
SUSTAINABLE DEVELOPMENT AS A CATALYST FOR LONG-TERM RESILIENCE

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ABSTRACT

The rapid growth of the country's population, urbanization, and industrialization have prompted the excessive extraction of natural resources in India, which is causing the environment to deteriorate rapidly. Preserving the environment and promoting sustainable development are of the utmost importance. Sustainable development was proposed as a solution to the global issue of environmental deterioration. Sustainable development refers to the preservation of natural resources for current as well as potential future generations. This paper aims to elucidate several facets of sustainable development. It employs a strictly doctrinal research technique, examining the issues of sustainable development now confronted by India. The paper further suggests methods to expedite sustainability that are both economically achievable and environmentally sound. As many of our natural resources are finite, our collective duty is to use them prudently.

Keywords: Sustainable Development, Environment, Pollution, Intergenerational, Intra-Generational,

INTRODUCTION

A country's path to economic progress can be mapped out by sustainable development. Sustainable development has been defined best by the Brundtland Commission (World Commission on Environment and Development, 1985) as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Harmony between man and nature is a prerequisite for sustainable development.¹ It depicts that the development of humanity should not be on cost of environmental health.² It is a well-known Newtonian notion that every action has equal and opposite reaction. Actions undertaken towards development growth, modernization, and progress also have opposite reactions and their impact is felt primarily on the environment which is why issues relating to the environment, or ecology are assigned subservient role to economic technical development.³ With our greed for development and material prosperity getting the better of us, we have recklessly exploited the natural resources around us without really caring for the environment.⁴ Approaches about the sustainable city have been changing over the last three decades, from intentions to avoid the urbanization process, towards recognizing the important role of cities in economic, social and cultural development⁵. Sustainable development is an active step when incorporated in *stricto sensu* led to wonders in the environmental jurisprudence.

EVOLUTION

During the historical period we were having few bilateral agreements which were mostly concerned with transboundary especially like waters, fishing rights navigation rights etc. They were silent about the other environmental issues. All the environmental issues were later taken into consideration when the Stockholm Conference which led to the creation of the United Nation Environment Programme in 1972 addressing environmental issues at the universal level and administrating the countries to implement it. As an outcome of this conference Stockholm declaration came into existence consisting of 26 principles including sustainable development, intergenerational equity, precautionary principle. The UNEP⁶ has signed and ratified many

¹ Vineeta Singh, *An Impact and Challenges of Sustainable Development in Global Era*, 2(2) JED, 330 (2014)

² *Id*

³ Dr. HN Tiwari, *Environmental Law*, 51, 3rd ed Reprint 2007

⁴ Nawneet Vibhaw, *Environment, Energy and Climate Change*, 2(1st ed.2020)

⁵ Dania González Couret, *Sustainable Urban Development. Cuban Challenges*, 14(1) Int. J. Urban Sustain. Dev, 410. 409, (2022)

⁶ United Nation Environment Programme

environmental conventions few of them includes Vienna Convention for the protection of the Ozone Layer 1985, Montreal Protocol on Substances that Deplete the Ozone Layer 1987, Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989 etc. International environmental jurisprudence influenced Indian jurisprudence to develop many acts pertaining to protection of nature and hence The Water (Prevention & Control Pollution) Act 1974, Air (Prevention & Control Pollution) Act 1981, The Environment Protection Act 1986 came into existence.

Principles Pertaining to Environment Protection

The principles have received international recognition as an outcome of Brundtland Commission Report which was devastatingly supported by all the nations.

Sustainable development is a phrase which is recurrently used in all aspects. It is the means of enhancing the human life while also living throughout harmony with the environment as well as preserving the life supporting ecological system. The concept of sustainable development floated by the Brundtland Commission represents the core principle of international endeavor towards integration between environment and development with increased focus on harmonious links between physical, economic and social aspects of environment and development.⁷ It signifies not only intragenerational equity but also intergenerational equity.⁸

Precautionary Principle seeks to ensure that the substance or human activity which may cause a threat to the environment is prevented from causing harm to environment even if there is no conclusive proof of linking that particular substance or human activity to environmental damage. This principle can be taken into consideration at the time of installation of the industry or a hazardous undertaking. *Vellore Citizens Welfare Forum V Union of India*⁹ was the first case in which this principle was established. Later followed by other cases like *Punjab V Modern Cultivators, Ladwa*¹⁰ and *Rajkot Municipal corporation V Manjulben Jayantilal Nakum*¹¹ here tortious liability was invoked on the ground of expectation of the precaution.

⁷ Ben Boer, Implementing Sustainability, 1 Del L. Rev, 9 (1992)

⁸ P Leelakrishnan, Environmental Law in India, 26 (6th ed. 2021)

⁹ 1996 (5) SCC 647, AIR 1996 SC 2715

¹⁰ 1964 SCR (8) 273, AIR 1965 SC 17

¹¹ 1997 (9) SCC 552

Intergenerational equity is a recent origin. It presupposes the right of each generation of human beings to benefit from cultural and natural resources of the past generations as well as the present obligation to preserve such heritage for future generations. The principle emphasizes on conservation of biodiversity resources and of the renewable sources like forest, water, soil etc.¹².

Intragenerational equity deals with the equality among the same generations as far as the utilization of resources are concern. It includes fair utilization of global resources among the human beings of the present generation.¹³ The concept of intra-generational equity provides rights and duties to every person of a single generation to use and take care of the renewable and non-renewable resources moderately among the members of the generation¹⁴. Industrialization is the key for the development of these countries which requires more and more renewable and non-renewable resources, in that the legislature must enact strict environmental laws in relation to the implementation of the rules specified in the doctrine of intra-generational equity, and it must be firmly interpreted by the judiciary system of the nation¹⁵

Public Trust Doctrine checks the legitimacy of government action. This principle mentions that state is the trustee of all national resources and the public at large is the beneficiary. Thus, the state is under the duty to protect the natural resources and they cannot be misused for private ownership. It has dual purpose firstly it mandates affirmative action for effective management and secondly it empowers the citizens to question the ineffective management of natural resources. The Supreme Court has invoked this doctrine in number of cases especially in *MC. Mehta v Kamal Nath*¹⁶ a land mark pronouncement based on the context of protection and preservation of natural resources.

Polluter Pays Principle aimed to prevent the cause which likely to result in damaging the environment at its source so that that damage does not occur. This principle states that if any person is found guilty for causing pollution, he will be held liable and will be asked to pay for

¹² Dr. PS Jaswal, Dr. Nishtha Jaswal et al, Environmental law, 120. (2009)

¹³ S Islam & A Jolley, *Sustainable development in Asia: The Current State & Policy Options*, 20 Nat. Resour. Forum, 263 -279 (1996)

¹⁴ R Rambousky et al., *Structural Relaxation and Viscous Flow in Amorphous ZrAlCu Above and Below the Glass Transition Temperature*, 225-227 MSF, 83-88 (1996)

¹⁵ Tiwari, Environmental law, 53, (2015).

¹⁶ 1997 (1) SCC 388 (413)

the same. It helps to make a curative approach on repairing the ecological damage done to the nature. In *Indian Council for Enviro- Legal Action V Union of India*¹⁷ the court held that the private companies are responsible in contaminating the soil as well as groundwater and directed them to make compensation to the villagers who were injured by the pollution. They were further directed to restore the polluted environment.

Indian Legislations

The Wildlife Protection Act, 1972 provides for setting up of national parks and sanctuaries where wild life can receive protection. It provides State Wild Life Advisory Boards, regulations for hunting wild animals and birds, trade in wild animals, animal products and trophies and penalties for violating the Act.

The Forest (Conservation) Act, 1980 as amended in 1988 places restrictions on the power of the state government concerning preservation of forests or use of forest land for non-forest purposes. The preamble of the Act mentions about the conservation of forests and for matter connected therewith and ancillary or incidental thereto.

The Air (prevention and control of pollution) Act, 1981 it was enacted under Article 253 of the constitution. Further it was later amended in 1987. The aim was to preserve the quality of air, control and abatement of air pollution.

The Public Liability Insurance Act and Rules 1991 and Amendment, 1992 enacted with the objective to provide for damages to the victims of an accident which occur as a result of handling hazardous substance. It applies to all owners associated with the production or handling of any hazardous chemicals.

The Energy Conservation Act, 2001 deals with effectual usage of energy and its preservation. It aims at establishing a framework and techniques for verifying measures and tracking improvements in energy efficiency inside the both private and public sectors at the private and national stages.

The Biological Diversity Act, 2002 is concerned with trust area is access to biological resources and information. Benefits sharing with conservers of biological resources /creators

¹⁷ AIR 1996 SC 1446

and holders of knowledge and information relating to use of biological resources. Notification of areas important from the standpoint of biological diversity as biological heritage sites.

¹⁸Protection to threatened species and involvement of local bodies in sustainable management of biodiversity. Then the establishment of biodiversity authority, state biodiversity board and biodiversity committees at block/ village level to implement the legislation.

The National Green Tribunal Act, 2010 was established to deal with appeals from the decisions of the agencies appointed under various environmental law. The aim of the act is to expeditious disposal of cases relating to environment protection and conservation of forests and other natural resources. It further enforces the legal right pertaining to the environment and provisions for relief and compensation for damage to persons and property.

Bio-Medical Waste (Management and Handling) Rules, 1998 came into existence with an aim to make the collection and discarding of biochemical waste easier. Rules were formulated for management and handling of biowaste used by the hospital's authorities, clinics and other institutions for scientific management without degrading the environment.

The Noise Pollution (Regulation and Control) (Amendment) Rules, 2010 provides for ambient air quality standards in respect of noise for different area and zones. *Church of God V K.K.R. Majestic Colony Welfare Assn.*¹⁹ was an interesting case involving various constitutional issues in respect of noise pollution.

The Batteries (Management and Handling) Rules, 2001 the matter of disposal of the battery became one of the common issues and to overcome this batteries rule were incorporated with object to handle and manage used up battery waste without causing the environment.

E-Waste Management Rules, 2016 were made with the goal of guiding the country's e-waste to approved dismantlers and recyclers in order to regularize the e-waste recycling field. The gathering aims under Extended Producer Responsibility (EPR) provision have been revised, and specific goals have indeed been launched for big producers who have finally started their sales operations.

¹⁸ P Leelakrishnan, Environmental Law in India, 119 (6th ed.2021)

¹⁹ (2000) 7SCC 282

Judicial Pronouncements

Rural Litigation & Entitlement Kendra, Dehradun V State of U. P²⁰ which is also known as Doon Valley Case was a famous case in which the issues of environment and ecological balance were taken into consideration. The problem of the mining activities in the limestone quarries in Dehradun Mussoorie area was discussed in this case. The Supreme Court emphasized the need for reconciling development and conservation in the larger interest of the country. The same was followed by the High Court of Himachal Pradesh ***in Kinkri Devi V State of H. P***²¹ as well as in ***General Public of Saproon Valley V State of H. P***²².

Indian Council for Enviro Legal Action V Union of India²³ In this case industry located in Rajasthan were engaged in producing chemicals like oleum. The industry failed to obtain necessary clearance as well as install equipment for treatment of highly toxic effluent discharged by it. These toxic effluents polluted the ground water thereby making it unfit for agricultural purposes and even human consumption. The apex court applied the polluter pay principle and held that the responsibility for remedying the damage is that of the offending industry and the H acid company was directed to pay compensation for those losses caused due to the damage and also to reimburse the cost of restoration of environmental qualities.

Vellore Citizen's Welfare Forum V Union of India²⁴ in the instant case tanneries situated in Tamil Nadu discharged untreated effluents into the river which was the main source of water supply to the residents. The apex court accepted the concept of sustainable development, precautionary principle as well as polluter pay principle. The Supreme Court directed the Central government to constitute an authority under Section 3(3) under Environmental Protection Act 1986 and confer on this authority all the power necessary to deal with the situations created by tanneries and other polluting industries in the State of Tamil Nadu.

M.C Mehta V Union of India²⁵ It is also known as Jajamau Tanneries case in which public interest litigation was filed drawing attention of the Apex Court towards polluting the Holy River Ganga. The tanneries started discharging their effluents into the river and they failed to

²⁰ AIR 1985 SC 652

²¹ AIR 1988 HP 4

²² AIR 1993 HP 52

²³ (1996) 3 SCC 212

²⁴ (1996) 5 SCC 647

²⁵ AIR 1988 SC 1037

set up primary treatment plant even after repetitively asking to do so. The court issued directions to close the tanneries which had failed to take minimum steps required for primary treatment of industrial effluents.

M.C Mehta V Union of India²⁶prevalently known as Taj Mahal Case. In Mathura hazardous industries were incorporated which emits sulphur dioxide which when combine with oxygen formed sulphuric acid known as acid rain. It resulted in gleaming white marble of the Taj. Even the industrial emission, brick kilns, vehicular traffic and generator polluted the ambient air around the Taj Trapezium. The apex court found that emission resulted in violation of right to life of the people living in and around the ITZ as well as damaged the prestigious monuments. The Supreme Court directed 292 industries to change over from coke to natural gas as industrial fuel and ordered stoppage of functioning and relocation of these industries which were not in a position to obtain gas connections for any reason.

Arjun Gopal and others V Union of India²⁷ the instant case was relating to air pollution in the National Capital Region. The case was seeking for relief against the use of fireworks, prevention of harmful crop burning, dumping of malba and further steps towards environmental purity. In short, the capital was smogged into an environmental emergency of unseen proportions. The Supreme Court imposed restriction on burning of firecrackers during Diwali and other festive occasion.

Murli S Deora V Union of India²⁸ The Supreme directed the Union of India, State Governments as well as Union Territories to take effective steps to ensure prohibiting smoking in public places as it violates the fundamental right of passive smokers under Art. 21 of the constitution of India.

In ***Municipal Corpn. Of Greater Mumbai V Kohinoor CTNL Infrastructure Co.(P) Ltd.***²⁹The Supreme Court held that the right to a clean and healthy environment is within the ambit of Article 21.

Anirudh Kumar V MCD³⁰ In this case the Supreme Court allowed special leave petition on

²⁶ (1997) 2 SCC 353

²⁷ (2017) 1 SCC 412

²⁸ (2001) 8 SCC 765

²⁹ (2014) 4 SCC 538

³⁰ (2015) 7 SCC 779

the ground of public health, safety and peace of local residents and safety of building, due to running of pathological lab in residential building. The Supreme court also quashed illegal regularization certificate of the said lab and directed the closure of the lab.

KEY CHALLENGES OF SUSTAINABLE DEVELOPMENT AND RECOMMENDATIONS

Several economic, political, environmental, and cultural changes have occurred in the world over the last few decades. Society is confronted with a plethora challenge related to sustainable development. Sustainable is the need of the hour. Significant global issues relevant to the present development path and the social component of sustainable development include poverty, inequality, illiteracy, unemployment. One of the root causes is extreme poverty and unemployment which leads to rise in violent crimes, family disruption, illegal narcotics consumption. The author recommends that poverty has to be eradicated with the help of government from concerned state by identify the area and conducting empirical study. The other issue is relating to high surge of population as we look at world population in 2022, it is remarkably close to around 8 billion and this drastic population growth indicate that the human impact on the globe has gone through the roof. Although the world produces more than enough food to feed everybody, due to unequal distribution and waste (one-third of food is wasted),³¹ almost a billion people suffer from hunger.³² The author recommends that due to population explosion the resources have to be planted especially the food crops and other environmental resources has to be improved to meet the need of future. Despite the steady rise in literacy rates over the past 50 years, there are still 773 million illiterate adults around the world, most of whom are women. ³³These numbers produced by the UIS³⁴ are a stark reminder of the work ahead to meet the Sustainable Development Goals (SDGs), especially Target 4.6 to ensure that all youth and most adults achieve literacy and numeracy by 2030³⁵. Education has to be given priority and educated people has to be given employment taking into consideration about their educational qualification as we all know that people are migrating to other countries for better job opportunities. Thirdly I would like to highlight that our environment is getting deteriorated continuously and it is evident from depletion of our natural resources like soil erosion, loss of

³¹FAO, Statistical Yearbook 2013, Food and Agricultural Organisation (Rome, 2013).

³² Holger Hoff, Understanding the nexus. Background paper for the Bonn 2011 conference: the water, energy and food security nexus (Stockholm, 2011).

³³ <https://uis.unesco.org/en/topic/literacy>. Accessed on (12. Nov 2024)

³⁴ The UNESCO Institute for Statistics

³⁵ <https://uis.unesco.org/en/topic/literacy>. (Accessed on 12. Nov 2024)

forests, habitats, and biodiversity etc. It is high time to note that we have to plant more trees even in private sector. School children can take more initiation for planting. Fourthly pollution is a serious concern in almost every country and our environment is mistreated extremely. It is to be noted that relevance of clean nature and green environment has been emphasized since time immemorial. Fifthly climate change has led to serious effect on humans, living organisms and ecosystems as it implies the overall change in the earth's climate. The author recommends that people have to live using fewer resources and has to manage water and waste, reduce carbon emission and to increase energy efficiency. Sixthly implementation wanting is the other truth so we have to work on implementing the sustainable development goals with the require commitment from the government and this will be achieved through adequate funding, financial prudence and ensuring value for money.

CONCLUSION

Sustainability is a condition, and sustainable development is the means by which we achieve sustainability.³⁶Sustainable development focusses at integration of development and environmental imperatives. This article has dealt with various aspects of sustainable development in the contemporary era. We must possess both economic and ecological sustainability for implementing the Sustainable Development Goals in India by accomplishing the components of the 17 goals by 2030. In order to make a sustainable country, we should holistically plan in a truly participatory way and we all people over the globe has to plan and execute a nationwide program for the prevention, control and abatement of environmental pollution that helps in building sustainable development. Awareness Programmes has to be constituted from grassroot level especially from the elementary school. It will be better if it is incorporated in all the schools worldwide. We have to balance development and environment by adopting change in hierarchy that is environment must be in top level, then human development has to be considered and last but not the least the development.

³⁶ Graeme Buchan, Ian Spellerberg and Winfried Blum, *Education for Sustainability: Developing a Postgraduate-level subject with an International Perspective*, 8(1) IJHES, 4-15. (2007)