

Rebooting Environmental Concerns in India: Hallenges, Greenwashing, and Sustainable Remedies

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ABSTRACT

India's rapid economic growth has come at a considerable environmental cost. With rising urbanization, industrialization, and population, the country faces multifaceted environmental challenges. These range from air and water pollution to deforestation, climate change, and biodiversity loss. This review explores the extent of environmental degradation in India, focusing on systemic and policy shortcomings. A special emphasis is placed on the phenomenon of greenwashing and the ways in which it hampers genuine sustainable development. The paper also outlines practical and policy-oriented remedies, drawing attention to the collective roles of government, corporations, and civil society in ensuring a cleaner, greener future. The concept of Greenwashing may be a misleading to public to make themselves as eco-friendly. Hence, one should be careful in purchasing their products only after thorough examining about the instructions and trademarks provided by the governmental agencies. By examining key environmental issues and proposed remedies through a critical lens, this paper aims to contribute to the evolving discourse on sustainable development in India.

Keywords: Climate change, environmental policy, greenwashing, pollution, sustainability

INTRODUCTION

India is on his development journey at a crossroads, facing the complex challenges of harmonizing economic growth with ecological sustainability. The country has made admirable advances in infrastructure and industrial development, but this progress often costs ecological wells. As climate change is intensifying around the world, India remains extremely vulnerable due to its geographical and socioeconomic context.

Major Environmental Challenges in India

Environmental degradation in India can manifest in several forms, including air quality degradation, dirty water, deforestation, soil degradation, and loss of biological diversity. Despite the initiatives of various states and growing awareness of the public, implementation and enforcement remain a major bottleneck. The current review aims to highlight these challenges, while also providing implementable strategies that include solutions at the technical, legal and basic levels. Furthermore, this paper examines misleading practices of greenwashing. This is a barrier to authentic sustainable development that must be addressed by stricter regulations and ethical governments. Air pollution remains one of the most urgent concerns. According to the Central Pollution Control Committee (CPCB, 2022), cities such as Delhi and Lucknow often report PM_{2.5} levels, which are more than 10 times the WHO-related limits. Most important contributors include vehicle chores, industrial activities and agricultural stubble. Water pollution is another surprising issue. Revered as sacred, the Ganges and Yamuna rivers are extremely dirty due to industrial emissions, untreated wastewater and religious practices. The CPCB (2021) reports that more than 70% of India's surface water is not suitable for consumption. According to the Food and Agriculture Organization (FAO, 2020), India lost 2.3% of forest cover between 2015 and 2020.

Furthermore, climate change has made the Himalayas a subject of quick retreat, a substantial threat to water security and local biodiversity (IPCC, 2022). Urban India faces a crisis in the treatment of fixed waste, generating approximately 150,000 tonnes of waste (CPCB, 2019) with insufficient systems for separation, recycling and disposal (CPCB, 2019). Wetlands, which are extremely important for biological diversity and water washing, also disappear at an incredible rate. Overall, these environmental issues illustrate the urgent need for integrated, enforceable political solutions. It undermines true sustainability efforts and misleads consumers, stakeholders and regulators.

Greenwashing (Green sheen)

The term started in the 1960s when the hotel business came up with clear example of greenwashing. They put up signs in hotel rooms asking guests to reuse their towels to help the environment. This helped the hotels save money on laundry. Recently, some of the largest companies that produce a lot of carbon emissions, like traditional energy firms, have tried to change how people see them. They act like they care about the environment. This is done by renaming, rebranding, or changing how their products look. These greenwashed products make people think they're better, more natural, or have fewer chemicals compared to other brands.

Companies use press releases and ads to claim the the environment by using clean energy or reducing pollution. But in reality, they might not be seriously working towards real environmental goals. Basically, when companies say their products are eco-friendly or have green benefits without proof, they are practicing greenwashing. (<https://www.investopedia.com/terms/g/greenwashing.asp>).

This tactic has become particularly widespread in the corporate world, where companies sell themselves as environmentally friendly and continue to practice environmentally harmful practices. Developed countries have also been criticized for greenwashing by characterizing foreign investment in developing countries as "climate-friendly." In response to this growing concern, in 2021, the United Nations formed a group of experts to develop mechanisms that regulate climate claims by non-state actors. The report (UNEP, 2022) suggests that companies: (1) new investments in fossil fuels, (2) insert measurable short-term emission reduction targets, (3) avoid reliance on carbon offsetting in the initial phase, and (4) meet standard regulatory frameworks. Therefore, strict review mechanisms, audits from third party providers, and transparent information are essential for containment of that spread. Consumers and investors play their role by demanding accountability and supporting truly sustainable practices.

Remedies And Strategies for Environmental Management

First, legal and political reforms should be prioritized. Environmental Impact Assessment Procedures (EIAs) should be strengthened by granting statutory status and informing stakeholders of meaningful participation. Regulators such as the National Green Tribunal should be permitted to implement compliance with reasonable resources. Technical interventions also offer promising methods. Promotion of electric vehicles in the glory context (Niti Aayog, 2021), improving public transport and implementing BS-VI emission standards are important in the fight against air pollution. Water pollution can be attacked by robust wastewater treatment plants, particularly under initiatives such as Namami Gange (Mojs, 2022). Furthermore, the introduction of decentralized renewable energy systems in rural areas can reduce dependence on fossil fuels. Environmental research needs to be integrated into school and university curricula to build a culture of sustainability. Basic organizations and NGOs must be supported in efforts to promote natural conservation and sustainable livelihoods. Sectors need to incorporate environmental, social and governance indicators (ESGs) into their business models, and businesses need to be liable for environmental violations. Political consistency is another important factor. Government measures must be consistent with international obligations such as the SDGS (Sustainable Development TARG (SDGS)) and the Paris Agreement. Localized adaptation strategies need to be developed, especially in climate-colored regions such as the coastal zone and the Himalayan zone. After all, individual responsibility cannot be overestimated. Together, simple measures such as reducing plastic use, introducing public transport, maintaining energy, and supporting eco-friendly businesses make a huge difference.

Cross-Cutting Themes

One is sustainable urban planning. Cities need to be designed to minimize environmental impacts with efficient public transport, green architecture, waste management systems and many green spaces. The second topic is aerial agriculture where drought-resistant plants, precision irrigation, and organic agriculture ensure nutritional safety while simultaneously maintaining ecological balance. Another important area is technology integration. Estimating technologies such as artificial intelligence (AI), the Internet of Things (IoT), and satellite-based technologies can improve the efficiency of environmental management. For example, real-time air and water quality monitoring can help to effectively implement pollution standards. Additionally, mobile applications and platforms can facilitate citizen commitment and data collection. Fundraising is also a cross-existence issue. Environmental initiatives require sustainable funding and public-private partnerships can play a key role. Green debt, carbon trade and environmental taxes are mechanisms that can generate financial resources and stimulate sustainable practices at the same time.

CONCLUSION

The environmental landscape of India offers immeasurable challenges and opportunities. Threats are complex and come together, but they are insurmountable. The path to sustainability lies in an integrated approach that combines legal enforcement, innovation, and participation in public and ethical corporate actions. Special attention must be paid to contain greenwashing. This is a serious threat to actual sustainability efforts. India can ensure that India not only will it be economically successful, but it also has an environmentally friendly future.

REFERENCES

1. Central Pollution Control Board. (2019). Annual report on solid waste management. Ministry of Environment, Forest and Climate Change, Government of India.
2. Central Pollution Control Board. (2021). Water quality status report. Ministry of Environment, Forest and Climate Change, Government of India.
3. Central Pollution Control Board. (2022). National air quality monitoring programme. Ministry of Environment, Forest and Climate Change, Government of India.
4. Food and Agriculture Organization. (2020). Global forest resources assessment 2020. FAO. <https://www.fao.org/forest-resources-assessment>
5. Intergovernmental Panel on Climate Change. (2022). Climate change 2022: Impacts, adaptation, and vulnerability. Sixth assessment report. IPCC. <https://www.ipcc.ch/report/ar6/wg2/>
6. Ministry of Environment, Forest and Climate Change. (2020). Crop residue management guidelines. Government of India.
7. Ministry of Jal Shakti. (2022). Namami Gange programme: Annual report. Government of India.
8. NITI Aayog. (2021). Faster adoption and manufacturing of hybrid and electric vehicles (FAME) India scheme. <https://www.niti.gov.in/>
9. United Nations Environment Programme. (2022). Integrity matters: Net zero commitments by businesses, financial institutions, cities and regions. UNEP. <https://www.unep.org/resources/integrity-matters>
10. World Bank. (2021). Strengthening water pollution management in India. World Bank Group. <https://www.worldbank.org/>
11. <https://www.investopedia.com/terms/g/greenwashing.asp>