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# A study on green education in India: A pathway to sustainable development

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## Abstract

This study explores the integration of green education in India as a crucial pathway to sustainable development. Given the country's rapid industrialization and urbanisation, environmental education is essential for raising awareness and promoting sustainable practices among the younger population. The research examines current initiatives such as the National Green Corps and the Green Schools Programme, which aim to embed environmental consciousness in the education system. However, significant challenges such as resource constraints, inadequate curriculum integration, and insufficient teacher training hinder the effectiveness of these programs. The study suggests a multifaceted approach to address these challenges, including stronger policy support, innovative teaching methods, public-private partnerships, and community involvement. By enhancing green education, India can better equip its youth to address environmental issues, fostering a culture of sustainability that is essential for the country's long-term environmental health.

**Keywords:** Green Education; Sustainable Development; Environmental Education; Curriculum Development; Educational Policy and Sustainable Development Goals (SDGs)

## 1. Introduction

Green education, usually referred to as environmental education, is gaining more recognition as an essential component in the effort to achieve sustainable development. The primary objective of this educational method is to enhance students' understanding of environmental issues and encourage the adoption of sustainable practices. It attempts to equip future generations with the necessary information and abilities to effectively tackle intricate ecological difficulties (Orr, 1992). The integration of green education into the mainstream educational system is critical in India, a country undergoing significant industrialization and urbanization.

India faces a myriad of environmental issues, including severe air and water pollution, deforestation, and a significant loss of biodiversity (Ravi, 2017). A population exceeding 1.3 billion exacerbates these problems, exerting immense pressure on the country's natural resources. The need for a robust environmental education framework is evident, as it can play a pivotal role in fostering a culture of sustainability and environmental stewardship.

India has launched several initiatives to promote green education. The Ministry of Environment, Forestry, and Climate Change leads the National Green Corps (NGC) project. It involves schoolchildren in different environmental conservation activities, with the goal of establishing a network of eco-club members throughout the country (Government of India, 2018). Another notable programme is the Green Schools Programme by the Centre for Science and Environment (CSE), which audits schools on their environmental performance and encourages them to adopt sustainable practices (Centre for Science and Environment, 2019).

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Despite these efforts, implementing green education presents significant challenges. Resource constraints, particularly in rural areas, limit the ability of schools to execute comprehensive environmental education programmes (Sharma, 2015). Despite its inclusion in the curriculum, environmental science frequently remains a theoretical subject with limited practical application (Pandey, 2016). Furthermore, the lack of adequate teacher training in environmental subjects hinders the effective dissemination of green education (Mukherjee, 2018).

Addressing these challenges requires a multifaceted approach. Strengthening policy support at both the national and state levels is crucial to mandating and funding green education initiatives (Mukherjee, 2018). Additionally, employing innovative teaching methods, such as experiential learning and interactive activities, can make environmental education more engaging and effective (Jain, 2020). Collaboration between government bodies, non-governmental organisations, and the private sector, along with community involvement, is also essential to provide the necessary resources and foster a culture of sustainability (Rao, 2019).

This study aims to explore the current state of green education in India, identify the challenges hindering its implementation, and propose strategies to enhance its effectiveness. It seeks to highlight the critical role of green education in fostering sustainable development and ensuring a healthy environment for future generations.

## 2. Review of Literature

The integration of green education into the educational system is becoming increasingly recognised as essential for fostering sustainable development. This review of the literature explores the current state of green education in India, its challenges, and its potential for promoting sustainability.

Green education, also known as environmental education, aims to in still an understanding of environmental issues and promote sustainable practices among students. As Filho et al. (2018) highlight, it encompasses various dimensions, including knowledge acquisition, attitude change, and behaviour modification towards environmental conservation.

Over the last ten years, green education has become increasingly integrated into India's formal educational system. Mukherjee (2019) reports that the Indian government and several non-governmental organisations have implemented initiatives to incorporate sustainability principles into school curricula. These initiatives are in accordance with the worldwide Sustainable Development Goals (SDGs), specifically SDG 4, which prioritises the provision of high-quality education and lifelong learning opportunities for everyone. Despite these efforts, the implementation of environmentally friendly education in India faces numerous obstacles.

According to Reddy (2020), the main obstacles are insufficient teacher training, a lack of resources, and inadequate infrastructure. In addition, Jha and Kumar (2017) observe that there is frequently a lack of alignment between policy development and implementation in schools, which impedes the successful spread of environmental education.

Effective curriculum design and pedagogical strategies are crucial for the success of green education. According to Sharma and Singh (2018), integrating environmental topics across various subjects rather than treating them as standalone modules can enhance students' comprehension and retention of sustainability concepts. Furthermore, studies have demonstrated the effectiveness of active learning methods like project-based learning and field trips (Das, 2021).

The concept of green schools, which implement sustainable practices in their operations and teaching methods, is gaining traction in India. Bhardwaj and Sharma (2020) describe how green schools not only teach environmental values but also practice them, thereby creating a model for students to emulate. These schools often use renewable energy, practice waste segregation, and encourage water conservation.

The impact of green education extends beyond the classroom. As noted by Roy and Gupta (2019), students who receive comprehensive environmental education are more likely to adopt sustainable practices and influence their communities. This ripple effect underscores the potential of green education to contribute significantly to sustainable development.

The literature indicates that while green education in India holds enormous promise for advancing sustainable development, it requires concerted efforts to overcome existing challenges. Enhanced teacher training, adequate resources, and practical implementation of policies are essential to realising the full potential of green education.

## 2.1. Statement of the Problem

India faces air and water pollution, deforestation, and biodiversity loss due to rising industrialization and urbanization (Ravi, 2017). A population above 1.3 billion strains natural resources. Green education is essential for future generations to learn sustainability and environmental care. Resource restrictions, especially in rural regions, hinder the implementation of the National Green Corps and Green Schools Programme (Government of India, 2018; Centre for Science and Environment, 2019). Inadequate teacher training hinders environmental education (Pandey, 2016; Mukherjee, 2018). To address these issues, we need policy support, creative educational approaches, and community involvement (Jain, 2020; Rao, 2019). This study assesses green education in India, highlights implementation issues, and suggests ways to improve its sustainability benefits.

## 2.2. Significance of the Study

This Indian green education study has the potential to promote sustainable development by addressing environmental issues through education. Indian industrialization and urbanisation pollute air, water, and biodiversity (Ravi, 2017). These issues impact health, the environment, and millions of jobs. Through green education, kids can learn about the environment and support sustainability. This study emphasises classroom environmental education. Ecological literacy aids sustainable environmental management (Orr, 1992). This study examines green education in India and pinpoints implementation challenges to assist policymakers and educators in enhancing environmental education. The study also addresses green education implementation issues. We must address curriculum integration, resource shortages, and teacher preparation (Sharma, 2015; Pandey, 2016). The report proposes solutions to create hands-on, comprehensive environmental education programmes. This research can influence state and federal policies. Implementing environmental education requires strong laws (Mukherjee, 2018). This study's evidence-based recommendations can assist in sustainable and effective green education programmes. The paper emphasises creative teaching and public-private green education cooperation. Environmental education should be dynamic and immersive, says Jain (2020). Government, non-governmental organisations, and businesses must collaborate to provide resources and promote sustainability, according to Rao (2019). This study is important because Indian green education promotes environmental awareness and sustainability. The study covers green education implementation concerns to improve environmental education and promote sustainable growth and a healthy environment for future generations.

### Objective of the Study

The goal of this research is to investigate and evaluate the current state of environmentally conscious education in India, pinpoint the obstacles and difficulties facing its successful execution, and suggest approaches to strengthen its function in advancing sustainable growth. Specifically, the study aims to:

- To investigate the necessity of implementing green education in India.
- To examine the ongoing initiatives and programmes in India.
- To examine the difficulties in implementing environmentally friendly education in India.
- To examine the future direction of environmental education in India.

By achieving these objectives, the study aims to provide comprehensive insights and actionable recommendations that can strengthen green education in India, thereby contributing significantly to the nation's sustainable development goals.

## 3. Research Methodology

An extensive literature study was undertaken to identify current research, theories, and frameworks pertaining to green education and sustainable development. This established a conceptual basis for the investigation and aided in identifying deficiencies in the existing understanding. The examination of secondary data revealed the notable advancements achieved in the promotion of environmental education in India. Government initiatives, NGO endeavours, and international collaborations facilitated the integration of sustainability into the education system. The positive impact of these activities on students' environmental awareness and behaviour is substantiated by academic research and statistical statistics. The extensive analysis of existing data emphasised the significance of environmental education as a means to achieve long-term and environmentally friendly progress in India.

## 4. Result and Discussion

This section presents the results of the study on green education in India and discusses the findings in relation to existing literature and theoretical frameworks.

### 4.1. Need for Green Education in India

Green education, encompassing environmental awareness and sustainable practices, is essential in today's world facing climate change, biodiversity loss, and environmental degradation. In India, with its vast population and diverse ecosystems, the implementation of green education is particularly critical. This study aims to explore the need for green education in India by examining its current state, challenges, benefits, and potential strategies for effective integration into the educational system.

*4.1.1. Policy and Curriculum Integration*

- The National Curriculum Framework (NCF) 2005 includes environmental education (EE) as a crucial component.
- Various state boards and the Central Board of Secondary Education (CBSE) incorporate environmental studies at different educational levels.
- Higher education institutions offer specialized courses in environmental science and sustainability.

*4.1.2. Government Initiatives*

- Programs like the National Green Corps (NGC) promote environmental awareness among school children.
- The Swachh Bharat Abhiyan (Clean India Mission) and other initiatives aim to instill a sense of responsibility towards cleanliness and hygiene.

*4.1.3. NGOs and Private Sector Efforts*

- Numerous non-governmental organizations (NGOs) and private institutions run environmental education programs and campaigns.
- Corporate Social Responsibility (CSR) initiatives often focus on environmental sustainability and education.

### 4.2. Challenges for Green Education in India

Challenges for green education in India include limited funding, a lack of trained educators, insufficient integration into curricula, cultural barriers, and inadequate infrastructure. Additionally, there is a need for greater awareness and engagement among students and communities, as well as support from policymakers to prioritise environmental education initiatives.

*4.2.1. Limited Reach and Awareness*

- Despite policies, the reach of environmental education is limited, especially in rural and remote areas.
- There is a lack of awareness among educators and students about the importance of sustainability.

*4.2.2. Resource Constraints*

- Insufficient funding and resources for comprehensive green education programs.
- Lack of trained teachers and educational materials focused on environmental topics.

*4.2.3. Curriculum Rigor and Relevance*

- Existing curricula may not adequately address current environmental challenges or practical applications.
- There is a need for more interdisciplinary and experiential learning approaches.

### 4.3. Benefits of Green Education

Green education fosters a sense of responsibility towards the environment, advocates for sustainable habits, and enhances students' understanding of ecological concepts. It equips students to address environmental concerns, fosters critical thinking, and promotes the growth of a sustainable economy. Moreover, it fosters principles of preservation and accountability, enhancing the collective welfare of societies and the environment.

*4.3.1. Environmental Stewardship*

- Instilling a sense of responsibility towards the environment from a young age.
- Encouraging sustainable practices and behaviours.

*4.3.2. Enhanced Critical Thinking and Problem-Solving Skills*

- Green education fosters analytical skills through the study of complex environmental issues.
- Students learn to develop innovative solutions for sustainability challenges.

*4.3.3. Economic and Social Development*

- Preparing a workforce skilled in green technologies and sustainable practices.
- Promoting eco-friendly industries and jobs, contributing to economic growth.
- Strategies for Effective Green Education

*4.3.4. Curriculum Enhancement*

- Integrate green education across subjects and grade levels.
- Update curricula to include the latest environmental challenges and sustainable practices.

*4.3.5. Teacher Training and Resources*

- Provide specialized training for teachers on environmental education.
- Develop and distribute high-quality educational materials and resources.

*4.3.6. Community and Stakeholder Engagement*

- Involve local communities, parents, and stakeholders in environmental education initiatives.
- Promote school-community partnerships for practical environmental projects.

*4.3.7. Policy Support and Funding:*

- Strengthen government policies supporting green education.
- Increase funding and incentives for schools and institutions to implement green education programs.

*4.3.8. Use of Technology and Innovation*

- Leverage digital platforms and tools for interactive and engaging environmental education.
- Encourage innovative teaching methods like project-based learning and field studies.

Green education is crucial for India's sustainable future, requiring concerted efforts from government, educational institutions, NGOs, and the private sector. By addressing the challenges and implementing effective strategies, India can foster a generation of environmentally conscious and proactive citizens, driving the nation towards a more sustainable and resilient future.

## 4.4. Current Initiatives and Programs in Green Education in India

Green education initiatives and programs in India aim to promote environmental awareness, sustainable practices, and eco-friendly behaviors among students and communities.

*4.4.1. National Green Corps (NGC)*

- **Description:** The National Green Corps (NGC) is an initiative by the Ministry of Environment, Forest and Climate Change (MoEFCC) aimed at promoting environmental awareness among school children across the country.
- **Objectives:** The objective is to raise awareness among children on environmental concerns and engage them in tasks such as planting trees, managing waste, and preserving biodiversity.
- **Activities:** Formation of eco-clubs in schools, organizing environment-related activities, and participation in community projects.

*4.4.2. Eco-Schools Program*

- **Description:** The Foundation for Environmental Education (FEE) operates an international programme that is being carried out in India by the Centre for Environment Education (CEE).
- **Objectives:** To encourage students to engage in sustainability practices through a structured, seven-step framework.
- **Activities:** Projects related to energy conservation, waste management, water conservation, and biodiversity.

*4.4.3. Swachh Bharat Abhiyan (Clean India Mission)*

- **Description:** A nationwide campaign launched by the Government of India to promote cleanliness and hygiene.
- **Objectives:** To achieve a clean and open defecation-free India.
- **Activities:** Construction of toilets, public awareness campaigns, and school-based sanitation programs.

*4.4.4. Incorporating Environmental Education into the School Curriculum*

- **Description:** Implementation of environmental education in the school curriculum as advised by the National Curriculum Framework (NCF) 2005.
- **Objectives:** To ensure that students are aware of environmental issues and sustainable practices from a young age.
- **Activities:** Environmental studies as a subject, project-based learning, and field trips.

*4.4.5. Green Skill Development Program (GSDP)*

- **Description:** An initiative by the MoEFCC to develop green skills in youth and equip them with job opportunities in the environment and forest sectors.
- **Objectives:** To bridge the skill gap and promote sustainable livelihoods.
- **Activities:** Training programs in areas such as waste management, biodiversity conservation, and green technology.

*4.4.6. Project Tiger and Project Elephant*

- **Description:** Conservation programs aimed at protecting endangered species and their habitats.
- **Objectives:** To increase the population of tigers and elephants and reduce human-wildlife conflict.
- **Activities:** Habitat restoration, anti-poaching measures, and community awareness programs.

*4.4.7. Atal Tinkering Labs (ATL)*

- **Description:** Part of the Atal Innovation Mission, ATL aims to foster creativity and innovation in students.
- **Objectives:** To encourage young minds to innovate and address real-world environmental problems.
- **Activities:** Hands-on learning with tools and equipment to create prototypes and solutions for environmental challenges.

*4.4.8. Energy Conservation and Efficiency Programs*

- **Description:** Initiatives by the Bureau of Energy Efficiency (BEE) to promote energy conservation in schools and colleges.
- **Objectives:** To instill a sense of energy efficiency and conservation among students.
- **Activities:** Energy audits, awareness campaigns, and participation in competitions like the National Energy Conservation Awards.

*4.4.9. UNESCO Associated Schools Network (ASPnet)*

- **Description:** A global network of schools committed to promoting UNESCO's ideals.
- **Objectives:** To integrate global citizenship education and sustainable development into school curricula.
- **Activities:** Collaborative projects on environmental sustainability, cultural heritage, and peace education.

*4.4.10. Green Audits in Educational Institutions*

- **Description:** Initiatives to conduct green audits in schools and colleges to assess their environmental impact.
- **Objectives:** To promote sustainable practices within educational institutions.
- **Activities:** Audits covering areas like energy use, water management, waste management, and biodiversity.

India's educational sector has several efforts and programmes in place to promote environmental awareness and sustainability among students, contributing to the country's green education landscape. These programmes are crucial in providing the younger generation with the necessary information and skills to tackle environmental concerns and advance sustainable development. It is imperative to sustain, advance, and expand these efforts in order to build a more environmentally friendly future for India.

## 4.5. Challenges in the Implementation of Green Education in India

Implementing green education in India faces several significant challenges, despite various initiatives and programs aimed at promoting environmental awareness and sustainability. These challenges can be broadly categorized into systemic, logistical, educational, and socio-cultural barriers.

### 4.5.1. Systemic Challenges

Policy and Governance Issues:

- **Fragmented Policies:** There is often a lack of coherence and integration among various policies related to environmental education at the central and state levels.
- **Inconsistent Implementation**: While policies exist, their implementation is inconsistent across different regions and schools due to varying administrative capabilities and priorities.

Insufficient Funding

- **Resource Allocation:** Green education programs frequently suffer from inadequate funding, impacting the quality and reach of these initiatives.
- **Dependency on External Funding:** Many programs rely on external funding from NGOs and international organizations, leading to sustainability issues once the funding ends.

### 4.5.2. Logistical Challenges

Infrastructure Deficiencies

- **Lack of Facilities:** A significant number of schools, particularly those located in rural regions, suffer from a lack of fundamental infrastructure, including access to clean drinking water, proper sanitation facilities, and electricity. This deficiency poses a major obstacle to the successful execution of environmentally-focused educational initiatives.
- **Inadequate Learning Resources**: Schools often do not have access to necessary materials and resources like books, digital tools, and lab equipment for effective environmental education.

Teacher Training and Capacity Building:

- **Insufficient Training**: Teachers may have insufficient preparation and limited chances for professional growth to proficiently instruct environmental education.
- **Low Motivation**: Without proper incentives and support, teachers may not be motivated to integrate green education into their teaching practices.

### 4.5.3. Educational Challenges

Curriculum Limitations:

- **Outdated Content**: The environmental education content in the curriculum may be outdated and not reflect current environmental challenges and practices.
- **Lack of Practical Exposure**: The curriculum often focuses on theoretical knowledge rather than practical, hands-on learning experiences that are crucial for understanding environmental issues.

Assessment and Evaluation:

- **Traditional Assessment Methods:** Standardized tests and traditional assessment methods do not effectively measure students' understanding and engagement with environmental education.
- Lack of Continuous Evaluation: There is a need for ongoing assessment methods to track students' progress and understanding of environmental concepts.

*4.5.4. Socio-Cultural Challenges*

Awareness and Attitude:

- **Low Awareness Levels:** There is generally low awareness and understanding of the importance of environmental education among students, parents, and even educators.
- **Cultural Attitudes**: Cultural attitudes and practices may sometimes conflict with environmental sustainability principles, making it challenging to promote green education.

Language and Communication Barriers:

- **Multilingual Diversity**: India's linguistic diversity can pose challenges in developing and disseminating educational materials in multiple languages.
- **Communication Gaps**: Effective communication strategies are needed to convey the importance of green education to diverse communities.

*4.5.5. Technological Challenges*

Digital Divide

- **Access to Technology**: Many schools, particularly in rural areas, lack access to digital technology, which is crucial for modern green education practices.
- **Skill Gaps**: Both students and teachers may have insufficient digital literacy skills to proficiently utilise technology in environmental education.

Integration of Technology

- **Limited Use of ICT:** Information and Communication Technology (ICT) tools are not widely integrated into teaching practices for environmental education.
- **Content Development**: There is a shortage of localized digital content and resources that are culturally relevant and engaging for students.

Addressing the challenges of implementing green education in India requires a multifaceted approach involving policy reform, increased funding, improved infrastructure, teacher training, curriculum development, and community engagement. Overcoming these barriers is essential for fostering an environmentally conscious and proactive generation capable of tackling the pressing environmental issues of today and the future.

## 4.6. Way Forward for Green Education in India

To effectively address the challenges and enhance the implementation of green education in India, a strategic and comprehensive approach is needed. The following recommendations outline the way forward for integrating green education more thoroughly and effectively into India's educational framework.

*4.6.1. Policy and Governance Enhancements*

Strengthen Policy Frameworks

- **Unified National Policy**: Develop a cohesive national policy for environmental education that integrates with existing educational policies and frameworks.
- **Regular Updates**: Ensure that policies are regularly updated to reflect current environmental challenges and global best practices.

Effective Implementation and Monitoring

- **Clear Guidelines**: Provide clear guidelines and standards for the implementation of green education across all educational levels.
- **Monitoring and Evaluation**: Implement rigorous monitoring and evaluation systems to measure the efficacy of green education programmes and guarantee responsibility.

*4.6.2. Increased Funding and Resource Allocation*

Enhanced Funding

- **Government Funding**: Increase budget allocations for green education programs at the central and state levels.
- **Public-Private Partnerships**: Encourage partnerships with private sector organizations, NGOs, and international agencies to support funding and resource development.

Resource Development:

- **Educational Materials**: Develop high-quality, locally relevant educational materials and resources for environmental education.
- **Infrastructure Improvement**: Invest in improving school infrastructure, including access to clean water, sanitation facilities, and renewable energy sources.

*4.6.3. Curriculum and Pedagogical Reforms*

Curriculum Integration:

- **Holistic Curriculum**: Integrate environmental education across all subjects and grade levels, making it a core component of the curriculum.
- **Interdisciplinary Approach**: Promote an interdisciplinary approach that connects environmental education with science, social studies, economics, and other subjects.

Innovative Teaching Methods:

- **Experiential Learning:** Emphasize hands-on, experiential learning opportunities such as field trips, nature walks, and eco-projects.
- **Use of Technology:** Incorporate digital tools and e-learning platforms to enhance engagement and accessibility of environmental education.

*4.6.4. Teacher Training and Capacity Building*

Professional Development:

- **Training Programs**: Create and execute extensive training programmes for educators to provide them with the necessary expertise and competencies to deliver environmental education with utmost effectiveness.
- **Ongoing Support**: Provide continuous professional development opportunities and support for teachers, including workshops, seminars, and online courses.

Incentives and Recognition:

- **Incentive Programs**: Establish incentives for teachers who excel in integrating and promoting green education, such as awards, grants, and career advancement opportunities.
- **Recognition Initiatives**: Recognize and celebrate schools and educators who demonstrate outstanding contributions to environmental education.

*4.6.5. Community and Stakeholder Engagement*

Community Involvement:

- **School-Community Partnerships**: Foster partnerships between schools and local communities to collaborate on environmental projects and initiatives.
- **Parental Engagement:** Engage parents and caregivers in environmental education activities to reinforce learning at home.

Stakeholder Collaboration:

- **Multi-Stakeholder Approach**: Involve a diverse range of stakeholders, including government agencies, NGOs, businesses, and academia, in planning and implementing green education programs.

- **Public Awareness Campaigns**: Conduct public awareness campaigns to highlight the importance of green education and encourage community participation.

### 4.6.6. Leveraging Technology and Innovation

Digital Resources and Platforms:

- E-**Learning Platforms**: Develop and promote e-learning platforms and digital resources tailored to environmental education.
- **Interactive Content**: Create interactive and engaging content such as videos, games, and simulations to enhance student learning.

Tech-Enabled Learning:

- **Smart Classrooms**: Implement smart classroom technologies to facilitate interactive and technology-driven learning experiences.
- **Mobile Learning**: Leverage mobile technology to provide access to environmental education resources, especially in remote and underserved areas.

### 4.6.7. Research and Development

Research Initiatives:

- **Educational Research**: Conduct research on effective environmental education practices and their impact on student learning and behavior.
- **Innovation Labs**: Establish innovation labs to experiment with and develop new approaches and technologies for green education.

Data-Driven Decision Making:

- **Data Collection:** Collect and analyze data on the implementation and outcomes of environmental education programs.
- **Policy Insights:** Use data insights to inform policy decisions and program improvements.

An effective strategy for advancing green education in India necessitates a comprehensive approach that encompasses policy formulation, financial support, curriculum development, teacher capacity building, community involvement, technological integration, and research initiatives. Implementing these measures will allow India to successfully include green education in its educational system. This would cultivate a generation of environmentally aware and proactive citizens who are capable of addressing future environmental concerns. Effective cooperation among governmental entities, educational establishments, communities, and the business sector will be imperative in attaining these objectives and guaranteeing a sustainable and resilient future for India.

## 5. Conclusion

The study on green education in India underscores its pivotal role in steering the country towards sustainable development. Green education, which encompasses environmental awareness, sustainable practices, and eco-friendly technologies, is crucial for fostering a generation of environmentally conscious citizens. India's unique environmental challenges, coupled with its rapid economic growth, necessitate an education system that integrates sustainability at every level.

The findings reveal that while there have been significant strides in integrating green education into the curriculum, there are still substantial gaps in implementation, resources, and training. Rural and underprivileged areas, in particular, face challenges in accessing quality green education due to infrastructural and economic limitations. However, the government's policies and efforts, such as the National Green Corps and eco-clubs, have established a strong basis for promoting environmental education. Moreover, the study highlights the importance of multi-stakeholder engagement, involving government bodies, educational institutions, NGOs, and the private sector, to create a comprehensive and effective green education framework. This collaboration is essential for developing innovative teaching methodologies, practical training programmes, and community-based projects that enhance learning outcomes and real-world application.

The research also points out the critical role of teachers as facilitators of green education. Investing in teacher training and development is paramount to ensuring they possess the necessary knowledge, skills, and motivation to impart environmental education effectively. While India faces numerous challenges in fully realising the potential of green education, the path forward is clear. By addressing the disparities in access, investing in teacher training, and fostering collaborative efforts, India can harness green education as a powerful tool for sustainable development. This approach will not only mitigate environmental issues but also empower individuals and communities to contribute meaningfully to the nation's sustainable future.

## Compliance with ethical standards

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