Environmental Sustainability and Environmental Movements in India

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Abstract

India's rich environmental history is marked by numerous movements that have sought to protect the country's diverse ecosystems and ensure sustainable development. From the verdant hills of Uttarakhand to the sprawling plains of Gujarat, these movements have highlighted the profound connection between people and their environment. Today, we'll delve into two of the most significant environmental movements in India: the Chipko Movement and the Narmada Bachao Andolan. These movements not only ignited a sense of ecological consciousness but also critiqued the prevailing development models, advocating for a balance between progress and preservation. Environmental sustainability is the responsibility to conserve natural resources and protect global ecosystems to support health and wellbeing, now and in the future. Because so many decisions that impact the environment are not felt immediately, a key element of environmental sustainability is its forward-looking nature. In fact, the U.S. Environmental Protection Agency defines it as "meeting today's needs without compromising the ability of future generations to meet their needs. "Environmental movements focus on

Ecological balance: Environmental movements emphasize the need to maintain a balance between development and ecological preservation. This includes protecting forests, rivers, and wildlife habitats.

People's rights: Ensuring that local communities, especially marginalized groups, have a say in development projects that affect their lives and livelihoods and Alternative models: Promoting alternative development models that are inclusive, sustainable, and environmentally friendly. This includes practices such as organic farming, renewable energy, and community-based resource management

Keyword: Community Rights, Sustainable, Ecological Balance, Environment, Movements, Marginalized, Development

Introduction
Section-I

An environmental movement is a type of social movement that involves an array of individuals, groups and coalitions that perceive a common interest in environmental protection and act to bring about changes in environmental policies and practices. Environmental and ecological movements are among the important examples of the collective actions of several social groups (Bandyopadhyay, 1999, 882) [1]. The increasing confrontation with nature in the form of industrial growth, degradation of natural resources, and occurrence of natural calamities, has resulted in imbalances in the bio-

spherical system. Major reasons for the emergence of environmental movements in India are as follows: Control over natural resources, False developmental policies of the government, right of access to forest resources, Non-commercial use of natural resources, Social justice-human rights Socioeconomic reasons, Environmental degradation/destruction and Spread of environmental awareness and media. Indian sustainability movements have deep philosophical roots that predate modern environmentalism by centuries. Bharat's rich cultural and spiritual traditions have long promoted harmony between humans and nature. Concepts such as *ahimsa*, *Vasudhaiva Kutumbakam* (ibid), and the reverence for natural elements like rivers, forests, and animals are intrinsic to Indian environmental thought. Mahatma Gandhi's philosophy of non-violence, simple living, and self-reliance played an important role in shaping India's modern environmental movements. His ideas were based on the belief that true sustainability could only be achieved through minimizing material needs, promoting local economies, and living in balance with nature.

Section-II
India's Sustainability Movements
Chipko Movement
The Chipko Movement, which began in 1973 in the Himalayan region of Uttarakhand, is one of the significant movements in Bharat's environmental history and a powerful example of grassroots ecological activism. The movement emerged as a response to the extensive deforestation occurring in the region, driven by commercial logging interests. This exploitation of forests threatened not only the ecological balance but also the livelihoods of the local communities, who relied on the forests for fuel, fodder, and sustenance (Baxi, 1989,168) [2].

The uniqueness of the Chipko Movement lay in its direct action and non-violent protest tactics. Villagers, led predominantly by women, physically embraced the trees to prevent them from being felled, a symbolic and practical act that obstructed loggers (Bandyopadhyay, 1999, 881) [1] and highlighted the villagers' commitment to environmental preservation. This strategy was inspired by Gandhian principles of satyagraha (truth-force) and non-violent resistance. The role of women in the Chipko Movement was particularly significant; they were both the primary caregivers and the most affected by deforestation, as it increased their daily burden in gathering resources necessary for survival. Their leadership highlighted the intersection of environmental and gender justice, challenging both ecological degradation and gendered social structures (ibid).

The Chipko Movement highlighted the importance of forests in maintaining ecological stability, including soil conservation, water retention, and climate regulation, which are essential for the health of mountainous regions. The movement emphasized that ecological well-being is inherently tied to social and economic resilience, especially in rural communities. Moreover, it influenced broader environmental policy discussions in Bharat, leading to the development (Baxi,1989,169) [2] of forest conservation policies and inspiring similar protests in other parts of the country.

Bishnoi Movement
The Bishnoi Movement of 1730 is among Bharat's earliest recorded acts of environmental conservation and serves as a significant testament to the relationship between spirituality and environmental stewardship. Originating within the Bishnoi community of Rajasthan, the movement emerged when 363 Bishnoi villagers sacrificed their lives to protect *khejri* trees (Prosopis cineraria) from being cut down on royal orders. This act of martyrdom by the Bishnois, who embraced the trees in non-violent resistance, emphasized their commitment to ecological preservation, deeply rooted in their faith and cultural values (Guha.R,2003, 57). The Bishnoi community follows the teachings of Guru Jambheshwar (Jambhoji), a 15th-century spiritual leader who established the 29 principles of the Bishnoi faith. These principles, including protection of all life forms, conservation of resources, and harmonious coexistence with nature, were intended to promote an ecologically balanced lifestyle. Jambhoji's teachings emphasized environmental responsibility as a religious duty, inspiring the community (Guha.R,1999, 48) to protect flora and fauna and avoid practices that could harm natural ecosystems. The Bishnoi approach reflects biocentrism, where all living beings, humans, animals, and plants are considered valuable and interdependent parts of the ecosystem (Rangarajan, M,2013,53-78) [20].

This early conservation movement has had a lasting legacy, inspiring modern environmental activism in Bharat. It illustrates that ecological responsibility is deeply embedded in cultural and spiritual values, advocating for sustainable practices that respect the intrinsic worth of nature. Today, the Bishnoi community (ibid) continues its conservation efforts, actively protecting wildlife, conserving water, and promoting afforestation, embodying a philosophy of ecological reverence and sustainable living (ibid) that holds enduring relevance.

Narmada Bachao Andolan
The Narmada Bachao Andolan (NBA), led by Medha Patkar since the 1980s, stands as one of Bharat's most prominent movements questioning large-scale development projects and their impact on marginalized communities and the environment. The movement was formed in response to the construction of large dams along the Narmada River, notably the Sardar Sarovar Dam, part of a broader project aimed at providing water, power, and irrigation. While the dams promised economic development, the movement raised fundamental concerns about displacement, environmental degradation, and social justice (Bandyopadhyay, J,1999,882) [1].

At the heart of the movement's critique was the displacement of indigenous Adivasi communities and rural populations who had lived along the Narmada River for generations. These communities relied on the river and surrounding land for their livelihoods, cultural practices, and spiritual well-being. The movement highlighted that displacement not only led to loss of homes and land but also the disintegration of cultural identity and social structures, issues that were inadequately addressed in government resettlement plans (Brundtland Commission,1987, Report). The movement called attention to the human cost of "development" and argued for the recognition of people's rights over their lands, aligning with the philosophy of environmental justice .

It further criticized large dams for disrupting riverine ecosystems, threatening biodiversity, and altering natural water flows, which had long-term impacts on both local agriculture and wildlife. These ecological critiques were rooted in the concept of sustainable development, emphasizing that true development should not degrade the

environment (Brundtland Commission,1987, Report) or marginalized vulnerable populations.

Swachh Bharat Abhiyan (Clean India Mission)
Launched in 2014, the Swachh Bharat Abhiyan aimed to eliminate open defecation and improve solid waste management across Bharat. The campaign has promoted sanitation infrastructure, especially in rural areas, leading to a significant increase in household toilets and public awareness about hygiene and waste segregation. This initiative also tackles environmental waste management challenges through urban cleanliness drives, anti-littering policies, and plastic waste reduction campaigns.

Swachh Bharat embodies the Gandhian ideal of self-purification and collective responsibility. Gandhi viewed cleanliness as a spiritual duty, emphasizing that a clean environment contributes to the purity of mind and soul. Swachh Bharat also resonates with the Vedantic concept of *Vasudhaiva Kutumbakam*, where the world is one family, sharing the responsibility for cleanliness and public health.

International Solar Alliance (ISA)
Co-founded by Bharat in 2015, the International Solar Alliance is a coalition of over 120 countries that aims to promote the adoption of solar energy, especially in countries with high solar potential. This global effort seeks to mobilize investment, facilitate technology sharing, and reduce costs for solar projects, positioning Bharat as a leader in renewable energy transition and reducing reliance on fossil fuels.

It is rooted in the philosophical idea of Prakriti Dharma, or harmony with nature (, environmental Forest). Solar energy harnesses a renewable, non-exploitative resource, reflecting the belief that humanity should take only what is needed, in line with *Aparigraha* (non-possessiveness). Its cooperation across nations aligns with the concept of *Lokasangraha*, the collective welfare and unity of humankind, transcending borders for the greater ecological good.

Namami Gange Programme
This river rejuvenation initiative, launched in 2014, is dedicated to cleaning and preserving the Ganga River and its tributaries. Namami Gange focuses on waste management, afforestation along riverbanks, sewage treatment, and public awareness, aiming to restore the river's ecosystem, crucial for millions who rely on it.

Namami Gange is inspired by reverence for nature, particularly rivers, which are seen as sacred sources of life in Indian culture. The Ganga River, in particular, is personified as Ganga Ma (Mother Ganga), symbolizing the idea of Bhumi Devi (Earth Goddess) as a nurturing force. The program reflects ecological dharma, the duty to protect and respect natural resources that sustain human life.

Section-III
Aims of India's Sustainability Movements
➢ Indian environmental movements share a strong focus on the conservation of natural resources, wildlife protection, and ecosystem preservation. Whether it's the Chipko Movement in Bharat or the global climate change movement, both seek to prevent the destruction of the environment for short-term economic gain. Grassroots mobilization is a common characteristic. The Chipko Movement, much like the Fridays for Future movement, emphasizes the power of local communities and youth in driving change. In both cases, activism emerged from the realization that governments and

corporations were failing to adequately protect the environment (Guha, R,2003,28).
➢ Indian sustainability movements are often deeply rooted in spiritual and ethical beliefs. For example, concepts like ahimsa (non-violence) and the intrinsic value of all life are central to Indian environmentalism which come from the *Vedas*. This approach views nature not as a resource to be exploited but as an entity to be revered and protected. Traditional Indian practices emphasize harmony between human beings and the environment, seeing the well-being of both as interconnected. Movements like the Chipko Movement exemplify this, where villagers, particularly women, physically embraced trees to prevent their feeling (Guha, R,2003,28), a symbolic gesture of protecting life.
➢ Sustainability movements, particularly those inspired by Gandhian philosophy and Vedas, critique industrialization itself. Gandhi's vision was one of sarvodaya (welfare for all), which included a critique of large-scale industrialization that he believed led to environmental destruction, inequality, and alienation. Indian movements often promote alternative models of development based on simplicity, self-sufficiency, and local economies (ibid). They emphasize minimizing material needs and protecting traditional ways of living, which are more in tune with ecological balance. For instance, the Narmada Bachao Andolan (Save Narmada Movement) questioned large-scale dam construction, arguing that it caused displacement and environmental damage while benefiting only certain sections of society (Gopalakrishna. S, 2011,70).
➢ Indian sustainability movements often focus on more localized environmental issues that are specific to communities or regions. These include forest conservation, water management, and the rights of indigenous and marginalized communities who are directly impacted by environmental degradation. Movements like the Chipko Movement, Namami Gange and Narmada Bachao Andolan are examples of grassroots activism focused on protecting natural resources that are crucial for the survival of local populations. The emphasis is on preserving local ecosystems and ensuring that development does not come at the cost of the environment or the well-being of vulnerable communities (Gopalakrishna.S,2011,70).

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Section-V
Impact of Environmental Movements
Ramachandra Guha frequently talks about unique features which define Indian environmental politics versus other movements. Indian environmental activism diverges from typical Western rights-based movements because it bases its activism on cultural associations and strengthens collective resistance. Insights gathered from the three environmental waves maintain their importance in current times. The successive waves in India's environmental history generated vital lessons through their policy achievements and residential activism which will lead the country to sustainable development (Gopalakrishna, S, 2011, 68).
➢ **Focus on Community:** According to Indian environmental thought the collective represents its central priority. People participated in both the "*Chipko Movement*" and "*Narmada Bachao Andolan*" as examples of how community members defended collectively owned resources. The traditional

ecological practices which base their operations on sustainable living methods (ibid) serve to demonstrate how deeply rooted the community-focused principles of India are.

➢ **Development and India's Struggle for Balance:** Following independence India needed to develop its industries rapidly to improve lives yet this process often generated disagreements with environmental protection needs (Guha.R, 1999, 32). The emerging tension during India's second environmental wave led to strong opposition against large-scale projects such as heavy dams because of their adverse impacts on both humans and nature.

➢ **Cultural Roots and India's Ecological Diversity**: The wide range of ecological environments in India creates a foundation for its diverse environmental activism campaigns. Different aspects of Uttarakhand Forests and Kerala wetlands drive people to create separate environmental activism programs that honor traditional customs and regional ecological conditions (R. Guha,2011,38-42).

➢ **Empowering Marginalized Communities:** The core vision of environmental activism according to Guha focuses on supporting those groups that face discrimination. Environmental degradation throughout history has led tribal communities along with villagers living near affected areas to bear the burden of displacement and other humanitarian losses (ibid). He strongly recommends using these groups' real-life understanding to add meaningful insight to sustainable decision processes during policy formulation.

➢ **Social Justice and Ecology:** Environmentalism represents a topic that Guha views as completely intertwined with social justice. Through social movements such as Chipko and Narmada Bachao Andolan both ecological protection and resource accessibility for local communities demonstrated critical compatibility. Guha emphasizes that environmentalism (Guha, R,2001,141-177) serves two essential purposes which need wider acknowledgment.

Guha highlights that environmental progress needs specific socio-economic and cultural analysis for India's approach to represent both a global framework and a remarkable sustainable learning experience. Guha seems India's Environmental movements as inclusivist movement. The analysis by Ramachandra Guha regarding India's environmental developments through three waves of conservation work delivers essential understanding about the country's changing environmental interaction (ibid). The evolution from the Chipko Movement to contemporary climate change responses shows how people have managed development growth along with ecological sustainability goals. Guha demonstrates through his insights that environmental challenges require us to address them by embracing traditional values along with a progressive approach and full community involvement. India's environmental history provides vital knowledge which guides the formation of collective responsibility to create sustainability for future generations (ibid) during its on-going ecological challenges in the globalized world.

Section - VI
Role of Policy and Governance

➢ **Balancing Growth with Preservation:** Guha promotes a sustainable form of development which achieves economic growth while preserving natural resources. He (Guha, R,2001,141-177) scrutinizes both industrialization without rules and global expansion stating that immediate economic gains should not surpass permanent environmental stability.

➢ **Integrating Traditional Knowledge:** Guha's observations show that India should protect its traditional ecological wisdom through proper management. Traditional approaches for water management and forestry retain their ability to implement environmentally sustainable solutions because they derive their knowledge from natural and cultural connections (ibid). Current environmental strategies require policymakers to adopt time-proven traditional ecological practices.

➢ **Stronger Regulatory Frameworks:** Through his work Guha defends the need to create comprehensive environmental policies which will tackle present-day environmental issues including climate change and urban contamination (Nayak.A. K,2010,69-73). According to his perspective effective governance needs to combine transparency as well as accountability and sustainability. The implementation of robust environmental laws (Pandey, B,1998,69-73) becomes more important and so does the development of an enforcement culture that follows compliance standards.

➢ **Participatory Policy Development:** According to Guha environmental policies should originate from collaborative dialogue among various (Guha, R,2001,141-177) stakeholders including citizens and scientists together with activists and governmental officials. Diverse stakeholder views from policymaking processes create decisions which simultaneously promote inclusiveness and performance efficiency.

➢ **Promoting Awareness:** Through his work Guha repeatedly emphasizes that education plays an essential role in establishing future sustainability (Guha.R,2003,24). Environmental consciousness requires development from people at the base levels of society he contends. Public educational programs and school curriculum must teach all citizens to develop ecological understanding from childhood through adulthood. India requires a widespread commitment to protecting its distinctive ecological variety which Guha promotes as essential. Active citizen participation in celebrating nature enables the nation to increase its dedication to preservation efforts.

➢ **Adaptation to Contemporary Challenges Like Climate Changes and Globalization:** We must rescue the current climate change circumstances alongside the globalization era because these dangers must be resolved according to Guha. The continuous development of renewable energy together with climate policy in India demands grassroots activism to achieve meaningful results according to Guha (Guha.R,2003,24).

➢ **Youth Engagement:** Guha asserts that the next generation demonstrates significant ability to establish environmental transformation. The younger generation now has the potential to use technology platforms alongside international networks to make their environmental movements more powerful while finding

modern answers to urgent ecological crises. The environmental historical examples from India that Ramachandra Guha presents give detailed instructions about balancing sustainability (Guha. R, 2003, 24) with economic progress. His message about inclusivity combined with education and balance demonstrates the path toward creating sustainability. Building upon these reflections India will become a worldwide leader which solves environmental issues with sensitivity towards culture and ecology.

Section - VII
Conclusion

Environmentalism as an Inclusive Movement focuses on empowering marginalized communities and promoting social justice and ecology. The core vision of environmental activism according to Guha focuses on supporting those groups that face discrimination. Environmental degradation throughout history has led tribal communities along with villagers living near affected areas to bear the burden of displacement and other humanitarian losses. Environmentalism represents a topic that Guha views as completely intertwined with social justice. Guha emphasizes that environmentalism serves two essential purposes which need wider acknowledgment. Indian sustainability movements have been highly effective in mobilizing local communities and promoting traditional ecological knowledge. Grassroots efforts, such as the Chipko Movement, successfully halted deforestation in certain regions and raised awareness about the importance of forests for local communities. Indian movements have also highlighted the connection between environmental conservation and social justice, advocating for the rights of indigenous and rural communities who depend on natural resources for their survival (Guha. R, 2003, 24). However, these movements often face opposition from state-led development projects and global economic pressures. The Narmada Bachao Andolan, for example, has fought for decades against large dam projects that displace local populations, but it has struggled to stop such projects due to the government's prioritization of industrial development. Despite their successes in raising awareness and protecting specific areas, Indian sustainability movements often find it difficult to compete with the economic and political interests that drive large-scale development projects.

To address current environmental sustainability issues, we need an approach that merges the strengths of both traditional Indian environmental philosophy and global sustainability frameworks. The Vedic principles emphasise harmony with nature, respect for all living beings, and the interconnectedness of humans and the environment, which can guide us in forming a more balanced relationship with nature. In the Vedas, elements like trees, rivers, air, and animals are respected as life-sustaining forces, not resources for exploitation. Adopting this ethos encourages community-driven conservation, as seen in movements like Chipko, Namami Gange which empower local people to protect their environment directly. A solution lies in integrating the ethical, community-focused Indian philosophy of environmental stewardship with the global emphasis on technology and policy. This combined approach can help shape policies that are sensitive to local cultures and ecosystems while still addressing urgent global issues. By respecting traditional ecological knowledge and fostering community participation, we can create sustainable solutions that empower local populations. Additionally, leveraging

scientific research and global cooperation ensures that these solutions can effectively mitigate environmental degradation on a broader scale. In this way, a synthesis of Indian and international sustainability frameworks can lead to a more inclusive, equitable, and sustainable future for our planet.

Reference

1. Bandyopadhyay J. Chipko movement: Of floated ideologies and appropriated ideas. Economic and Political Weekly. 1999;34(15).
2. Baxi U. Constitutional and legal aspects of rehabilitation and displacement. In: Thukral E, Fernandes W, editors. Development, displacement and rehabilitation. New Delhi: Indian Social Institute; c1989.
3. World Commission on Environment and Development. Our common future. New York: United Nations; c1987.
4. Centre for Science and Environment. The citizens' fifth report: National overview. New Delhi: Centre for Science and Environment; c1999.
5. Fernandes W. The draft national policy for the rehabilitation of DPs: Is displacement inevitable? In: Fernandes W, Paranjpye V, editors. Rehabilitation policy and law in India: A right to livelihood. New Delhi: Indian Social Institute; c1997.
6. Fernandes W, Paranjpye V. Hundred years of involuntary displacement in India: Is the rehabilitation policy an adequate response? In: Fernandes W, Paranjpye V, editors. Rehabilitation policy and law in India: A right to livelihood. New Delhi: Indian Social Institute; c1997.
7. Gadgil M, Guha R. This fissured land: An ecological history of India. New Delhi: Oxford University Press; 2003.
8. Gandhi MK. The story of my experiments with truth. Ahmedabad: Navajivan Publishing House; c1927.
9. Gopalkrishnan S. The Forest Rights Act, the adivasis, and the state. In: Mohanty M, editor. India social development report 2010: The land question and the marginalized. New Delhi: Oxford University Press; 2011.
10. Guha R. The unquiet woods: Ecological change and peasant resistance in the Himalaya. New Delhi: Oxford University Press; c1999.
11. Guha R. The prehistory of forestry in India. Environmental History. 2001;6(2).
12. Guha R, Gadgil M. State forestry and social conflicts in British India. Past and Present. 1989.
13. Hemadri R. Dams, displacement, policy and law in India. Contributing paper prepared for Thematic Review, Social Issue 1.3. World Commission on Dams; c1999.
14. Mahapatra LK. Development for whom? Depriving the dispossessed tribals. Social Action. 1991;41(3).
15. Nabhi SU. Environmental movements in India: An assessment of their impact on state and non-state actors. India Quarterly. 2006;62(1).
16. Nayak AK. Big dams and protests in India: A study of Hirakud dam. Economic and Political Weekly. 2010;45(2).
17. Pandey B. Depriving the underprivileged for development. Bhubaneswar: Institute for Socio-Economic Development; c1998.
18. Pattnaik BK. Tribal resistance movements and the politics of development-induced displacement in contemporary Orissa. Social Change. 2013.

19. Rajagopal B. International law from below: Development, social movements, and Third World resistance. New Delhi: Cambridge University Press; 2003.
20. Rangarajan M. The Bishnois of Western Rajasthan: Spiritual ecology in practice. In: Cederlöf G, Sivaramakrishnan K, editors. Ecological nationalisms: Nature, livelihoods, and identities in South Asia. New Delhi: Permanent Black; c1996.
21. Government of India. Environmental and forest services. Available from: http://www.india.gov.in
22. Press Information Bureau, Government of India. Available from: http://www.pib.gov.in
23. MyGov India. Available from: http://www.mygov.in
24. NITI Aayog. Available from: http://www.niti.gov.in