

## Green Entrepreneurship in India: A Study of the National Green India Mission Scheme (GIM)

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**ABSTRACT:** Green entrepreneurship encompasses the process of creating and bringing to market environmentally beneficial products, services, and technologies. India is confronted with a plethora of environmental challenges, encompassing escalating air pollution, scarcity of water, and the impacts of climate change. In light of these challenges, the concept of green entrepreneurship has emerged as a viable and promising approach to tackling these issues while simultaneously fostering economic development. The twin-fold objectives of the study are to review the policy ecosystem for green entrepreneurship in India with special reference to the Green India Mission Scheme (GIS) and to identify the main challenges in the implementation of the scheme, and to suggest supportive policy changes. The GIM program has made significant progress in promoting green entrepreneurship. However, it is evident that there are several challenges on the operational side that, if overcome, would lead to sustainable solutions for economic development.

**KEYWORDS:** Green Entrepreneurship, National Green India Mission Scheme (GIM)

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### INTRODUCTION

India is confronted with a plethora of environmental challenges, encompassing escalating air pollution, scarcity of water, and the impacts of climate change. In light of these challenges, the concept of green entrepreneurship has emerged as a viable and promising approach to tackling these issues while simultaneously fostering economic development. Green entrepreneurship encompasses the process of creating and bringing to market environmentally beneficial products, services, and technologies. The significance of green entrepreneurship in India cannot be exaggerated; however, it encounters various challenges such as restricted financial accessibility, insufficient infrastructure, and regulatory impediments. Hence, it is imperative to comprehend the policy ecosystem that impacts green entrepreneurship in order to cultivate a conducive milieu for sustainable business models.

This article aims to analyse the policy framework pertaining to green entrepreneurship in India and ascertain the primary opportunities and challenges encountered by green entrepreneurs. Moreover, our objective is to offer policy recommendations that will augment the assistance for green entrepreneurship in India. Through the process of mapping the policy ecosystem, an attempt is made to discern the principal stakeholders implicated in this domain. These stakeholders encompass the government, private sector, non-governmental organizations, and the green entrepreneurs themselves. The primary objective of our study is to investigate the various policies, incentives, and regulations that either facilitate or impede the growth of environmentally conscious entrepreneurship. The National Mission for Green India has been examined in detail. Our research endeavours will make a valuable contribution to the current body of literature surrounding green entrepreneurship and policy analysis. This research aims to generate practical insights that will facilitate additional discourse and initiatives regarding the significance of green entrepreneurship in fostering sustainable development within the context of India.

### LITERATURE REVIEW

Halder (2019) offers significant contributions to the understanding of green entrepreneurship within the context of developing countries. The study specifically examines the renewable energy sector in Gujarat, India. The user's text does not provide any information to be rewritten. The research employs a case study methodology, wherein primary data is gathered through structured interviews conducted with three green entrepreneurs who are actively involved in the renewable energy industry in Gujarat. The user's text does not provide any information to rewrite in an academic manner. The article effectively presents a conceptual framework for green entrepreneurship, which encompasses individuals who establish new for-profit businesses that are notably

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environmentally friendly. This is achieved through either the development of green products or the implementation of environmentally conscious practices and policies within the organisation. This study examines the motivations and barriers faced by green entrepreneurs operating in the renewable energy sector, with the aim of providing valuable insights that can contribute to the development of a conducive environment for green entrepreneurship in India. The research emphasises the significance of public sector assistance and governmental policies in fostering green entrepreneurship and attaining sustainable development within the energy sector. The study's limitations, including the small sample size and sector-specific focus, are recognised in the article. This recognition implies the necessity for additional research utilising quantitative methodologies to extrapolate the findings and apply them to different sectors. In general, this study makes a scholarly contribution to the existing body of knowledge on green entrepreneurship. It achieves this by conducting a sector-specific examination of green entrepreneurs operating within the renewable energy sector of Gujarat, India. Additionally, the article puts forth policy recommendations aimed at cultivating a conducive environment for green entrepreneurship in developing nations such as India.

An article by A.Raj, Naveen, Chander. (2018) presents a comprehensive examination of the obstacles encountered by green entrepreneurs in India, emphasising the inherent risks involved in establishing environmentally-conscious enterprises and the imperative to address societal and environmental concerns. This statement underscores the significance of raising customer awareness regarding environmentally friendly products and services, while also highlighting the imperative for green entrepreneurs to ensure the longevity of their businesses in the marketplace through diligent endeavours. The article recognises the capacity of green entrepreneurship to make a significant contribution towards environmental conservation and to attract a customer base that is inclined towards supporting businesses that prioritise environmental sustainability. Nevertheless, the lack of specific case studies and quantitative data in the study may restrict the extent of analysis and the ability to apply the findings to a broader context. In general, the article functions as an initial reference for comprehending the obstacles and prospects associated with green entrepreneurship in India. However, additional investigation is required to delve into precise strategies and resolutions for surmounting these obstacles.

Prema. (2019) presents a thorough analysis of green business owners operating in the Kanyakumari District and their contribution to offering reasonably priced and environmentally friendly products. The methodology employed in this study is not explicitly delineated; however, it can be inferred that it encompasses a comprehensive literature review and a meticulous analysis of extant data pertaining to green entrepreneurship within the district. The primary objective of the data analysis is to examine the various obstacles encountered by green entrepreneurs, including resource scarcity and economic limitations, as well as explore potential strategies to effectively address these challenges. The results emphasise the growing significance of green enterprise within the business sector, as consumers are becoming increasingly conscious of environmental matters and anticipate companies to actively acknowledge and respond to their apprehensions. The study proposes that businesses can enhance their credibility with customers and showcase their dedication to sustainability by implementing environmentally friendly practises in manufacturing, packaging, and operations. In general, the article presents a comprehensive examination of green entrepreneurship in Kanyakumari District, emphasising the importance of providing cost-effective environmentally friendly products and the necessity for inventive financial and problem-solving approaches to address obstacles.

Haldar (2019) examines the concept of green entrepreneurship within the Indian context, a topic that has become increasingly important in light of growing global apprehension regarding climate change and sustainable development. The objective of this study is to provide a comprehensive understanding of the emergence of green entrepreneurship and its significance within the context of India. This study presents a theoretical framework that elucidates the interplay among environmental, economic, and social stakeholders in the advancement of green entrepreneurship, ultimately contributing to the achievement of sustainable development. This article additionally examines the prospects and obstacles associated with the advancement of green entrepreneurship, while emphasising noteworthy instances of success in India. This study is characterised by its exploratory nature, as it seeks to derive insights from existing literature. The notion of green entrepreneurship is progressively gaining traction in the Indian markets, propelled by the expanding population of environmentally conscious consumers. The preference for green products over conventional ones among consumers in India is indicative of their commitment to environmental and social responsibility. This study proposes that various stakeholders, including businesses, individuals, and the Government of India, should undertake proactive measures to foster and advance the growth of environmentally sustainable entrepreneurship.

This study by Mathur & Tandon (2016) centres on the phenomenon of green entrepreneurship in India and its prospects for fostering sustainable growth and development, particularly among the millennial population. The research aims to gain a comprehensive understanding of the various opportunities and challenges encountered by green entrepreneurs in India. Additionally, it seeks to propose effective solutions that can be implemented to mitigate ecological degradation through the practice of green entrepreneurship. The study employs a combination of primary and secondary data, wherein primary data is obtained through random sampling from a cohort of millennial student participants. The techniques employed for data analysis include factor loading, analysis of variance (ANOVA), and correlation coefficient. The Indian millennial population exhibits a notable degree of environmental consciousness; however, there exists a limited association between gender, age, and environmental knowledge, beliefs, and attitudes. Green entrepreneurship is driven by various factors, including the emergence of new opportunities, the implementation of innovative

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interventions, and the accessibility of technological alternatives. Barriers encompass a restricted understanding of green technology, substantial capital requirements, and a deficiency in comprehending the potential advantages. The study offers valuable insights into the attitudes, beliefs, and values of consumers, thereby aiding marketers and entrepreneurs in the development of their strategies. This statement underscores the significance of enhancing consumer awareness regarding environmentally-friendly and sustainable products as a means to foster green entrepreneurship.

Potluri and Phani. (2020) conducted research on the relationship between women and green entrepreneurship in India, with a focus on the ability of educated middle-class women to make significant contributions to ecopreneurship. The primary aim of this study is to conduct a comprehensive analysis of existing literature in three distinct domains pertaining to the relationship between women and green entrepreneurship. The purpose is to facilitate a comparative assessment and derive meaningful conclusions from the findings. The methodology employed in this study entails the examination and interpretation of a range of published and unpublished documents sourced from diverse domains. These documents are scrutinised in order to construct persuasive arguments. The research methodology employed in this study encompasses content analysis, constant comparative analysis, and ethnographic analysis. Specifically, the focus is on examining Indian women who have obtained formal education and currently fulfil the role of homemakers. The analysis encompasses an examination of domain analysis and theme analysis concerning the identified domains relevant to educated middle-class women in India. The results indicate that there is a correlation between middle-class educated women in India and their pro-entrepreneurial behaviour, as well as the presence of a socio-cultural environment that encourages their participation in ecopreneurship. Additionally, their education appears to contribute to their strong inclination towards engaging in ecopreneurial activities. The study proposes that governmental initiatives aimed at facilitating the establishment of environmentally conscious businesses may serve as a catalyst for the engagement of educated women from the middle-class in ecopreneurship.

Nayak, and Sahoo (2021) examined the concept of green entrepreneurship and its importance in promoting sustainable development in the Indian context. The primary aims of this study are to establish a clear definition of green entrepreneurship, examine the factors that facilitate green entrepreneurship within the context of India, and provide recommendations for fostering the growth of green entrepreneurship within the nation. This study adopts an exploratory approach and draws upon existing literature, such as research articles, web pages of green enterprises, and interviews conducted with green innovators. This study presents a theoretical framework that elucidates the relationship between social, environmental, and institutional variables and the emergence of green entrepreneurship, ultimately contributing to the achievement of sustainable development. This study emphasises the rise of green entrepreneurship as a means of gaining a competitive edge, which is fueled by the increasing recognition and demand from consumers for environmentally sustainable products. The study posits the necessity of cultivating a cultural environment that fosters heightened consciousness among entrepreneurs with respect to the potential benefits associated with embracing environmentally sustainable business models, while also providing incentives to encourage investments in green initiatives. Additionally, it underscores the significance of mitigating obstacles in the initiation and maintenance of environmentally-friendly enterprises.

### OBJECTIVES

The specific objectives of the study are;

1. To Study the policy ecosystem for green entrepreneurship in India with special reference to the Green India Mission Scheme (GIS),
2. To identify the main challenges in the implementation of the scheme and suggest supportive policy changes.

### METHODOLOGY

The study was conducted using secondary data sources. The collection of secondary data was derived from a systematic literature review. The research methodology employed in this study was grounded theory, utilising qualitative methods to facilitate a thorough examination of the policy ecosystem pertaining to green entrepreneurship in India. A comprehensive literature review was undertaken to systematically identify and analyse extant research articles, reports, and policy documents pertaining to the domain of green entrepreneurship in the context of India. This study serves as a fundamental basis for understanding the subject matter and aids in the identification of areas that require further investigation and exploration. It undertakes a comprehensive examination of governmental policies, initiatives, and regulations pertaining to the field of green entrepreneurship. This task entails the examination of pertinent policy documents, reports, and official websites of governmental entities at both the national and state levels. The analysis primarily concentrated on the identification of specific policies and incentives that either facilitate or impede the development of green entrepreneurship across different sectors. The findings have led to the formulation of specific policy recommendations aimed at enhancing the support and growth of green entrepreneurship in India. The proposed qualitative methodology aims to provide a comprehensive understanding of the policy landscape and its impact on green entrepreneurship. This facilitates the examination of diverse viewpoints and establishes a robust basis for deriving significant insights and making informed recommendations.

### **GREEN ENTREPRENEURSHIP: A POLICY CONTEXT OF INDIA**

Amidst the increasing environmental challenges and the global demand for sustainable development, the notion of green entrepreneurship has emerged as a significant catalyst for promoting constructive transformation. India has undertaken a transformative endeavour towards a more sustainable future, characterised by its dedication to promoting innovation, economic growth, and environmental stewardship. The convergence of a drive for entrepreneurship and a concern for the environment has resulted in the development and execution of a range of policies designed to foster and bolster environmentally conscious entrepreneurship at the national level. This discussion explores the policy landscape pertaining to green entrepreneurship in India, shedding light on the strategic measures and regulatory structures that have been developed to stimulate the expansion of environmentally conscious enterprises. As India endeavours to align its economic development with environmental sustainability, an examination of its policies pertaining to green entrepreneurship reveals a captivating account of ingenuity, accountability, and the aspiration for a more environmentally friendly future.

The National Action Plan on Climate Change (NAPCC), which was initiated in 2008, delineates the strategic approaches and measures aimed at tackling the various challenges posed by climate change within the context of India. The programme encompasses a variety of missions that target distinct sectors, including solar energy, energy efficiency, sustainable agriculture, and sustainable habitat. These missions serve as a structural framework for environmentally conscious entrepreneurs to conceive and execute inventive solutions that are in line with the nation's climate objectives. The initiatives of "Make in India" and "Start-up India" aim to foster the expansion of domestic manufacturing and the development of the startup ecosystem. Although their primary focus is not solely on green entrepreneurship, they do provide assistance and incentives to businesses involved in environmentally sustainable technologies and practises.

**Renewable Energy Development:** The Indian government has established ambitious objectives to augment the proportion of renewable energy within the nation's energy composition. Policies such as the National Solar Mission and various state-level policies offer economic incentives to encourage businesses to allocate investments towards solar, wind, and other forms of renewable energy initiatives. The Atal Innovation Mission is an initiative that seeks to foster a climate of innovation and entrepreneurship within the nation of India. The organisation offers assistance to emerging businesses and inventive enterprises, encompassing those focused on environmentally sustainable technologies and solutions. The implementation of regulations by the government aims to effectively manage electronic waste, commonly known as e-waste. The aforementioned circumstance presents favourable prospects for entrepreneurs operating within the e-waste recycling and management industry. The implementation of policies aimed at mitigating plastic pollution provides opportunities for businesses to innovate sustainable alternatives to plastic products and participate in effective waste management practises. The Smart Cities Mission is primarily centred around urban development, with a particular emphasis on sustainability and the integration of technology to improve the quality of urban life. This presents potential avenues for environmentally conscious entrepreneurs to provide intelligent and sustainable solutions for urban dilemmas.

The government has implemented various fiscal measures, such as tax incentives, subsidies, and grants, to support businesses operating in the domains of clean energy, waste management, and other sectors that prioritise environmental sustainability. India has made international commitments by signing agreements such as the Paris Agreement, which entails a commitment to mitigate greenhouse gas emissions. This phenomenon provides additional motivation for the advancement of environmentally-friendly technologies and enterprises. The Green Skill Development Programme, initiated by the Ministry of Environment, Forest, and Climate Change, seeks to provide training and expertise to young individuals in diverse fields related to the environment. These sectors encompass renewable energy, waste management, and sustainable agriculture, with the ultimate goal of cultivating a skilled workforce to support and drive green enterprises.

### **NATIONAL MISSION FOR A GREEN INDIA (GIM)**

The "National Mission for a Green India" (GIM) is a component of India's National Action Plan on Climate Change (NAPCC), which encompasses a total of eight missions. The primary objective of this mission is to effectively tackle the pressing issues of climate change, biodiversity decline, and land degradation through the promotion and implementation of sustainable practises in land and forest management. The central aim of the National Mission for a Green India is to augment ecosystem services such as carbon sequestration, hydrological services, and biodiversity conservation, while concurrently enhancing the well-being of indigenous communities. The GIM initiative was introduced in 2014 in order to address the increasing apprehensions regarding deforestation, habitat depletion, and the deterioration of natural resources. The mission acknowledges the significance of forests and other ecosystems in the mitigation of climate change, preservation of biodiversity, and provision of livelihoods for numerous individuals, particularly those residing in and adjacent to forested regions.

The principal aims of the National Mission for a Green India encompass: The primary objective of this mission is to augment the provision of ecosystem services by implementing sustainable land and forest management practices, thereby promoting carbon sequestration, enhancing hydrological services, and improving the overall health of ecosystems. The GIM initiative aims to mitigate the decline in biodiversity and facilitate the preservation of both plant and animal species, thereby safeguarding India's diverse range of biological resources. The primary objective of this mission is to enhance the economic conditions of the local



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communities by fostering sustainable livelihood opportunities based on forest resources. These opportunities include the utilisation of non-timber forest products, the development of ecotourism initiatives, and the implementation of agroforestry practices. Climate change mitigation is facilitated by the mission through the augmentation of forest cover and the promotion of sustainable land use practises. This contributes to India's endeavours to mitigate climate change by bolstering carbon sinks and diminishing greenhouse gas emissions.

The objective of this initiative is to enhance forest and tree coverage through the implementation of afforestation and reforestation endeavours in diverse ecological regions. Biodiversity conservation initiatives are implemented with the aim of preserving and rehabilitating regions that possess high levels of biodiversity, encompassing crucial habitats and corridors for wildlife. The mission of this initiative is to advocate for sustainable land management by encouraging the adoption of land use practises that are environmentally friendly, promoting effective watershed management, and implementing soil conservation measures. These efforts aim to enhance land productivity and address the issue of land degradation. The mission aims to enhance ecosystem services, such as water provisioning, carbon sequestration, and soil fertility, by restoring degraded ecosystems. The active engagement of local communities in the decision-making processes and the sustainable management of forests is a fundamental principle of the organization's mission. There is also a strong emphasis on the promotion of alternative livelihood opportunities.

Capacity-building initiatives are implemented with the aim of providing stakeholders with the requisite knowledge and skills essential for the proficient management of forests and land. The implementation of the NAMAMI GIM is facilitated through a collaborative approach that encompasses multiple government agencies, state forest departments, local communities, and various other stakeholders. The mission's funding is derived from a combination of domestic sources and international climate finance mechanisms.

Despite the significant potential of the National Mission for a Green India in addressing environmental and socio-economic challenges, there are still several obstacles that remain.

1. Insufficient Awareness: There exists a need for enhanced awareness regarding the objectives and potential benefits of the mission among local communities and stakeholders.
2. Coordination: The successful implementation of the mission necessitates effective coordination among diverse agencies and stakeholders.
3. Financial Resources: Sufficient financial resources are imperative for the expansion of operations and the attainment of the mission's ambitious objectives.
4. The Importance of Land Tenure and Rights: The establishment of clear land tenure and rights is crucial in enabling local communities to actively engage in and sustainably manage natural resources.

The National Mission for a Green India serves as a demonstration of India's dedication to the principles of sustainable development, environmental preservation, and the mitigation of climate change. The mission seeks to establish a symbiotic equilibrium between ecological integrity and human welfare through the promotion of sustainable land and forest management practices and active involvement of local communities. As the mission undergoes further development and growth, it is positioned to assume a crucial role in India's pursuit of a more environmentally sustainable and resilient future.

**Table-1 The physical and financial progress of the scheme, National Mission for a Green India, from 2015 to 2023**

India	Physical Progress	Financial progress
	Afforestation being taken up (in ha.)	Funds Released (Rs. in crore)
2015-2023	222062	690.39

**Source: Annual report 2022-2023 from the website, Ministry of Environment, forest and Climate Change.**

The table 1 shows the physical and financial progress of the scheme from 2015 to 2023. 222062 hectares of afforestation are currently being carried out throughout India as part of the GISM program. The funds released for the scheme were Rs. 690.39 crore.

### CONCLUSION

The article examines green entrepreneurship in India, focusing on the prevailing ecosystem for the same. It examines the National Mission for Green India (GIM) and its policies, incentives, and regulations. Green entrepreneurship holds the potential to be a growth agent in our economy. There are several organisations and policies to encourage green entrepreneurship. It is evident that India has proactive initiatives of businesses, individuals, and the government to foster sustainable entrepreneurship. The GIM programme has made significant progress in promoting green entrepreneurship; but challenges remain, such as insufficient awareness and coordination. To address these challenges, the study recommends the implementation of comprehensive educational campaigns to raise awareness about green entrepreneurship and its benefits. Additionally, it suggests the establishment of

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collaborative platforms that bring together businesses, individuals, and government agencies to streamline efforts and ensure effective coordination in promoting sustainable entrepreneurship.

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