
UNIT 4 ISSUES AND CHALLENGES

Structure

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4.1 INTRODUCTION

The challenge of sustainable development is the challenge of achieving environmental conservation and resource management without compromising the targets of growth and development. It is therefore a process of making human and environmental regeneration not only an end of economic growth but also a means. It redefines wealth and restructures qualitative development in economic growth policies. Sustainable development is in itself revolutionary since it replaces exchange value by intrinsic value, market regulation by self-regulation and capital accumulation with de-accumulation. It is an effort and a design to raise poor countries of the world from social decadence, exploitation, global inequity and waste.

Many questions intrigue the concept of sustainable development: Is economic growth possible without destroying our environment? What supports sustainable economic growth? What are the major contentious issues involved in sustainable economic growth? Does sustainable economic growth affect stock market gains? Can developed countries continue with their consumption patterns without damaging the planet's ability to sustain life? These are perplexing questions that have become crucial to the international debates and political battles. These form the subject matter of the last unit of this block.

Objectives

After studying this unit, you should be able to:

- identify the various issues that require to be undertaken to pursue sustainable development;
- discuss the challenges that are to be overcome; and
- describe the policies and methods adopted by the international community to achieve sustainable development.

4.2 SUSTAINABLE ECONOMIC GROWTH

You will agree that the major problem faced by the world today is still the intractable problem of poverty and hunger. Achieving food security requires more than just production of food. Overall perspectives of economic development are being increasingly seen as a better promoter of food security than food production alone. But this cannot be achieved without firm knowledge. Action upon land and water is an unavoidable part of any economic policy. Thus economic development and food security require knowledge-based firm action upon land and water and indeed on all natural resources. Accordingly Natural Resource Management (NRM) is one of the biggest issues in sustainable development. For example, phenomena like land degradation, desertification, loss of wetlands and deforestation are the real constraints to the future sustainability of good agriculture everywhere in the world.

However, as we enter the 21st century, we have begun to face a new sustainability challenge in business and trade, namely, the growth of Trans National Corporations (TNCs), which have taken control of resource policies in the world. These TNCs have changed the contours of the welfare state and Keynesian economics. Since the TNCs bring Foreign Direct Investment (FDI), the poor countries are making extensive regulatory changes in their economic resources and policies to make themselves appear as attractive investment areas for FDI. Policies that might ensure sustainable use of resources are being changed for better business and FDI. This large company and TNC based development has been so rapid that by mid 1990s we were faced with an alarming and stupefying statistics. In 1995 the United Nations Conference on Trade and Development (UNCTAD) study found that 40,000 corporations, in all, controlled two-thirds of the total world trade in goods and services. According to a report:

- Of the world's largest economies, 51 are corporations. Only 49 are countries. The budget of Mitsubishi Corporation is larger than that of Indonesia, the world's fourth most populous country and a land of enormous natural wealth.
- The combined sales of the world's top 200 corporations are equal to 28 percent of the world's Gross Domestic Product (GDP).
- These same 200 corporations employ only 18.8 million people, less than one third of 1 percent of the world's people and the downsizing continues.
- In 1995 the total value of mergers and acquisitions for the world exceeded the preceding year by 25 percent.

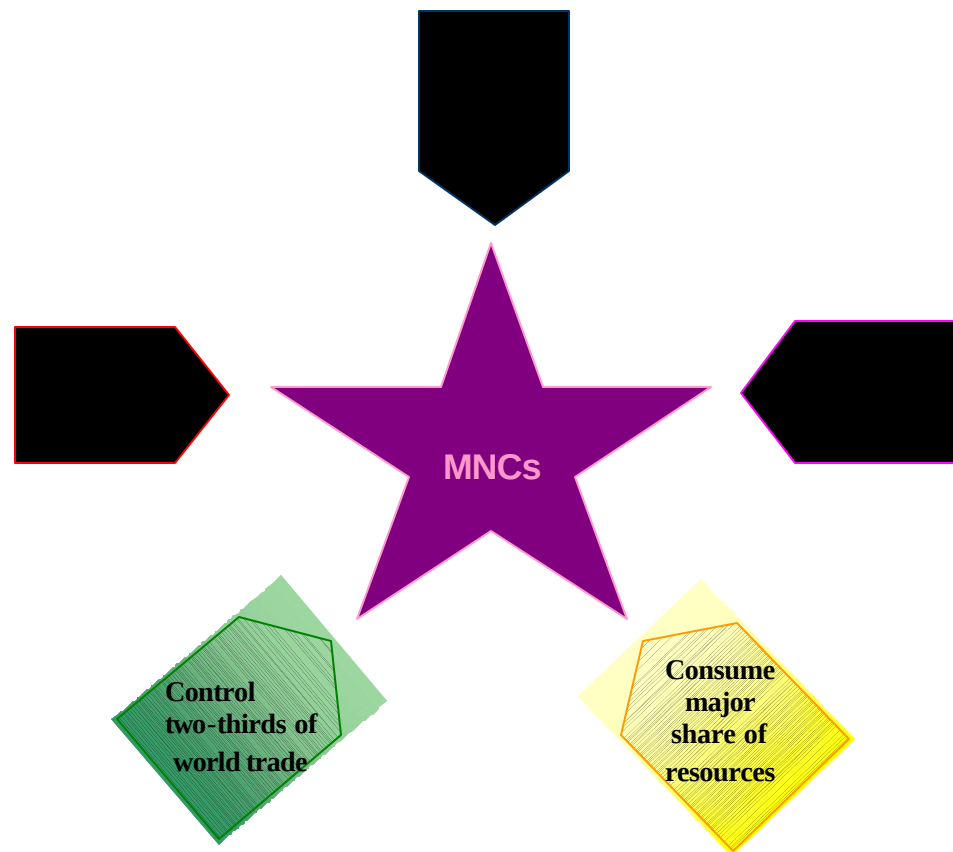


Fig.4.1: The saga of transnational or multinational corporations

In parallel to the 'better business & FDI' narrow view, since the Earth Summit, sustainable development has been faced with many contentious issues, which are being debated and are still to be resolved. You may like to know about them. We describe them now.

- While the rich nations consume the largest share of resources the poor countries bear the cost of this consumption in the form of pollution, chlorofluorocarbons (CFCs), deforestation, global warming and loss of fisheries, wilderness and animal resources.
- It has been debated between the rich and the poor nations that forests of the third world countries are sinks for the pollution mostly generated by the developed countries. Thus while the developed countries are trying to restrict the exploitation of forests by the poor countries they are not at the same time willing to restrict their own production and consumption systems to meet the demands of sustainable economic growth.
- Biotechnology and Genetically Modified (GM) foods are a threat to the indigenous agriculture and rural economy of developing countries, besides also disturbing their village institutions and local economy.
- There are different perspectives on Climate Change conventions or the Kyoto Protocol under which the United States, Canada and other developed countries would have to reduce greenhouse gases by 5 % from the 1990 levels. This is presently the hottest debate in international politics since the developed and the developing countries have all been taking different positions on Kyoto obligations.

The following five themes became the centre of concern at the Tenth Session of the United Nations Commission on Sustainable Development (CSD10) in May 2002, and the World Summit on Sustainable Development (WSSD) in August 2002:

- Stewardship and Conservation
- Innovation and Partnership
- Sustainable Communities
- Health and the Environment
- International Governance

These themes set up certain priorities for the developed and the developing countries and all future collaboration between the countries would largely depend upon their willingness to explicitly incorporate these priorities in their national policy agenda and actions taken towards them. The following main themes focus upon the agenda of governance for sustainable development:

- experiences of countries implementing sustainable development,
- institutional arrangements for implementing sustainable development,
- the role of governance and public administration in the achievement and implementation of sustainable development, and
- the role of Regional Organisations in promoting good governance for the implementation of WSSD outcomes.

Referring to trade and Sustainable Development in Chapter 2 of Agenda 21, and in Chapters V and X of the Plan of Implementation, it is mentioned that trade liberalisation and globalisation can have both positive and negative effects on sustainable development. There is a continued need to support efforts by the developing countries to integrate themselves into and derive benefits from the multilateral trading system. At the same time, attention is given to enhancing the contribution of the multilateral trading system to sustainable development. Agenda 21 of the Earth Summit calls for a supportive international climate for achieving environment and development goals by (a) promoting sustainable development through trade liberalisation, (b) making trade and environment mutually supportive, (c) providing adequate financial resources to developing countries dealing with international debt and (d) encouraging macroeconomic policies conducive to environment and development. A closer integration of trade and sustainable

development can play a major role in achieving sustainable development and poverty eradication.

There are serious challenges to economic growth in present times, which may be described under following points:

1. **From quantity to quality:** The quantitative aspect of growth had settled upon the simplistic tendency of cost-benefit analysis about the worth of a productive process. However the intangibles in nature are difficult to quantify. Thus new forms of accounting techniques are being developed to quantify the value of flora and fauna in nature so that the material and monetary scarcity can be assessed in real terms. Incentives other than money have been found to be more welcome by communities in a large number of cases.
2. **Human self-development is the core of sustainable economic growth:** It draws connection between individual and social change. It also encourages symbiosis between humanity and nature. The dominant industrial system survives upon various forms of mental slavery, which leads to material dependence. Under this system unhealthy relationships are tolerated and creativity and simplicity are suppressed.
3. **From patriarchal society and male supremacy towards a holistic paradigm of equity:** Unsustainable economic growth is based upon male domination, beliefs in racism, subordination of nature, suppression of women and other weaker sections of the society. Excessive and single-minded emphasis on efficiency in the productive processes ignores these factors and encourages accumulation of surplus to very few. A feminist theory of science, on the other hand, deconstructs, lays open and criticises embedded assumptions that result in the domination of nature and aims at developing alternatives towards a more benign relationship within the society and between society and nature.
4. **From TINA approach to a Strategy of design:** TINA stands for 'There is no alternative' approach. It was the suggestive approach to generate conspicuous technology in colonial industrial societies. Though forces of domination still exist and are growing simultaneously, the pool of knowledge in the form of awareness of alternative approaches is also growing and this has a high liberating potential. Sustainable economic growth has reprioritised economic goals to move societies out of the 'commercialisation trap' and provide need satisfaction in a more elegant, comprehensive and efficient manner.'
5. **Polluter Pays principle:** Sustainable economic growth strategies recognise that producers have a genuine responsibility towards people and the labour they employ. Producers who damage conditions of good living and environment must also pay and bear the cost of damage to the society. This is possible in two ways: *One*, by internalising the cost of damage in the productive process and the cost of the object produced and *two*, by a regulatory mechanism such as public liability or insurance acts which may prevent obsolete and polluting technology or hazardous systems from being used in a poor region.
6. **Appropriate technology and community-owned firms:** Appropriate technology refers to technologies that do not necessarily require large capital and resource intensive industrial systems. It is also need based. Community firms or community owned firms or municipally owned enterprises work not only for profit but also to protect and represent community interests such as local developmental issues that are often termed as 'Non-Profit Organisations'. They are also referred to as 'Community Corporations' and provide alternatives to large capital and resource intensive industrial systems.

In terms of appropriate technologies or methods of production that make use of local skills and resources, the developing countries provide a wealth of innovative ideas practiced at grass-roots levels. These innovative ideas and practices also lead to alternative production systems.

SAQ 1

Outline the major issues in relation to sustainable economic growth that confront the developing countries today.

4.3 ACHIEVING SUSTAINABLE LIVELIHOOD

About 900 million people in the world live in absolute poverty. Their livelihoods essentially depend upon the production of natural resources and natural products. People from the least developed countries are the most vulnerable to trade offs in their natural produce. Their livelihood depends upon the export earnings from their primary products such as agricultural and forest products, mineral, fish etc. consumed by others. For increasing consumerism demands rapid exploitation and over exploitation causes depletion of resources. Yet any commodity crash in the international market worsens the terms of trade for them.

At present 80 percent of poor in Latin America, 50 percent poor in Asia and 50 percent poor in Africa live on marginal lands, which are already highly susceptible to environmental degradation. Desertification and various forms of land degradation affected the livelihoods of more than 135 million people in 1984, which had increased from the 77 million in 1977. This increasing pressure on land and other natural resources prevents sustainable livelihoods of people in both the poor and the developed countries also like the United States and Japan.

The attainment of sustainable livelihoods is related to the sustainable economy of nations. A highly indebted country, which is suddenly made to repay debt, speeds up production of primary commodities pushing the prices further down. Between 1980 and 1999, the weighted index for a group of 33 primary products declined by half from 105 to 57 and the export commodity prices of the Third World fell by 20 percent. Uganda alone suffered a loss of 122 million on exports from just two primary commodities tea and coffee. In Tanzania poor people derive half of their cash incomes from the sale of forest products such as charcoal, honey, firewood and wild fruits. The same is true of other poor countries including the transitional countries like India, Brazil etc.



Fig.4.2: Attaining sustainable livelihoods is a major concern of poor people all over the world.
(Source: www.iucn.org/.../images/imagebody2.jpg)

An empirical analysis of sustainability shows that Japan and Indonesia accumulate man-made capital stocks at a high rate. An industrially developed country like Japan has small stocks of natural capital and consequently the amount of stock it depletes is

also very small so that the country is regarded as very sustainable. On the other hand, Indonesia, with large stocks of natural capital, depletes its stocks by a large amount (due to exports), so that the country is regarded as marginally non-sustainable. Sustainability within each country implies that the countries should reinvest natural resources in proportion to their resource consumption.

Sustainable livelihood is a mode of protecting and improving the management of 'the natural and physical environment'. The 1997 White Paper on International Development commits Department for International Development (DFID) to promoting 'sustainable livelihoods'. The White Paper defines sustainable livelihood as *'A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource capital asset'*.

Transnational business shifts operations from a high cost production area to a low cost production area and introduces production systems that have no linkages with the local communities and their resource use methods and styles of livelihoods. These communities are alienated from their own land and assets. International agreements reduce possibilities of asserting their claims and access to resources. The framework currently in use classifies five types of capital assets from which the individual draws his/her livelihood:

1. **Natural:** The natural resource stocks from which resource flows useful for livelihoods are derived (e.g. land, water, wildlife, biodiversity, environmental resources).
2. **Social:** The social resources (networks, membership of groups, relationships of trust, access to wider institutions of society) upon which people draw in pursuit of livelihoods.

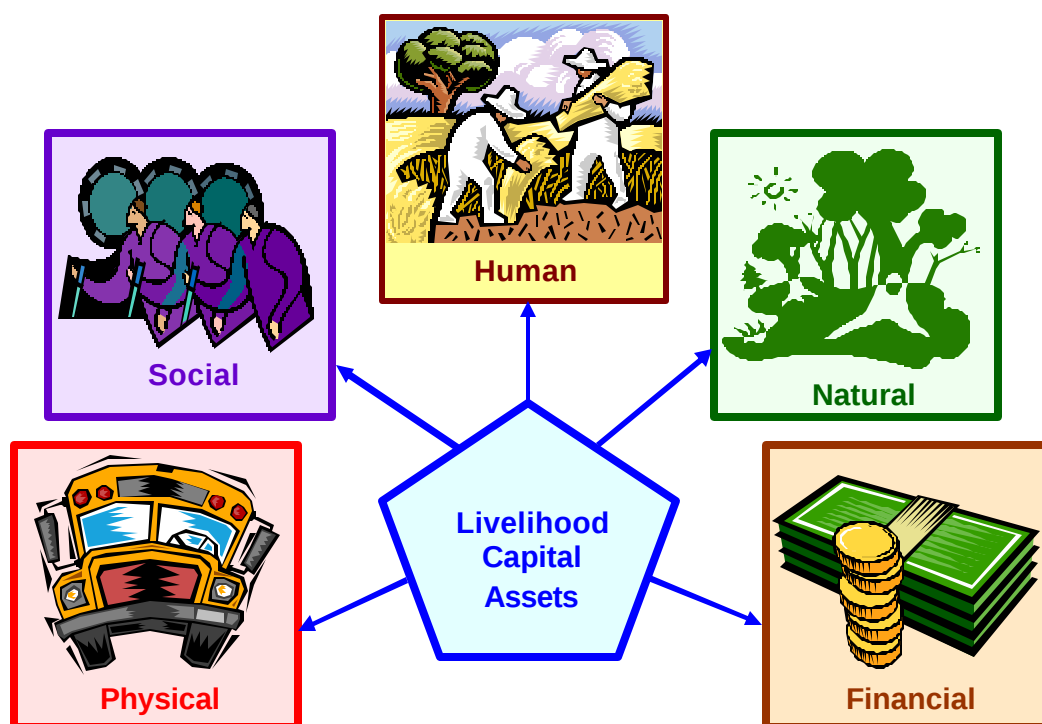


Fig.4.3: Capital assets for sustainable livelihoods

3. **Human:** The skills, knowledge, ability to work and good health important to the ability to pursue different livelihood strategies.
4. **Physical:** The basic infrastructure (transport, shelter, energy and communications) and the production equipment and means, which enable people to pursue their livelihoods.
5. **Financial:** The financial resources which are available to people (whether savings, supplies of credit or regular remittances or pensions) and which provide them with different livelihood options.

The selection of these capital assets is a subjective exercise but it provides a good starting point to assess as to how and in what combinations assets actually translate into sustainable livelihoods. Livelihoods are ideally sustainable when all stakeholders are empowered and have enhanced access to assets. This calls for a change in the status quo and by implication a shift in the power relations towards equality. To achieve this, therefore, attention to the constitutive side of politics, i.e., governance is required. The key governance issue to change the rules and underlying power structures towards a positive sustainable livelihood outcome may be summarised as:

- People centred
- Responsive and participatory
- Multi level
- Partnership
- Sustainable
- Dynamic

The above issues, inter alia, require attention to the following:

Appropriate Knowledge: Knowledge, in order to be appropriate, has to be rooted in the community resource use pattern and is politically neutral. It has to be ensured that channels are created within institutions to allow for this knowledge to be effectively and clearly communicated to those making decisions. Prevailing systems suggest excessive focus upon formal or codified types of knowledge ignoring the tacit or experiential knowledge embedded in community practices appropriate to capturing local dynamics and locally differentiated patterns of resource use. Therefore assessments of needs and decisions on action are to be based on the views of all, even those that may not be less endowed with formal knowledge organised through formal education systems (usually the poor and marginalized sections of population).

In this respect Participatory Poverty Assessments (PPAs) are a major step towards the poor defining their needs, and having a say in decisions affecting them: PPAs are making national as well as local impacts (national PPAs have been produced for example in Uganda, Zambia, and others). This reorients the ownership and management patterns of natural resource as well as contributes to enhancing overall effectiveness being rooted in people's everyday understanding and knowledge of ecological processes.

Equitable: Equity is the basis of sustainable development policies. Questions such as who decides on resource use policies and approaches and who benefits from them suggest the need for an equitable economic base. Institutions can play a key role in redistributing tangible assets (especially land, securing land rights and rights to services, removing restrictions which impoverish and weaken the poor) and in implementing measures to guard against discrimination in all its guises. The principle of equity needs to guide not only how institutions govern access to resources and assets, but also in determining what assets are needed and created (i.e. in terms of technology, infrastructure, etc.). Focus on equitable growth ensures long-term benefits to mankind.

Participatory: Participation is necessary for effective policy and for guarding against arrogance and suspicion when institutions assume the right to make decisions on

behalf of others. Groups engaged in livelihoods often do not have the resources and political influence to represent their interests in national and international fora. It is more realistic to explore ways in which such groups, for example, of farmers and others, can feed their concerns into regional and national decision-making in such a way that the concerns can then go on to be represented at the international level.

Flexible/adaptable: Institutions for sustainable livelihood are opposed to the top down or trickle down approaches. They are flexible enough to accommodate changing political and ecological circumstances - making sure that the adoption of procedures are not bogged down by inertia, routine or agency capture. This is particularly important where institutions have to react and respond quickly to changing resource needs. Flexibility provides security, creativity and drive for innovation.

Enforceable: Policies that propose solutions to particular problems have to be sensitive to the problems of enforcement and implementation, often in very adverse conditions. Policies that fail to be implemented undermine trust and respect in an institution which is critical to its overall success. Enforcement procedures need to be clear and realistic and reporting mechanisms need to be transparent in order to demonstrate effectively whether policy commitments have been met.

SAQ 2

What do you understand by sustainable livelihoods? How can a nation achieve this target?

4.4 LIVING IN HARMONY WITH NATURE

The Stockholm Declaration of 1972 suggested that “*Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man’s environment, the natural and the man made, are essential to his well being and to the enjoyment of basic human right- even the right to life itself.*”

Thirty years after the Stockholm Conference, it is still not possible to describe the state of world environment comprehensively or to say with confidence that national governments have the will or the knowledge to harmonise development policies with sound environmental policies. Problems and challenges in this context are:

- **Problem of accounting environmental losses:** Authoritative studies to reveal the economic costs of damage caused by environmental pollution are not available although. Since the mid eighties many such studies have attempted to reveal the costs. For example costs of damage to health of society, historic monuments and biological systems. The economic cost of pollution and global warming include the cost that nations would have to bear due to the impact of sea level rise such as the cost to deal with the migration of coastal area population as ‘ecological refugees’.

Some studies estimate the cost of pollution abatement and control in the developed countries at 0.8 to 1.5 per cent of annual GDP a figure much lower in developing countries. Following this, in the past two decades some attempts have also been made to adjust national income accounts to register both the direct cost inflicted by environmental degradation and the ‘depreciation’ of natural resources capital to allow for losses in future production potential. Although the national accounts record the income earned from harvesting resource stock such as fish, timber and minerals, the loss of future income through declining resource stocks

and deteriorating environmental quality is excluded. When such depreciations are included into natural capital stock, the net contributions of resource degradation to national income are much lower and more accurately reflect the impact on economic reforms.

Take for example Japan, which attempted to correct its Gross National Product (GNP) for many factors including, environmental. It was found that instead of the GNP growing by a factor of 8.3 percent per year between 1955 and 1985; it grew by an average of only 5.8 percent per year. Similarly if the physical depletion and petroleum price increase, forest, soil and water assets are taken into consideration most of the developed and developing countries face a sharp drop in their GNP ratings. However accounting for the loss of stock resources is complex and remains a contested debate in international politics. The task of adjusting national accounts becomes a political task when no national government likes to reveal the drop in its GNP rise.

- **Problem of fixing responsibilities and making them pay:** The global balance of environmental use suggests a redistribution of monetary resources to the poor countries to improve their human capital by investing in health, education and nutrition. This presently is a major battle in the economic and the environmental forums. It demands a change in the life styles of the rich nations and a reduction in their consumption patterns. Because the environment has been treated as a free resource, the rich nations have taken advantage of this to emit most of the world's pollution.

It has been suggested that the environment be correctly priced and tradable permits were issued to all nations (50% on the basis of GDP and 50% on the basis of population). If this was done, then it has been estimated that the rich nations might have to transfer as much as 5% of their combined GDP to the poor nations to 'buy' environment 'permits' from them. The Human Development Report suggests that the developing countries are a home to the world's tropical forests and it is in everyone's interest to preserve them to counter global warming and preserve biodiversity. Similarly protection of the ozone layer demands global restraint in the production of CFCs.

The industrial countries have been responsible for most of its production and the issue of transfer of this polluting technology to the developing countries should be prevented. This would be possible only if the poor countries are duly compensated and helped in investing into alternative technology. A corollary to this principle is that countries which pollute atmosphere should be charged for such irresponsibility or revoking the 'polluter pays principle'. This could be the basis for an international market for tradable permits for various forms of pollution. This should be treated as a payment for services by the rich nations and not as an aid to the poor countries.

- **Efficacy and authority of international legal system in solving environmental conflicts:** Like most national societies even the international societies allocate rights of access to and control of resources through certain rules broadly analogous to property rules. In international law these property concepts are treated in terms of national sovereignty, territorial rights or jurisdictions. While international law recognises the right of a nation to exercise jurisdiction within its territory, it may not allow so outside it. Because the concept of sovereignty or jurisdiction over resources involves the right to exclude others from access to its use, it has become a very debatable issue in international law.

The 1973 Oil Embargo by Arab states is one such manifestation of this exclusive right possessed by a nation. In contrast to this is the principle of common access to natural resources such as the freedom of the high seas. This is now severely modified to exclude the exclusive economic zones. The debate raises 'labyrinthine issues'. The question arises about the fairness of the international

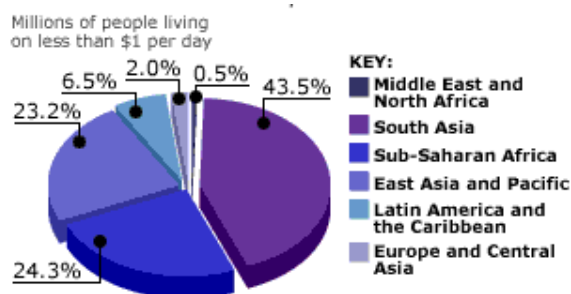
rules. How equitable or rational are the basic assumptions upon which the international system currently distributes resources?

It is not only a question of protecting the resources directly being affected but also regulating the international investment system, for example, through FDI made by the trans national companies, in the natural resources sector such as mining, fishing and timber logging etc.

In the past decade at least two important cases have been decided by the International Court of Justice in favour of India and Pakistan who were the petitioners against the United States of America (USA) for the protection of their coastal fisheries. The negotiations on the signing of the Climate Change Convention or Kyoto Protocol and the Biodiversity Convention expose the myth of 'interdependence' and reveal the use of the dominance theory by the USA and other developed nations.

- **The ever growing population:** Paul Ehrlich in his book *The Population Bomb* (1969) had given a threatening description of the population growth which was reminiscent of Thomas Malthus's prediction in the late 18th century that the growth in human numbers would outstrip the growth in food supply and this would lead to poverty and hunger. The conventional school, which is mainly Western in origin, treats population growth as the main contributor to environmental degradation but another school mainly emerging out of India treats the growth of population as irrelevant to this debate.

The Centre for Science and Environment in its *Second Citizen's Report* (1982) has claimed that it is the callous mismanagement of country's natural resources that is responsible for hunger and poverty in India. The Human Development Report of 1995 has shown that developmental policy of increasing education and employment of women has brought a sharp fall in the population growth of some South East Asian countries. Therefore population growth is a consequence of imbalanced and non-sustainable development rather than its cause.



Source: www.globalpolicy.org/.../worldpoor

Fig.4.4: Is poverty a cause or consequence of non-sustainable development in South Asia?

- **Appropriate or Alternate Technology:** Appropriate technology is designed with the purpose to meet a need and a community objective. The purpose is generally development without destruction. Technology is appropriate when it is in harmony with the objectives and patterns of development. Most existing technologies in industrially advanced countries are capital intensive as well as 'resource capital' intensive. Appropriate technology presents an alternative to such technology. It is one of the best manifestations of attempts at living in harmony with nature.

The following conditions are needed for a technology to be appropriate:

1. relevance to the factor endowments of the nation,
2. optimum utilisation of natural and human resources,
3. maximisation of output, of basic consumption goods and services and of the rate of growth,
4. reduction of balance of payments deficits and unemployment,
5. greater equity in the distribution of income,
6. improvement in quality of life,
7. promotion of political development and stability,
8. contribution to regional development,
9. ability to solve or avoid environmental problems, and
10. relevance to cultural environment and social tradition

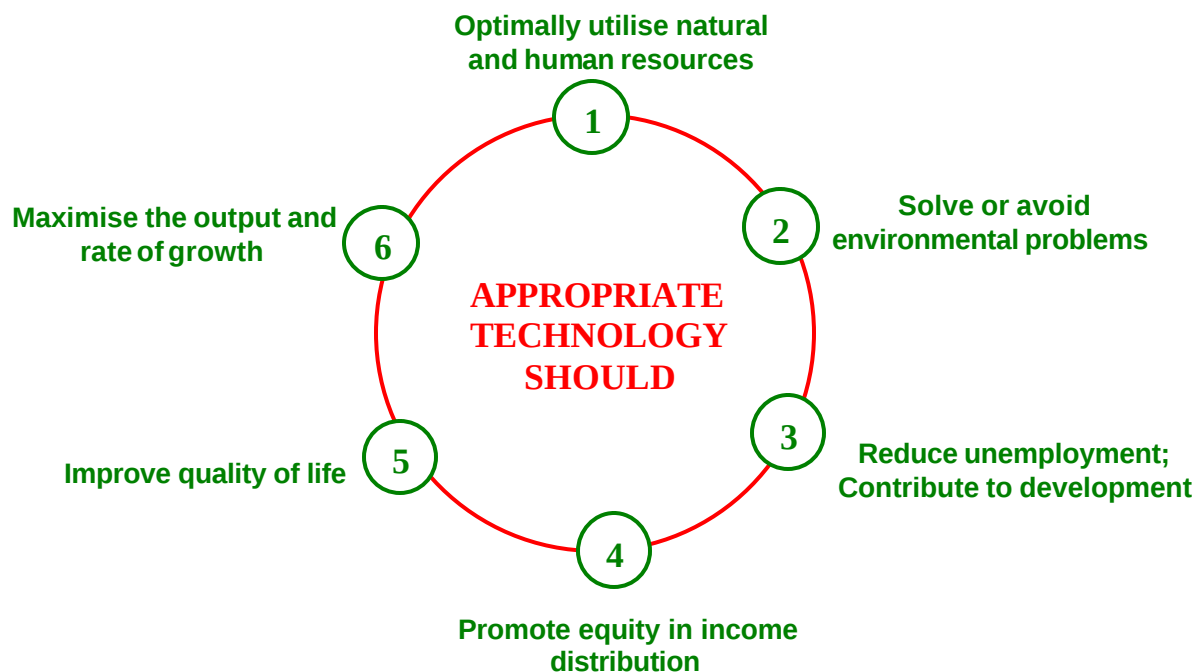


Fig.4.5: Some features of appropriate technology

This technological strand of environmental movement strives for a working synthesis of agriculture and industry, big and small units and Western and Eastern (or modern and traditional respectively) technological and production traditions. It is a promising sector for solving the problem of entrepreneurship in rural areas and preventing the marginalisation or elimination of traditional handicraft worker or a cottage industry due to expanding Trans national and capital resource intensive technology. Gandhiji's Charkha and Khadi Udyog are the prime examples of appropriate technology that also promoted political development namely to fight subservience to a foreign rule.

4.5 SUMMARY

- Problems of sustainable development are rooted in the issues of resource use and their pattern of distribution and ownership. Thus a policy towards sustainable development cannot be framed in isolation to politics and state regulations. The

world community is confronted by a chicken and egg controversy; economic problems aggravate resources crisis and environmental despoliation and this leads to constrained economic revival due to which nations find it more difficult to solve problems of unsustainable use of environment. In a world where progress depends on a complex set of national and international economic ties, any step towards **sustainable patterns of growth** involves as yet unresolved problems and challenges.

- In the 1970s the debate on development was safely polarised between the issue of environment and development. This decade saw a major revision in the thought of development itself and that has presented a major challenge to the conventional consensus on economic development. New expressions such as ‘sustainable development’ have added new dimension to development debates.
- The problem today is not primarily one of absolute physical shortage but of economic and social maldistribution and misuse.’ Thus the United Nations Environment Programme (UNEP) 1975 explains ‘environmental management implies sustainable development’. Since then the challenge as expressed in the Brundtland Report, is that ‘the process of economic development (which) must be more soundly based on the stock of capital that sustains it.’
- Issues of sustainable development have become centre stage to economic debates and are now setting the pattern of economic growth and world trade. The conventional agenda of the trans national businesses is found to be inadequate for sustainable development programmes of developing and the transitional countries and international institutions are required to implement inter and intra-generational equity and justice in trade pacts. The challenge of changing lifestyles and mode of production would require a technological change towards a just order.
- Economic growth cannot be translated into economic well being till distribution of costs and benefits of both financial and natural resources in economic policies is accounted for. It has been found that the costs of development are generally borne by the poor and subsistence community but the benefits are always falling into the pockets of the rich. This is also translated into international relations where the poor countries over-extract their resources to meet the requirements of the international market under the pressure of debt and amortisation payments leaving them with no choice but to abuse their environmental resources in an unsustainable manner.
- The primary requirement of sustainable economic prosperity in the world is to make the international economic system more equitable and just so that the developing countries can access it more vibrantly. It would also need a firm action towards debt servicing so that the poor countries may come out of the debt trap and participate in the world economic recovery programmes. Success of sustainable development is dependent upon the capacity development of the developing countries and environmental management. The main purpose of this programme would be to establish better management practices for both the human and the natural resources through innovations in technology, social policies, political and cultural paradigms.

4.6 TERMINAL QUESTIONS

1. What are the major challenges confronting sustainable development?
2. How can sustainable development be included in economic growth programmes?
3. What is appropriate technology?
4. What problems confront a country’s desire to live in harmony with nature?

REFERENCES

1. Development Report (2003) United Nations Development Programme, Oxford University Press, Oxford.
2. Korten, D C. (2001) *The Responsibility of Business to the Whole*, in: Richard Starky., *Richard Welford's Business and Sustainable Development*, Earthscan Publications, London
3. Kothari, S. (1993) Incompatibility of Sustainability and Development, *Indian Journal of Public Administration*, July-September, Vol.39, No.3, pp 315.
4. Pearce, D., et al. (1989) *Blueprint for a Green Economy*, Earthscan, London.
5. Pearce D, and Atkinson G. (1993) *Capital Theory and the Measurement of Sustainable Development: An indicator of "Weak" Sustainability*, *Ecological Economics*, 8:103-8.
6. Raghavan, C. (1995) TNCs Control Two-Thirds of the World Economy, *Third World Resurgence*, No.65/66, 31.
7. Singh, A. (2000) *The Politics of Environment Administration*, Galgotia, New Delhi.
8. World Commission on Environment and Development (1987) *Our Common Future*, Oxford University Press, Oxford.
9. World Conservation Monitoring Centre (1992) *Global Biodiversity: Status of the Earth's Living Resources*, Chapman and Hall, London.
10. Williamson, T. (1999) *What an environmentally sustainable economy looks like*, *Dollars and Sense*, July/Aug, Vol. 224, pp24-28.
11. Daly, H.E. (1996) *Beyond Growth: The Economics of Sustainable Development*, Beacon, Boston.
12. Milani, B. (2000) *Designing the Green Economy*, Rowman, New York.
13. McMurtry, J. (1999) *The Cancer Stage of Capitalism*, Pluto, London.
14. Sarwat, M. (1980) Technology, Development & Natural Resources. in: Peter Dorner and Mahmoud El Shafie, *Resources and Development*, University of Wisconsin Press. London.
15. Bilder R.B. (1980) International Law and Resource Policies, in: Peter Dorner and Mahmoud A. El. Shafie., *Resources and Developmen.*, University of Wisconsin Press. London.