It varies considerably from country to country. In

general the transfer of authority and responsibility from central to Intermediate and local governments. It aims to address failures to foster development and reduce poverty, and to consolidate democracy. It may entail transferring certain planning, financing and management tasks to local units of central agencies (deconcentration), lower levels of government (devolution), or semi-autonomous authorities (delegation). It alters the structure and systems of governance (inter-governmental relations, state-society relations).

Decentralised planning : decentralised planning is defined as the planning from below and it includes the local and state bodies in plan formulation and in India it is to decentralise adequate powers to popularly elected Panchayati Raj bodies, besides making them responsible for development activities within their jurisdiction.

22.13 ANSWERS AND HINTS TO CHECK YOUR PROGRESS

Check Your Progress 1

See section 22.2 and answer.

Check Your Progress 2

See section 22.3 and answer.

Check Your Progress 3

See section 22.4 and answer.

Check Your Progress 4

See section 22.7 and answer.

Check Your Progress 5

See section 22.8 and answer.

Check Your Progress 6

See section 22.9 and answer.

22.14 FURTHER READINGS

Government of India (2006). The state of Panchyats (2006)-A Mid term Review and Appraisal : November 22, 2006 Ministry of Panchayati Raj.

Mukherjee, Amitava(1990) Studies in Multilevel Planning -Foundation of Decentralised Planning -with Special Reference to Decentrased Planning in India. New Delhi : Convept Publishing Company.

Sen J.B. (1996) Report of the Committee on Decentralisation of Power. Thiruvananthapuram.

Mishra Sweta, Demopcratic Decentralisation in India, Mittal Publishers, New Delhi 1994.

Reddy, Ram GPatterns of Panchayati Raj In India, Macmillan, New Delhi, 1979.

NOTES

SOSS/IGNOU/P.O.3T/January-2011

ISBN : 978-81-266-5149-8