

International Conference on Green Capitalism Reimagined: Evolving Ecosystems of Commerce and Sustainability (ICGCREECS)

Editors

Dr. D.Lalitha
Dr. T.Anitha
Dr. K.Shyamala
Dr. Vimala Vasudevan



2026

International Conference on Green Capitalism Reimagined: Evolving Ecosystems of Commerce and Sustainability (ICGCREECS)

Editors

Dr. D.Lalitha

Associate Professor

Department of Commerce

*Shrimathi Deukunvar Nanalal Bhatt Vaishnav College for Women
Chromepet, Chennai*

Dr. T.Anitha

Associate Professor

Department of Commerce

*Shrimathi Deukunvar Nanalal Bhatt Vaishnav College for Women
Chromepet, Chennai*

Dr. K.Shyamala

Associate Professor

Department of Commerce

*Shrimathi Deukunvar Nanalal Bhatt Vaishnav College for Women
Chromepet, Chennai*

Dr. Vimala Vasudevan

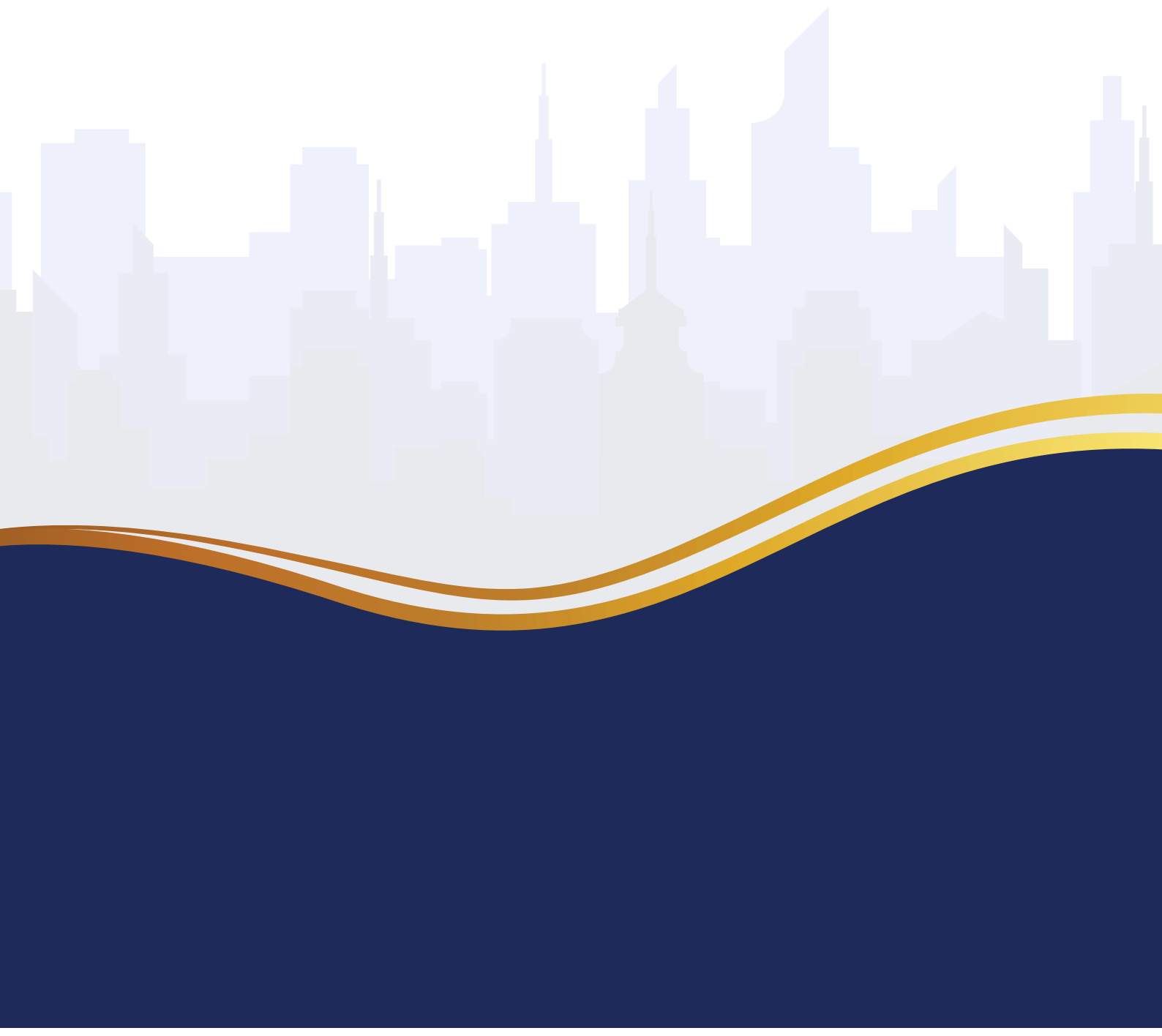
Assistant Professor

Department of Corporate Secretaryship

*Shrimathi Deukunvar Nanalal Bhatt Vaishnav College for Women
Chromepet, Chennai*

Publisher	Dr. BGR Publications Tuticorin Tamil Nadu India 📞 9003494749 ✉ drbgrpublications@gmail.com 📖 https://drbgrpublications.in/books/ 📱 https://www.instagram.com/drbgrpublications/
Type	Special Issue (Guest Edited Issue)
Conference	International Conference on Green Capitalism Reimagined: Evolving Ecosystems of Commerce and Sustainability (ICGCREECS)
Venue	Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet, Chennai
Journal	International Journal of Business and Economics Research (IJBER)
Journal Codes	e-ISSN: 2455-3921 Linking ISSN (ISSN-L): 2455-3921
Year of Publication	2026
Product Form	Digital download and online
Edited and typeset by	Dr. BGR Publications
Cover Design	Dr. B.Govindarajan
Cataloguing Data	Available from the Publisher 📱 https://drbgrpublications.in/special-issue-archives/
Copyright Holder	© 2026 by respective authors
Page Size	A4
Language	English
Disclaimer	The author is fully responsible for the content of this special Issue. The publisher disclaims all liability for errors, omissions, inaccuracies, plagiarism, or interpretations. Unintentional errors may be reported to the author or publisher for correction in future editions.
Copyright Notice	All rights reserved. Reproduction or transmission in any form requires prior written permission.
Jurisdiction Clause	Any disputes arising from this publication shall be the sole responsibility of the author(s). The publisher shall not be held liable for any legal claims, disputes, or consequences related to the content of this special Issue. <i>An imprint of Dr. BGR Publications</i>

ED



List of Contributors

S. No.	Paper ID	Title	Page No.
ED			
67)	<i>ED – 01</i>	Social Entrepreneurship and Inclusive Innovation: Cultivating the Sustainable Entrepreneurship Practices in India <i>Dr. S. Sundararajan, Dr. S. Rajamohan</i>	608
68)	<i>ED – 02</i>	Sustainable Startups and their Eco-Innovation in Pollachi <i>Dr. P. Archanaa</i>	616
69)	<i>ED – 03</i>	Harvesting Sustainability: The Role of Agricultural Entrepreneurs in Rural Development <i>Jerry Dhiraj Kumar</i>	622
70)	<i>ED – 04</i>	Industrial Policy for MSME Development: Challenges and Strategic Inventions in Tamil Nadu <i>S. Shanthi, K. Manikandarajan</i>	627
71)	<i>ED – 05</i>	A study on Women Entrepreneurship and Challenges faced towards sustainable development goals among female young entrepreneurs in Chennai City <i>Mary Francis Maliakal</i>	634
72)	<i>ED – 06</i>	Digital Capability Gaps with Market Access Challenges Constraining the Growth and Sustainability of Women Entrepreneurs in India <i>Dr. Poorani. D</i>	640
73)	<i>ED – 07</i>	Disability-Inclusive Social Entrepreneurship for Sustainable Livelihoods: A Social Work Perspective <i>Monika Magesh, Aswani Bhuvanendran Nair</i>	649
74)	<i>ED – 08</i>	Women Entrepreneurs and SDG (Sustainable Development Goals) Impact <i>Samyuktha M R, Nandhini R, Nishanthini R</i>	657

75)	<i>ED – 09</i>	Challenges Faced by Women Entrepreneurs towards the SDG Growth in Chennai City <i>Ms. R. Vidhyashree, Ms. M. Brindha</i>	663
76)	<i>ED – 10</i>	Artisanal Enterprises as Catalysts of Green Capitalism: Re- imagining Rural Entrepreneurship for Local Sustainability and Regenerative Economies <i>Ms. Megha G Patil, Dr. Kirankumar R Bannigol</i>	667
77)	<i>ED – 11</i>	A Study on the Level of Satisfaction of Women Entrepreneurs with Entrepreneurial Support Systems <i>Amsatha. K Jaya Pavithra. N</i>	677
78)	<i>ED – 12</i>	An Analytical Study on the Performance of Women Entrepreneurs in the Service Sector <i>Dr. C. Sankar, P. Thenmozhi</i>	685
79)	<i>ED – 13</i>	Innovating for Impact: Women Entrepreneurs and Their Contribution to the SDGs <i>Dr. R. Santhi</i>	695
80)	<i>ED – 14</i>	Women Entrepreneurs and Their Contribution to Sustainable Development Goals (SDGs) in India <i>Dr. V. Regima, Dr. A. Franklin Ragila</i>	701
81)	<i>ED – 15</i>	Youth Entrepreneurship for Climate Action in India: Opportunities, Challenges and Institutional Imperatives <i>Dr. R. Vijimalar, Subhiksha S V</i>	706
82)	<i>ED – 16</i>	A Study on the Role of Women Entrepreneurship in Achieving SDGS in India <i>Ms. Harini S, Ms. Merlyn, Dr. G. Maheshkumar</i>	712
83)	<i>ED – 17</i>	The role of Export Financing in India in Promoting Youth Entrepreneurship <i>Pragya Verma</i>	718
84)	<i>ED – 18</i>	Impact of Self-Help Groups (SHGs) on Women Entrepreneurship <i>Dr. K. Latha</i>	730
85)	<i>ED – 19</i>	Investors' Acumen Towards the IPO of Startup Companies (A Study with reference to Investors from Chennai city) <i>Dr. T. P. Priya</i>	736

Sustainable Startups and their Eco – Innovation in Pollachi

P. Archanaa

Assistant Professor and Head UG Department of Commerce CA, NGM College, Pollachi.

Corresponding Author Email: abimaniarc1189@gmail.com

Abstract

Sustainable startups are increasingly recognized as key drivers of environmental conservation and economic development. In recent years, the adoption of eco-friendly innovations has become essential for startups to achieve operational efficiency, market competitiveness, and social responsibility. This study aims to examine the eco-friendly ideas and innovations adopted by sustainable startups in Pollachi, the benefits they gain from these practices, and the factors influencing their adoption. A descriptive research design was employed, and data were collected from 150 startup owners and managers using a structured questionnaire. The study utilized descriptive statistics, ranking analysis, cross-tabulation, and Chi-square tests to analyze the data. The findings indicate that energy-efficient technologies, waste reduction practices, and renewable energy adoption are the most common eco-innovations, with significant benefits including cost reduction, improved brand image, and enhanced market competitiveness. The study also reveals a significant association between the type of startup and the eco-innovations adopted. The results provide valuable insights for policymakers, entrepreneurs, and researchers aiming to promote sustainable business practices in India.

Keywords: Sustainable startups, Eco-innovation, Green practices, Renewable energy, Startup benefits, etc.,

Introduction

Sustainable entrepreneurship is becoming increasingly important in today's world as societies face challenges related to climate change, pollution, waste management, and resource scarcity. Startups that focus on sustainability and eco-innovation play a crucial role in reducing environmental impact while creating economic opportunities. Pollachi, located in Tamil Nadu, is well known for its rich agricultural base, especially coconut cultivation, coir production, jaggery units, dairy farms, and small-scale industries. The region produces a large amount of natural raw materials such as coconut husk, coir fibre, agro-waste, cattle waste, and sugarcane residue. These resources provide strong potential for sustainable startups that

can convert natural and agricultural materials into eco-friendly products through innovative approaches.

In recent years, Pollachi has seen the rise of enterprises involved in organic farming, coir-based products, natural fibre handicrafts, agro-waste recycling, eco-friendly packaging, and renewable energy solutions. Startups in these areas not only support environmental conservation but also generate employment, enhance local livelihoods, and promote circular economy practices such as waste-to-wealth, recycling, and resource efficiency.

At the same time, sustainable startups in Pollachi also face challenges including limited access to finance, low consumer awareness about eco-friendly products, lack of advanced technology, and insufficient market linkages. Understanding these opportunities and challenges is essential to support the growth of eco-innovation in the region.

Review of Literature

Anjuka and Ganesamurthy (2025) examined eco-entrepreneurship and sustainable green startups in Tamil Nadu and found that supportive state policies, access to funding, and awareness of eco-friendly practices encourage the growth of sustainable ventures, while regulatory hurdles and competition act as barriers. Chouhan (2024) explored sustainable entrepreneurship innovation across India and reported that green products, eco-friendly services, and environmentally responsible production methods help reduce negative environmental impacts and improve social welfare. Halder (2019) provided insights into the growth of green entrepreneurship in India and highlighted that environmental, economic, and social factor collectively drive green business development, contributing to sustainable development. Sharma (2025) studied green startups in sectors such as organic farming and concluded that these ventures generate employment, improve living standards, and promote sustainability through eco-friendly agricultural and business practices.

Objectives of the Study

- To examine eco-friendly ideas and innovations adopted by sustainable startups.
- To identify the benefits of eco-innovation for sustainable startups.

Research Methodology

The study adopts a descriptive research design to examine the eco-friendly ideas, innovations, and benefits adopted by sustainable startups in Pollachi. The population includes owners, managers, and founders of sustainable startups operating in Pollachi, covering

sectors such as renewable energy, organic and agri-based products, green products, and tech-based sustainability solutions. A sample of 150 respondents was selected using purposive sampling, ensuring that only startups actively implementing eco-friendly practices were included. Primary data were collected through a structured questionnaire, which included questions on demographic details, awareness of eco-innovations, types of eco-friendly practices adopted, perceived benefits, and challenges faced. Secondary data were gathered from books, journals, government reports, and online resources related to sustainable startups and eco-innovation. Data were analyzed using descriptive statistics such as mean and percentage, ranking analysis to identify the most significant eco-innovations and benefits, and cross-tabulation with the Chi-square test to examine relationships between type of startup and eco-innovation adoption. Findings were presented using tables and charts for clarity.

Limitations of the Study

The study has certain limitations that need to be considered. It is geographically limited to sustainable startups operating in Pollachi, which may not represent the practices and challenges of startups in other regions. The sample size is restricted to 150 respondents, and only those willing to participate were included, potentially excluding some relevant startups. The data collected are based on self-reported responses, which may involve subjective bias or overestimation of eco-friendly practices. Additionally, the study focuses primarily on eco-innovation and sustainability benefits, so other factors affecting startup performance, such as financial management or market dynamics, are not extensively explored. Finally, due to time and resource constraints, in-depth qualitative insights from interviews or case studies were limited.

Analysis and Interpretation

Table No. 1

Chi-Square Analysis of Eco- Friendly Innovation Adoption by Startup Category

Demographic Variable / Type of Startup	Category	Energy-Efficient Tech (O)	Waste Reduction & Recycling (O)	Renewable Energy Use (O)	Total	χ^2 Value	Table Value

Type of Startup	Green Product	14	20	12	46	9.18	12.59
	Renewable Energy	16	10	22	48		
	Organic / Agri	6	12	5	23		
	Tech-based Sustainable	12	16	5	32		
Totals	—	48	58	44	150		

The Chi-square analysis indicates a significant association between the type of startup and the eco-friendly innovations adopted (χ^2 calculated = 13.271 > χ^2 table = 12.59, df = 6, $p < 0.05$). This means that the adoption of specific eco-innovations varies depending on the startup category. For example, renewable energy startups primarily focus on adopting renewable energy technologies, green product startups emphasize waste reduction and recycling practices, and tech-based sustainable startups prioritize energy-efficient technologies. The results suggest that startup type plays a key role in determining the eco-friendly strategies implemented, reflecting differences in operational focus, resources, and sustainability goals.

Table No. 3
Benefits of Eco-Innovation for Sustainable Startups

Benefits / Statements	Mean Score	Rank
Eco-innovation helps reduce operational costs and saves resources.	4.55	I
Eco-friendly practices improve brand image and attract customers.	4.42	II
Adoption of green technologies increases market competitiveness.	4.30	III
Eco-innovation helps comply with environmental regulations.	4.18	IV
Sustainable practices create opportunities for government incentives or funding.	4.05	V

Implementing eco-friendly processes fosters employee satisfaction and engagement.	3.92	VI
Green innovation enhances investor confidence and attracts funding.	3.85	VII
Eco-innovation contributes to long-term sustainability and growth of the startup.	3.78	VIII
Sustainable practices help reduce carbon footprint and environmental impact.	3.65	IX

The ranking analysis of benefits of eco-innovation for sustainable startups shows that cost reduction and resource savings hold the top position (Rank I) with the highest mean score of 4.55, indicating that financial and operational efficiency is the primary advantage. This is followed by brand image improvement (Rank II) and increased market competitiveness (Rank III), showing that eco-friendly practices also enhance business reputation and performance. Compliance with environmental regulations (Rank IV) and opportunities for incentives or funding (Rank V) are other important benefits. Employee satisfaction, investor confidence, long-term sustainability, and reduction of environmental impact are recognized but have relatively lower mean scores (Ranks VI–IX), suggesting that while these benefits are acknowledged, financial and market-related advantages are considered the most significant by startups.

Suggestions for the Study

Encourage startups to adopt energy-efficient technologies and renewable energy solutions to reduce operational costs and environmental impact. Promote waste reduction and recycling initiatives across all types of startups to enhance sustainability practices. Provide training and awareness programs for startup founders and employees on eco-friendly innovations and sustainability strategies. Facilitate access to green finance and government incentives to support startups in implementing eco-innovative practices. Highlight the importance of eco-innovation in improving brand image and gaining competitive advantage in the market.

Conclusion

The study highlights that eco-innovation plays a crucial role in the growth and sustainability of startups. Startups that adopt energy-efficient technologies, waste reduction

practices, and renewable energy solutions benefit not only financially through cost savings but also gain a stronger market position and improved brand image. The findings show that different types of startups prioritize different eco-friendly practices, reflecting their operational focus and resources. Awareness and adoption of eco-innovations are influenced by factors such as access to green finance, government incentives, and digital promotion. Overall, integrating eco-friendly strategies into business operations contributes to long-term sustainability, environmental protection, and socio-economic development, making eco-innovation a key driver for the success of sustainable startups in India.

Acknowledgement

This Research Paper has been published using the Seed Money Grant provided by NGM College, Pollachi

References

- 1) Anjuka, M., & Ganesamurthy, K. (2025). *Eco-entrepreneurship building sustainable green startups in Tamil Nadu. International Research Journal of Modernization in Engineering, Technology and Science*, 7(2), pp. 45–52.
- 2) Chouhan, R. K. (2024). *Sustainable Entrepreneurship Innovation in India. International Journal of Research in Academic and Management Studies*, 12(1), pp. 30–38.
- 3) Halder, S. (2019). *Green entrepreneurship in theory and practice: Insights from India. International Journal of Green Economics*, 13(2), pp. 99–119.
- 4) Sharma, K. (2025). *Green Startups and Economic Development in India. Research Ambition: An International Multidisciplinary e-Journal*, 10(1), pp. 12–18.
- 5) Mistry, M. J. (2025). *Green Entrepreneurship and Sustainable Innovation: Exploring Eco-Conscious Startups in Urban India. Journal of Business Strategy and Technology*, 5(1), pp. 22–30.

