

ECOLOGY CONSERVATION AND ENVIRONMENTAL GOVERNANCE IN URBAN AREA

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[**Abstract:** *“There is a sufficiency in the world for man’s need but not for man’s greed” these line by Mahatma Gandhi tends to portray the conflict of interest between mother earth and mankind over centuries in the form of industrial revolution, other scientific and social changes which eventually lead to the environmental degradation and ecological crisis. Since the Vedic era, India had been a land of ecological diversity and environmental worship. Indian ecology contains approx. 6-7% of the total plant species in the world. It consists of more than 50,000 species of plants, including a variety of endemics, if we talk about fauna Indian has a treasury of 7.6% of all mammalian, 12.6% of all avian, 6.2% of all reptiles, 4.4% of all amphibian and 11.7% of all fish¹ segregated from the Himalayan ranges to the alluvial plain and coastal areas to the Thar desert. However, with the passage of time and multiplying human desire across colonial and post-colonial era changed the overall demography of Indian ecology, along with the ideology of ecological conservation and environmental governance especially in urban areas. This article discusses the environmental crisis which India faced and policies drafted in response, during different phases, historical background to the environmental degradation, associated reasons, and how the wake of sustainable development and environmental protection charged the Indian government to take initiative for eco-friendly transformation.]*

INTRODUCTION

The historical study of natural resources conflict and the ethnographical study of indigenous conservation systems are two important ways in which we can construct a lineage for Indian environmentalism. Though the sensitive attitude towards the environment and its component dates back to the Vedic era and Vedic literature where the status of the environment is equal to that of the religious totem. But the history of environmental conservation in modern India precedes back to the 1970s, only after Indira Gandhi’s 1972 speech on poverty and pollution in Stockholm conference that was focused on human and environment. Parallel to that many indigenous and tribal movements in different part of Nation like Chipko Andolan (1973, Uttarakhand), save silent valley movement (1978, Kerala), Jungle Bachao Andolan (1982, Bihar), Narmada Bachao Andolan (1985)² provided a platter to build new laws and policies that will help to conserve our ecology and govern the environment.

Scientifically forest is one of the major factors that influences climate change and also consists of a major portion of ecological diversity. As per the Indian constitution, the forest appears in the concurrent list and its conservation forms an integral part of Vedic culture as early as 300 BC, and even the Mughal Empire recognized the importance of forests. The forest policy and its take

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¹ PMF UAS, *Biodiversity of India, Biodiversity Hotspots of India*, PMF IAS, available at – <https://www.pmfias.com/biodiversity-hotspots-india/> (last visited on Oct. 11, 2020).

² Clear IAS Team, *7 Major Environmental Movements in India*, CLEAR IAS, available at – <https://www.clearias.com/environmental-movements-in-india/> (last visited on Oct. 11, 2020).

on environmental issues in India have a dynamic nature and it has constantly been changing over some time. The arrival of the Imperial rule and their perspective attitude towards forest resources and the overall environment has created enormous change in the environmental resource, forest cover, its management and the indigenous rights of tribal community of India. Especially in the urban context, the colonial period has brought major changes and challenges in the core of urbanization. Between 1800-1947, India witnessed rigorous policy interventions in forest management. Since 1855, the development and establishment of railway network lead to major deforestation to meet the need for sleepers and low-cost engine fuel, the expansion of railways networking and deforestation went hand in hand, also for the colonial power Indian ecosystem and resources are the matter of economic monopoly and resources occupation, a transformation of forest land into agricultural land, restriction on tribal and local people rights over forest resources, stratification of a forest, appointment of forest guard, construction of buildings and colonies on the forest land are some of the environmental exploitation and discrimination that sprung up with colonial policies such as forest policy 1855, Indian Forest Act, 1865, The Forest Act, 1878, National Forest Policy, 1894, Indian Forest Act, 1927³.

The amount of destruction the environment faced during the colonial regime was unprecedented. But some of the Governor Generals and environmental philosophers such as Mahatma Gandhi, Mumford, J.C Kumarappa, Verrier Elwin worked to conserve the ecosystem and provided a threshold to work for environmental management and governance.

REASONS FOR THE ECOLOGICAL MISBALANCE AND ENVIRONMENTAL DEGRADATION

As per the UN report around 55% of the world's population is living in an urban area and around 2050 approx. 68% of the total world population will project to live in an urban environment also the population of the world may increase to **9.725 billion**⁴, which means that in this wave of urbanization, our ecology is going to suffer many changes, as rightly pointed out by Henry David Thoreau that “ What is the use of a house if you haven't got a tolerable planet to put it on? ”, in this blind race of urbanization, we are losing the land where we are supposed to stand. The fever of anthropocentric transformation leads to major challenges for the healthy existence of human, rise in global temperature, drought, landslides, ecological unbalance, are some of the major challenges that the whole world is facing, countries like America and China that are the veto power countries in the hunger of development and power crosses all the level of self-esteem to neglect international environmental submit and guidelines and building structure like Three George Dam that tends to slow down the rotation speed of earth by around 0.006 microseconds. which in itself is unrecognizable but not uncountable. As per the world economic forum 2019 report alone, China and India release around 41.8 % of total carbon dioxide emission, but we neglect the risk it poses. Ambient air pollution is a key risk factor for preventable non-communicable diseases and around four million people die per day globally. Worldwide, air pollution is responsible for 29% of all deaths and diseases from lung cancer, 17 % from an acute lower respiratory infection, 25% from ischaemic heart disease, 43% from

³ SaumyaUmashankar, *Evolution of Environmental Policy and Law in India*, SSRN, available at – https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2508852#:~:text=In%20the%20initial%20colonial%20and%20the%20railways%20and%20communication%20network.

⁴ Hannah Ritchie and Max Roser, *Urbanization*, OUR WORLD IN DATA (Nov. 2019), <https://ourworldindata.org/urbanization> (last visited on Oct. 12, 2021).

chronic obstructive pulmonary disease, and 24% of all deaths from stroke. Around the 1970s when India was on its march toward environmental protection, the scientific boon in the form of the green revolution, which was no doubt one of the most successful scientific experiment on the land of India lead to the over-exploitation of groundwater, soil pollution, and many other environmental and social issues. Incidents like Array forest deforestation for the sake of rail project, over-exploitation of natural resources like groundwater to apartment construction conflict in the green city that is Bangalore, and the self-centred attitude of mankind towards nature is a call for catastrophe. We have to understand the fact that what we are doing to the forests of the world is but a mirror reflection of what we are doing to ourselves and one another.

EFFORTS AND LEGISLATION GOVERNING THE ISSUE

The works of scholars such as Ramachandra Guha and Anthony Giddens's thoughts on environmental sociology and ecology conservation focuses on urban ecology and its conservation. Geddes's ecological approach is reflected in the concrete recommendations for open space for recreation, tree planting and protection, and perhaps most important for the provision of sustainable and safe water supply. In a plea for increasing tree space and garden space, he also talked about the conservation of forests and trees that provide fruit to people and talked to replace concrete and dusty roads with the road lined with trees on both sides. Also some of the cases like Damodar Rao v. S.O. Municipal Corporation ⁵where the supreme court of India linked the environmental issue to the human right and held that environmental pollution and spoliation which is slowly poisoning and polluting the atmosphere should also be regarded as amounting to a violation of Article 21 of the Indian Constitution which guarantees right to personal life and liberty and right to clean environment.

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⁵ AIR 1987 AP 171.

⁶ Ramachandra Guha, *Prehistory of Indian Environmentalism Intellectual Traditions*, 27(1) EPW 57 (1992).

⁷ AIR 1987 AP 171.

⁸ 1986 SCR (1) 312.

⁹ AIR 1980 SC 1622.

During the post-colonial and modern era, there were many policies and legislation drafted to conserve the ecosystem and repair the lungs of the earth that were destructed during colonial rule and overall human existence, to make earth inhabitable especially for the people leaving in the skyscrapers, in the mob of building, automobiles, shops, and factories.

1. **Indian Forest Policy, 1952**, was merely the extension of colonial forest policy, however, it focuses on reading the forest cover up to one-third of total land.
2. **The Forest Conservation Act, 1980**, stipulated that the Central permission is necessary to practice sustainable agro-forestry in forest areas.
3. **Indian Forest Policy, 1988**, This was the second forest policy after independence and first to recognize the role of local people in forest management. The prime objective of this policy was to maintain environmental stability and ecological balance through the conservation of forests as a natural heritage.
4. Constitution of India, Article 51A of the Indian constitution imposed a fundamental duty on every Indian citizen to protect and improve the natural environment including forests, lakes, rivers, and wildlife, also under article 48A of Directive principles of State policy stipulates that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country. These articles are brought in by the 42nd amendment act and the reference of the same was taken In one of the landmark judgment *Sachidanand Pandey v. State of West Bengal*¹⁰ where the apex court held that Court is bound to bear in mind the above mentioned articles whenever a case related to an Environmental problem is brought to the Court.
5. **The National Green Tribunal Act, 2010**, this act was enacted to constitute a body that is the National Green Tribunal, to look after issues related to the environment and the effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources. It also looks into the enforcement of any legal right relating to the environment and giving relief and compensation for damages to persons and property.
6. **The Air (Prevention and Control of Pollution) Act, 1981**, this act was enforced to provide for the control, prevention, and abatement of air pollution, it also work for the establishment of Boards both at the Central and State levels to look into the aforesaid purposes.
7. **The Water (Prevention and Control of Pollution) Act, 1974**, this act has been passed to provide for the prevention and control of water pollution and to restore and maintain the wholesomeness of water in the country. Also, it provides for the establishment of Boards at two-level. This Act prohibits the discharge of pollutants into water bodies beyond a given standard and lays down penalties for non-compliance.
8. **The Environment Protection Act, 1986**, this act set guidelines for the protection and improvement of the environment. It also talks about the offenses and penalties attached and attracted in case of any breach.

¹⁰ AIR 1987 SC 1109.

The field of academia has also inculcated more focus on environmental protection at all stages of learning, urban ecology can be an illustration for the same, it is the recent field of study, where we focus on the scientific study of the relation of living organisms with each other and their surroundings in the context of an urban environment. Organic farming, a ban on plastics, people turning vegan and adopting an electrical mode of transportation, and using alternative fuel instead of thermal or coal energy, are some of the steps that are taken on an international level that shows the awaking concern of people toward the protection of the environment. In fact, famous clothing brand GUCCI has launched its first sustainable collection clothing line.

If we talk about India, apart from the aforementioned acts and polices different guidelines and notification has regularly been served by the minister of Environment, Forest and Climate Change Ministry and other government and non-government organizations different initiative has been adopted to rejuvenate the urban environment, Turing buildings, airport, railway station into a green zone, the inauguration of worlds largest solar power plant, to notifying citizen to install an air purifier in an urban area and criminalizing the use of firecracker. Recently during the virtual celebration of World Environment Day India's Minister for Environment, Forests and Climate Change Prakash Javadekar, launched the Nagar Van project. The scheme aims to create urban forest cover in 200 cities across the country in the next five years. Jal JivanHariyali Yojana by the Government of Bihar is also a step in the direction of environmental conservation which in itself is remarkable.

After India has been ranked as the second most polluted country in the world, and Delhi as one of the most polluted cities as per the WHO report. The government of Delhi has taken a note to create awareness. Delhi's Environment Pollution (Prevention and Control) Authority declared air pollution a public health emergency and called out for change by launching initiative such as Odd-Even Policy On Vehicles, construction of 20 feet smoke tower in Lajpat Nagar, also the National Green Tribunal Restricts Industrial Activities And Bans Waste Burning in the area.

CONCLUSION AND ROAD AHEAD

One of the demerits of science and technology is that unlike all other forms of social organization it cannot be judged, examined, and evaluated in the public domain. In contemporary times, scientific advancement has been assigned a privileged epistemological position of being socially neutral both at the humanitarian and environmental level. It provides technological fixes for human needs and problems but delinks itself from any social or environmental problem it creates. The human proletariat tendency for ever-evolving and eternal greed for prosperity, power, and dominance over productive forces disturb the ecological balance which will affect human civilization, if this self-centred attitude will not sublimate from the human brain, it is no longer than the whole population will be wiped out from the face of the world. The earth had been alone and it will survive, the only thing that will happen is that the most dominated creature will get extinct. Sooner or later, we will have to recognize that the Earth has rights, too, to live without pollution. What mankind must know is that human beings cannot live without Mother Earth, but the planet can live without humans.

For the betterment of humans' peaceful and healthy existence, the whole world has to join hands, rising above selfish motive towards more liberal and environment-friendly development. Also, the individual human being has to take action especially in urban areas where the concrete is taller than trees. Also, the present laws governing environmental protection and ecological

conservation need to be amended as per the current scenario and need. Strict punishment and constant monitoring from the grassroots level to the central level can bring change. Afforestation around the countryside and in urban areas is the best way to conserve and maintain ecological balance. Maximization of renewable resources and adoption of sustainable development from an individual level can make a difference. But no laws no lecture can make the change until we want to change. It is well said by Richard *Rogers that* ‘The only way forward if we are going to improve the quality of the environment, is to get everybody involved.