

**Environment and Sustainable Development**

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LUCKNOW**Received :** 18.03.2019; **Accepted :** 14.05.2019**ABSTRACT**

The field of sustainable development can be conceptually broken into three constituent parts: environmental sustainability, economic sustainability and sociopolitical sustainability.

Sustainable Development stands for meeting the needs of present generations without jeopardizing the ability of future generations to meet their own needs – in other words, a better quality of life for everyone, now and for generations to come. It offers a vision of progress that integrates immediate and longer-term objectives, local and global action and regards social, economic and environmental issues as inseparable and interdependent components of human progress.

Sustainable development will not be brought about by policies only: it must be taken up by society at large as a principle guiding the many choices each citizen makes every day, as well as the big political and economic decisions that have. This requires profound changes in thinking, in economic and social structures and in consumption and production patterns.

Figure : 00

References : 04

Table : 00

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**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 used by the Brundtland Commission<sup>2</sup> which coined what has become the most often- quoted definition of sustainable development as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Sustainable development 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.

As man’s knowledge of his environment increased, there has been a desire for more comfortable way of living. As the number of people increased, more & more natural resources were consumed in the process of satisfying the rapidly growing needs of the habitat. Every developmental activity has some impact on the environment. Development & Environment both are considered as two sides of the same coin. In the present scenario, the human as it is developed cannot live without the developmental activities for meeting his needs. Consequently there is a need to harmonize developmental activities in such a way that environment is not polluted.

It is desirable to ensure that the development options under consideration are sustainable. To be sustainable, development must possess both economical & ecological sustainability. The concept of sustainable development has received much recognition after the Stockholm Declaration resulting from the United Nations Conference<sup>4</sup> on Human Environment in 1972. The Brundtland report<sup>2</sup> in 1987 has defined that sustainable development is development that meets the needs of the present without compromising the ability of the future generations to meet their own needs. The Earth Summit held at Rio de Janeiro in 1992 put the world on the path of sustainable development which aims at meeting the needs of the present without compromising the ability of future generations to meet their own needs. The Rio Declaration has taken cognizance of the fact that in order to achieve sustainable development, eradication of poverty is indispensable and thus development process and environment protection must go on simultaneously. As per principle 11 of Rio Declaration, it requires the state to enact effective environmental legislation. Principle 13 says that the state shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. The need of having Environmental Impact Assessment (EIA) for proposed activities, that are likely to have a significant adverse impact on the environment, has been recognised in principle 17 of the Declaration. The objective of Environmental Impact Assessment is to foresee the potential environmental problems that would arise out of a proposed development and address them during the planning and design stages

of the project.

An integration of development and environmental imperatives, to be sustainable, development must possess both economic and ecological sustainability. The concept of Sustainable Development signifies a policy approach or goal rather than a substantive prescription. Its principal merit is that it modifies the previously “unqualified” development concept.

The caring for the Earth document<sup>2</sup> defines “sustainability as a characteristic or state that can be maintained indefinitely whereas development is defined as the increasing capacity to meet human needs and improve the quality of human life. This means that sustainable development would imply improving the quality of human life while living within the carrying capacity of supporting ecosystem”.

Sustainable development is a multi-dimensional concept with three interacting angles-ecology, economics and ethics. The necessary conditions for achieving Sustainable development are ecological security, economic efficiency and social equity. Sustainable development does not end with the sustainability of just the environment and resource system but requires the sustainability also of economic and social system.

### **Sustainability and Economic Growth**

Economic Growth is not an antithesis to sustainability but a condition underlying sustainability. Economic progress emphasizes qualitative and quantitative progress in the context of clean and qualitative improvement to socio-economic system. Quantitative improvements enable us to meet the essential needs of the present generation without compromising the ability of future generations to meet their own needs. Qualitative improvements reflect our capacity to convert physical resource- use into improved services for satisfying human wants. The key to sustainable growth is not to produce less but to produce differently, offering solutions to a broad range of environmental problems.

The relationship between economics and sustainable development may be explained as follows: “Based on our best understanding of how economics and ecosystem operate, we must try to generate rules of behaviour which, if followed, would sustain each. We can think of economic and ecological sustainability as overlapping circles. Where they overlap, is found the terrain of sustainable development and the starting point of a national strategy. Economic sustainability can be defined as the way that humans must manage an economy to preserve its productiveness”. Thus to achieve sustainability, economic growth cannot be based on over exploitation of the resources but must be managed to enhance the resource base.

### **International Law and Sustainability**

International Law is an increasingly important mechanism in the quest for sustainable development. International customary Law as well as conventional Law contain provisions which deal with protection and promotion of the environment. The “Stockholm Declaration” containing 26 principles opened the floodgate for subsequent developments for the protection and promotion of environment. To achieve sustainability, the “Vienna Convention” to prevent the depletion of ozone layer was conducted in 1982, followed by “Montreal Protocol” in 1987.

Meanwhile, World Conservation Strategy produced jointly in 1980 by the IUCN, WWF and UNEP, aimed “to help advance the achievement of sustainable development through the conservation of living resources”. It declared that “conservation, like development, is for people”. That is why all future development was to take place and be judged.

The Report of the World Commission on Environment and Development<sup>2</sup>, produced a document *Caring for Earth : A Strategy for Sustainable Living*. The document defined and explained the concept of Sustainable development. According to this report, the environment- development conflict is more apparent than real. As poverty is the worst enemy of environment, its alleviation requires “human intervention with natural ecosystem during the course of development”. At a minimum, the sustainable development must not endanger the natural ecosystem.

The Brundtland Report emphasizes that “precautionary principle” be made the basis of decisions on development and environment. Lack of scientific certainty should not be used as a reason for postponing measures to protect environmental degradation. This principle has been given utmost importance in Rio Conference, 1992.

The Brundtland Report emphasizes that the reduction of poverty is a pre-condition for environmentally sound development in lower income countries.

The Brundtland Report developed the World Ethic of Sustainability: Every human being is a part of the community of life, made up of all living creatures.

Every human being has fundamental and equal rights, including the rights to access to the resources needed for a decent standard of living. Each person and each society is entitled to respect these rights and is responsible for the protection of these rights for all others. Every life-form warrants respect irrespective of its worth to people. Everyone should take responsibility for his or her impacts on nature. Everyone should aim to share fairly the benefits and costs of resource use.

The protection of human rights and the rights of nature is a worldwide responsibility that transcends all cultural, ideological and geographical boundaries. In 1992, United Nations Conference on Environment and Development (UNCED) held at Rio de Janeiro, with a view to provide principles of economic and environmental behaviour for individuals and nations. As a matter of fact, UNCED heralded a new global commitment to sustainable development, promised on the interconnectedness of human activity and the environment. The Earth Summit produced five documents- Rio Declaration, Agenda 21, Forest Principles, Climate Convention and Biodiversity Convention.

### Judiciary and Sustainable Development

Nevertheless the concept of sustainable development is being applied by courts to settle disputes involving questions of environmental pollution development.

On the basis of Brundtland Report and other international documents prepared at Rio, the following have been accepted to be the contents of 'Sustainable development',

- (1) Inter Generational Equity;
- (2) Use and conservation of Natural Resources;
- (3) Environmental protection;
- (4) The Precautionary Principle;
- (5) The Polluter Pays Principle;
- (6) Obligation to Assist and Cooperate;
- (7) Eradication of Poverty, and
- (8) Financial Assistance to the Developing Countries.

These principles may help to some extent in striking a balance between development on one hand, protection and preservation of environment on the other. However, as a legal content it may not offer a precise limit. It is difficult to say that at this limit development is good and beneficial but beyond this it is bad and not in the interest of the living being. Where damage has been done, it is difficult to assess precisely the quantum of damage. Whatever is assessed by way of damages is only arbitrary even if it was fixed by the highest court of the land because the court proceeds only on the basis of the facts, circumstances of the case and the evidences produced before it. Many more things may not strike in the mind of any person including Judges or the evidences may not be forthcoming to prove various facts or it is very ticklish if not impossible to measure them precisely.

Sustainable Development is a balancing concept between ecology and development<sup>3</sup>. Some of the salient features of "Sustainable Development", as called out from

Brandtland Report (Rio Declaration) and other international documents are Inter Generational Equity, use and conservation of Natural Resources, Environmental Protection, the Precautionary principle, polluter pays principle and financial assistance to the Developing Countries. However "The Precautionary Principle" and "Polluter Pays Principle" are essential features of "Sustainable Development". The "Precautionary Principle" in the context of municipal law, in his opinion and correctly means:-

- (i) Environmental Measures - by the State Government and the Statutory Authorities - must anticipate, prevent and attack, the causes of Environmental degradation.
- (ii) Where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- (iii) The "Onus of Proof" is on the actor or the developer, industrialists to show that his action is environmentally benign.

So far as the "Polluter Pays Principle" is concerned, in *Indian Council for Envirolegal Action vs Union of India*, the Supreme Court has observed:

"We are of the opinion that any principle evolved in this behalf should be simple, practical and suited to the conditions obtaining in this country. Once the activity carried on is hazardous or inherently dangerous, the person carrying on such activity is liable to make good the loss caused to any other person by his activity irrespective of the fact whether he took reasonable care while carrying on his activity. The rule is premised upon the very nature of the activity carried on. Consequently the polluting industries are absolutely liable to compensate for the harm caused by them to the villagers in the affected area, to the soil and to the underground water and hence, they are bound to take all necessary measures to remove sludge and other pollutants lying in the affected areas."

Thus the "Polluter Pays" principle means that the absolute liability for harm to the environment extends not only to compensate the victim of the pollution but also the cost of restoring environmental degradation<sup>3</sup>. Remediation of the damaged environment is the part of the process of "Sustainable Development" and as such polluter is liable to pay the cost of reversing the damaged ecology. This is the right approach. This is not only desirable. It is must for everyone. Development at the cost of environment without regard for its restoration is not going to last forever. It will boomerang and dooms day will not be far away for humanity; therefore it is must

for us to conserve

1. Ecology and Scientific Value
2. Biological Values
3. Aesthetic Values, and
4. Environmental Qualities.

### Efforts for Sustainable Development

To meet the rising needs of the rising population within the limitations imposed by sustainable development, the efforts needed are immense and multidimensional. The primary needs of sustainable development are: i) Environmental awareness ii) Modified eco-friendly technology iii) Determination and will at the individual national and international level and iv) Cooperation and coordination.

As technology develops, issues tend to be more globalized. The future of the concept of sustained development depends largely on a global coordination. Fortunately, the international conventions on environmental issues held in Stockholm, Geneva, Rio etc., indicate the global movement in the right direction, before it is too late. As it is, the present global damage is reversible and further damage is preventable, provided the appropriate measures are taken up seriously.

### Measures for sustainable development

1. Population Control: Sustainable human population in each area should be estimated and growth should be limited to the desirable level.
2. Reduced Consumption: Values of life should be shifted to honour lesser consumption and simpler life styles. Mental development should gain more respect than material pomp.
3. Integrated Land use Planning: Relative priorities among different land uses like agriculture, forestry, fodder cultivation, urban and industrial growths, traffic etc., should be planned and managed judiciously.
4. Water Resource Management: River flooding and meandering, silting up of natural and man made reservoirs, overexploitation of ground water, water logging by over irrigation and poor drainage and pollution of the water bodies are some of the consequences of poor water resource management. Sustained development implies optimum management of water resources locally and globally.
5. Renewable Resources : Future development should be based on material resources that can be renewed or recycled, or resources that cannot be depleted in the near future. For example, wood can be consumed and can be grown maintaining

a balance between the two. Metals can be used, recycling the scrap again and again. Solar energy will not be depleted in the near future and is an ideal energy source.

6. Biosphere Conservation: Man's activities or callousness result in the destruction of species. Thousands of plant and animal species are endangered today with threats of extinction due to pollution, destruction of habitat, commercial exploitation, pampering monocultures etc. To ensure ecological stability, species diversity is essential. Sustained development includes biosphere conservation.
7. Production Efficiency : The current production processes involve wastages that can be reduced or avoided. Better planning and improved technology can lead to better yields from given resources. Genetic hybrids, drip irrigation, pest control, soil - crop - fertility management etc. are examples of improving agricultural productivity.
8. Pollution Control : Pollution of air, water and soil constitutes a major threat for future mankind. Improved pollution control technology is another major component of sustainable development.

Thus, the main measures for sustainable development are: 1. Removing subsidies that encourage excessive use of fossil fuels, pesticides, minerals, timber, water etc. 2. Encourage, Educate<sup>1</sup>, Empower and involve local people, rural youth and women in their own long-term interests. 3. Protect natural habitats and their biodiversity by protecting estuaries, mangroves, wetlands, forest, mountains etc.

Thus, it is the compatibility between ecology and economics; reaction and anticipation; industry and environment; conservation and exploitation; disposing and recycling; penalties and incentives and curing and prevention. Gro Harlem Brundtland, the first woman Prime Minister of Norway is the pioneer of the concept of "Sustainable Development".

### Management towards Sustainable Development

Application of the principles and functions of management is presently utilized in managing the environment to achieve the goals of sustainable development. The objectives and guidelines of such sustainable development have been described as 'selected sustainable development principles from the Rio declaration'.

### Sustainable Development Principles from Rio Declaration (UNCED 1992)

- \* Human beings are at the centre of concerns for sustainable development.

They are entitled to a healthy and productive life in harmony with nature.

- \* States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.
- \* The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.
- \* In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.
- \* All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.
- \* States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem.
- \* To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.
- \* Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.
- \* States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular

developing countries.

- \* States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.
- \* In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.
- \* Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.
- \* Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.
- \* Indigenous people and their communities and other local communities, have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.
- \* Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.
- \* Peace, development and environmental protection are interdependent and indivisible.
- \* States and people shall cooperate in good faith and in a spirit of partnership in the fulfillment of the principles embodied in this Declaration and in the further development of international law in the field of sustainable development.

Some environmental crises and disasters till date have profound influence in guiding the course of environmental management in future days. The crises include acid rain, deforestation, desertification, global warming and ozone layer depletion; while disasters are as follows:

- The release of dioxin after a major chemical explosion of Givaudan's plant of Roche Holding AG, at Seveso in 1976.
- A leak of poisonous fumes (MIC gas) from Union Carbide's plant at Bhopal in 1984.
- The explosion at the Soviet nuclear plant at Chernobyl in 1986.
- The 'NIMBY' (not-in-my-back-yard) syndrome of the 1988 voyage of the polychlorinated biphenyls (PCBs) toxic waste-laden Karin B barge to find suitable treatment capacity;
- The 1989 oil spills into Prince William Sound off Alaska from the Exxon Valdez;
- Saddam Hussein's deliberate oil releases in Kuwait during the Gulf War.
- The 1992 Aegean Sea oil spillage disaster off the north western coast of Spain;
- The 1993 oil spillage from the Braer along the Shetland Island's southern coastline;

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