

# Study of Environmental imperatives of sustainable development in India

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## Abstract

The concept of sustainable development is still being developed and the definition of the term is constantly being revised, extended, and refunded, its main components are the economic, social, and environmental factors. Sustainable development is the concept of environmental protection for the sake of future generation. Sustainability is the process of change in which exploitation of resources, direction of investments orientation of technological changes, etc. Sustainable development is the preservation of the production possibilities of an economy to provide the same goods and services obtained from nature. Sustainable development involves disciplines such as ecology, biology, an opinion but imperative. For a better India to live in; we need good air, pure water, nutritious

food, healthy environment and greenery ethics, economics, chemistry, physics, statistics, and engineering. Sustainability is not around us. Without sustainability environmental deterioration and economic decline will be feeding on each other leading to poverty, pollution, poor health, political upheaval and unrest. The environment is not to be seen as a stand-alone concern. We need to tackle the environmental degradation in a holistic manner in order to ensure both Economic and Environmental sustainability. Forests play an important role in environmental and economic sustainability. They provide numerous goods and services and maintain life support systems for life on earth. Some of these life support systems of major economic and environmental importance.

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## Introduction

Sustainable development is playing important role to all societies, but critical for poor ones, which depends more heavily on natural resources such as soils, rivers, fisheries, and forests than do the richer nations. It is argued that environmental problems in developing countries are predominantly driven by poverty, while those of richer nations are driven by affluence and over consumption. This is the subject of the future, especially when considered in a long-term generation perspective. Sustainability is about the possibility that the things we value in the present will continue to exist in the future. Sustainable development is the concept of relationship between economic growth and the environment. This paper addresses some pertinent issues concerning economics of Sustainable development in the present context through literature.

## Objectives of sustainable development

### Economic objectives

- Growth
- Efficiency
- Stability

### Social objectives

- Full employment
- Equity
- Security
- Education
- Health
- Participation

-Cultural identity

## Environmental objectives

- Healthy environment for humans
- Rational use of renewable natural resources
- conservation of non-renewable natural resources

## Review of literature

As suggested by Barbier (1987) sustainable economic development is likely to require simultaneous account to be taken of at least three systems, namely the biological system, the economic system and the social system. He contends that sustainable development is indistinguishable from the total development of society and cannot effectively be analyzed separately as sustainability depends upon the interaction of economic changes with social, cultural, and economic transformations. Human ascribed goals apply in relation to each of these systems and must be taken into account simultaneously in determining a path or path of sustainable developments. He suggested that goals in relation to each of these three systems must be:

- For the biological system: maintenance of genetic diversity, resilience and biological productivity
- For the economic system: the satisfaction of basic needs, equity enhancement, increasing useful goods and services
- For the social system: ensuring cultural diversity, institutional sustainability, social justice and partition.

Georgescu Roegen (1972) suggested that actual human population need to be reduced rather than stabilized to ensure the maximum period of existence of human species. He based his view on the Entropy law of physics. Economic growth relies on high entropy which it uses and disperses. Eventually the stock of such resources will be completely dispersed and no longer available for production. In his view unlimited economic growth is in principle impossible and there is no possibility of human intervention making it so because of operation of the basic principles of entropy.

United Nations conference on Environment and development held in Rio de Janeiro, Brazil in 1992, United Nations conference on sustainable development 1993; and world summit for sustainable development Johannesburg 2002.

Brundtland Report 1987: Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

### **Global warming - climate change**

We have to pay the ecological and human costs of globalizing agriculture as well as industry. It is a major signal that we need a shift from production oriented conventional modern agriculture to ecologically resilient agriculture. Besides these phenomena, the emission of green house gases through thermal plants, chemical industries units, nuclear arsenal,

petrochemical units, leads to climate change. With countries habitual to periodic epidemics facing the menaces of bird flu fraught with disastrous consequences for human life.

Its spread in winter appears a trickle unusual. The recent surfacing of chikungunya in Italy, a disease so far confined to warmer tropical climate change which emerges critical to horizon. These are cases of global warming. Experts had been warning that global warming is fuelling the spread of epidemics in areas higher to unaffected. Large scale emission of carbon dioxide from industries is responsible for these climate devastations and the adversely affected 262 million people between 2000 and 2004 by these climatic disasters have been mostly the poor.

Thus, globalization enthused conventional productivity oriented growth models with excessive consumerism and comfortable, life style, has led to climatic change through emission of green house gases, mainly carbon-dioxide which trap heat in atmosphere leading to large scale climatic disasters causing miserable life conditions for poor in developing world.

### **Poverty eradication and sustainable livelihoods**

Poverty and a degraded environment are closely inter-related, especially where people depend for their livelihoods primarily on the natural resource base of their immediate environment. Restoring natural systems and

improving natural resource management practices at the grassroots level are central to a strategy to eliminate poverty. The survival needs of the poor force them to continue to degrade an already degraded environment. Removal of poverty is therefore a prerequisite for the protection of the environment. Poverty magnifies the problem of hunger and malnutrition. The problem is further compounded by the inequitable access of the poor to the food that is available. It is therefore necessary to strengthen the public distribution System to overcome this inequity. Diversion of common and marginal lands to ‘economically useful purposes’ deprives the poor of a resource base which has traditionally met many of

Their sustenance needs. Market forces also lead to the elimination of crops that have traditionally

Been integral to the diet of the poor, thereby threatening food security and nutritional status.

### **Changing unsustainable patterns of consumption and production**

With increasing purchasing power, wasteful consumption linked to market driven consumerism is stressing the resource base of developing countries further. It is important to counter this through education and public awareness. In several areas, desirable limits and standards for consumption need to be established and applied through appropriate mechanisms including education, incentives

and legislation. Several traditional practices that are sustainable and environment friendly continue to be a regular part of the lives of people in developing countries. These need to be encouraged rather than replaced by more ‘modern’ but unsustainable practices and technologies. Development decisions regarding technology and infrastructure are a major determinant of consumption patterns. It is therefore important to evaluate and make development decisions which structurally lead to a more sustainable society. Technologies exist through which substantial reduction in consumption of resources is possible. Efforts to identify, evaluate, introduce and use these technologies must be made.

### **Protecting and managing the natural resource base of economic and social development**

The integration of agriculture with land and water management, and with ecosystem conservation is essential for both environmental sustainability and agricultural production. An environmental perspective must guide the evaluation of all development projects, recognizing the role of natural resources in local livelihoods. This recognition must be informed by a comprehensive understanding of the perceptions and opinions of local people about their stakes in the resource base. To ensure the sustainability of the natural resource base, the recognition of all stakeholders in it and their roles in its

protection and management is essential. There is need to establish well-defined and enforceable rights (including customary rights) and security of tenure, and to ensure equal access to land, water and other natural and biological resources. It should be ensured that this applies, in particular, to indigenous communities, women and other disadvantaged groups living in poverty. Water governance arrangements should protect ecosystems and preserve or restore the ecological integrity of all natural water bodies and their

Catchments. This will maintain the wide range of ecological services that healthy ecosystems provide and the livelihoods that depend upon them. Biomass is, and will continue for a long time to be, a major source of fuel and energy, especially for the rural poor. Recognizing this fact, appropriate mechanisms must be evolved to make such consumption of biomass sustainable, through both resource management and the promotion of efficient and minimally polluting technologies, and technologies which will progressively reduce the pressures on biomass, which cause environmental degradation. The traditional approaches to natural resource management such as sacred groves and ponds, water harvesting and management systems, etc., should be revived by creating institutional mechanisms which recapture the ecological wisdom and the spirit of community management inherent in those systems.

## **Environment and development**

The United Nations general assembly through its agenda 21 has provided a comprehensive picture of inter links related to environment and sustainable development. The agenda 21 suggests an action plan is to link national and international policies for revitalizing economic agro with sustainability. Combating poverty ,improvement in demographic structure ;change in consumption patterns health, human settlements, pollution control, energy management, treatment of industrial wastes, control of hazardous materials and after the input sustainability are vital requirements for overall sustainable development of nations.

- Changing consumption patterns: Less wasteful life styles sustainable consumption levels; informed consumer choices.
- Health: Pollution health risks, urban health, Basic needs; communicable diseases; vulnerable groups.
- Human settlements: shelter, land and settlement management, environmental infrastructure, energy and transport, human resources and capacity building, disaster prone areas.
- Urban water supplies: drinking water, sanitation, intercultural planning, monitoring
- Fresh water resources: integrated assessment, development and management, production of quality and resources,

drinking water, sanitation, water for agriculture.

- Energy: Sustainable energy development and consumption, house hold, transport, industry.

### **India's green economy**

Economics is going green. Its latest concept is sustainable development which can only be achieved if economic theory can be utilized to determine sustainable natural resources. Development can be sustainable if it has roots in its own people, culture, soil and heritage rather than the glamour of the others. Sustainability is not an option but imperative. For better a better world to live in; we need good air, pure water, nutritious food, healthy environment and greenery around us. Without sustainability environmental deterioration and economic decline will be feeding on each other leading poverty, pollution, poor health, political upheaval and unrest.

### **India's environmental ethics**

Ecological economics accounts not only for the financial constraints on consumption, as in conventional economics, but also for the natural constraints implied by the limited ability of the environment to provide natural resources and to absorb the wastes of production and to absorb the wastes of production and consumption. Sustainable management of the economic and ecological

system is one of the major focuses of ecological economics.

### **Conclusion**

Social and Environmental stresses are the failures of institutions to manage and provide public goods to correct the spillovers. Getting socially preferred outcomes require institutions that can identify who bears the burden of social preferred outcomes require institutions that can identify who bears the burden of social and environmental neglect and who benefits and who balance these diverse interests within society. This perspective helps in understanding why technically sound policy advice is so seldom taken up. Thus, sustainable development is about enhancing human well being thorough time.

So, is enjoying physical security and basic civil and political liberties. And so is it appreciating the natural environment, breathing fresh air, drinking clean water, living among an abundance of plant and animal varieties, and not irrevocably undermining the natural processes that produce and renew these features.

There is both a need and a scope for regional and global cooperation in sustainable development. Some of the areas of common concern are marine and riparian issues, transboundary environmental impacts, and management of bioresources, technology sharing and sharing of sustainable development experiences. Efforts must be made, especially

by developing countries, to work towards synergizing experiences and raising shared regional concerns as a strong united front in international forums. Mechanisms must be put in place to facilitate such international exchange of domestic and global experiences in sustainable development. There must be mechanisms for monitoring the compliance of countries to their obligations under various environmental agreements. Currently there is a multiplicity of institutions with fragmented responsibilities. A better governance regime is required to ensure cooperation and compliance. Climate change and loss of biodiversity undermines sustainable development. However, there is no dichotomy between economic progress and protecting our environment by limiting climate change and loss of biodiversity. Indeed, the cost to mitigate climate change is less than the cost of inaction if one takes the ethical position of not discounting future generations, and delaying action can significantly increase costs. Efficient resource use (e.g., energy or water) saves money for businesses and households. Valuing and creating markets for ecosystem services can provide new economic opportunities. A green economy will be a source of future employment and innovation. Governments, the private sector, voluntary and civil society at large all have key roles to play in the transition to a low-carbon economy,

adaptation to climate change and a more sustainable use of ecosystems.

If we are to achieve our dream, the time to act at scale is now, given the inertia in the socio-economic system, and that the adverse effects of climate change and loss of biodiversity cannot be reversed for centuries or are irreversible (e.g., species loss). Failure to act will impoverish current and future generations.

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