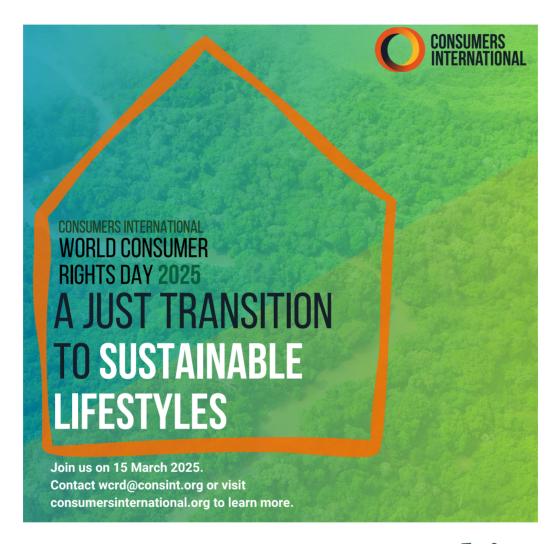


GREEN INSIGHTS



Newsletter on "Environment Literacy - Eco-labelling and Eco-friendly Products"

January - March 2025, Vol. 19 No. 4



Green Entrepreneurship in India



Sponsored by:

Ministry of Environment, Forest and Climate Change, Government of India Environmental Information, Awareness, Capacity Building and Livelihood Programme (EIACP) Programme Centre, Resource Partner on:

Environment Literacy - Eco-labelling and Eco-friendly Products



Contents

 Foreword 	
------------------------------	--

- A Just Transition to Sustainable Lifestyles
- Green Entrepreneurship in India: Innovations and Challenges in the Sustainable Business Landscape
- Events (January-March 2025)



2

3

6

9





Shri. Praful Amin Chairman CERC

Anindita Mehta Program Coordinator

Editorial Team

Dr. Neel Talati Programme Officer

Mr. Hiren Chaudhari Information Officer

Design & Graphics



India's green entrepreneurship sector has grown significantly, driven by innovations in renewable energy, waste management, and sustainable agriculture. However, for this transition to be truly impactful, policy frameworks must evolve to provide stronger financial incentives, streamlined regulations, and expanded Extended Producer Responsibility (EPR) policies. Encouraging green financing, impact investments, and sustainability-linked bonds can further bridge funding gaps for emerging enterprises, ensuring that eco-friendly solutions become more accessible and scalable.

Consumer awareness and market demand play a crucial role in sustaining this momentum. Large-scale behavioral change campaigns, expansion of eco-labeling initiatives, and support for local green enterprises can drive sustainable consumption patterns.

Collaboration between research institutions, industry leaders, and policymakers will be essential in fostering innovation and knowledge exchange, helping businesses adopt resource-efficient technologies while maintaining economic viability.

A just transition must prioritize inclusivity, ensuring that marginalized communities. women entrepreneurs, and small-scale enterprises benefit from sustainable economic opportunities. Capacity-building programs, skill development in green jobs, and equitable access to markets can empower local communities to actively participate in the green economy. By integrating sustainability with social and economic equity, India can position itself as a global leader in green entrepreneurship while securing a resilient future for both people and the planet.

A Just Transition to Sustainable Lifestyles



India, with its vast population and rapidly growing economy, faces unique challenges in the fight against climate change. The climate crisis, biodiversity loss, and environmental degradation have become defining issues for the nation, impacting millions of livelihoods. As the world moves towards a sustainable future, India must ensure that this transition is just and inclusive, especially for vulnerable communities. Recognizing this, World Consumer Rights Day (WCRD) 2025 has chosen the theme "A Just Transition to Sustainable Lifestyles" to drive awareness and collaborative action globally.

Understanding the Just Transition in India

A just transition in India must ensure that the shift towards sustainability does not disproportionately impact marginalized communities. India's rural population, comprising nearly 65% of the total, relies heavily on agriculture, which is increasingly threatened by erratic weather patterns and declining soil health. The Intergovernmental Panel on Climate Change (IPCC) estimates that demandside strategies—those that focus on sustainable consumption—can reduce greenhouse gas emissions by 40-70% across key sectors. However, affordability, availability, and systemic barriers continue to hinder progress.

India has already witnessed the consequences of climate change, from extreme heatwaves and water shortages to devastating floods in states like Uttarakhand, Assam, and Kerala. Research highlights that 49% of people globally struggle with the financial burden of adopting sustainable lifestyles, and in India, where income disparities are stark, this challenge is even more pronounced. The need for affordable, accessible, and culturally relevant sustainable solutions is critical.

The Role of Consumers in a Just Transition

Consumers are at the heart of the transition to sustainable lifestyles. Their choices, demands, and behaviours can drive businesses and policymakers to adopt greener practices. While individual efforts alone cannot solve the climate crisis, collective consumer action can lead to systemic change.

- Demand for Sustainable Products: Consumers must make informed choices by supporting brands that prioritize ethical sourcing, eco-friendly packaging, and energyefficient products.
- Adopting Green Habits: Simple changes in daily life—such as reducing single-use plastics, conserving water, and switching to energy-efficient appliances—can have a significant impact.
- Advocating for Policy Change: Consumers can push for stronger environmental regulations by engaging in petitions, supporting green policies, and holding corporations accountable.
- Participating in Circular Economy Initiatives:
 Recycling, upcycling, and supporting second-

hand markets can reduce waste and promote sustainability.

 Raising Awareness: Consumers play a key role in spreading awareness within their communities. From discussing sustainable practices with family to participating in sustainability workshops, informed consumers can inspire broader societal shifts.



Overcoming Barriers to Sustainable Lifestyles in India

Consumers need systemic support to make informed, sustainable choices. Governments, businesses, and academic institutions must collaborate to:

- Develop and promote affordable sustainable alternatives: India's growing startup ecosystem can play a pivotal role in creating cost-effective sustainable products, from biodegradable packaging to electric vehicles.
- Increase awareness and behavioral interventions: Scientific research should inform targeted public awareness campaigns, especially in regional languages, to bridge the intention-action gap.
- Integrate sustainability into governance frameworks: Policymakers must prioritize sustainability in urban planning, transport, food security, and consumer goods production. The Smart Cities Mission can incorporate more stringent green regulations.
- Enhance research on local contexts: A just transition varies across India's diverse states, and localized studies will help shape relevant and effective policies. Solutions for arid Rajasthan will differ from those for flood-prone West Bengal.
- Strengthen regulatory frameworks: The government must enforce stricter regulations on industries that contribute to environmental degradation while providing incentives for green innovation.
- Encourage corporate responsibility: Indian businesses must prioritize sustainability, from sourcing raw materials to packaging and

logistics. The Extended Producer Responsibility (EPR) policy for plastic waste is a step in the right direction, but stronger enforcement is needed.

Joining the Movement in India

The WCRD 2025 campaign, coordinated by Consumers International, will run from March 10-14, culminating in the Sustainable Lifestyles Summit. This platform will bring together experts, policymakers, and advocates to discuss innovations and commitments. India's consumer rights communities are encouraged to contribute by sharing insights, supporting responsible brands, and engaging in policy dialogues.

At the grassroots level, movements like the zero-waste initiatives in Bengaluru and community-led afforestation projects in Maharashtra show that local action can drive significant change. India's consumers, from urban dwellers to rural farmers, must be equipped with the knowledge and tools to adopt sustainable habits. The Swachh Bharat Abhiyan has successfully raised awareness about waste management; similar large-scale campaigns can be implemented for sustainable living.

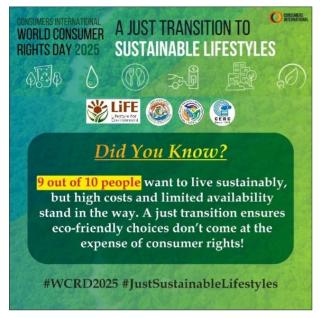
A Call to Action for Indian Consumers

The transition to sustainability is not just a necessity; it is an opportunity to redefine economic and social progress. By ensuring that this transition is just, inclusive, and consumer-driven, India can create a resilient future that benefits both people and the planet. Let us unite in our commitment to a just transition and drive forward a sustainable lifestyle for all.

4 January - March 2025 GReeN IN®IGHTS

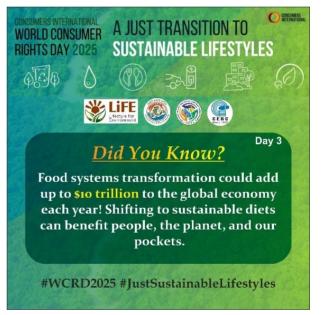
Indian consumers have the power to influence industries, demand sustainable products, and advocate for environmental justice. As we prepare for WCRD 2025, let us harness the power of

informed consumerism, grassroots advocacy, and collective action to secure a just transition that serves both humanity and the environment. The time to act is now.









References

- Intergovernmental Panel on Climate Change (IPCC). (2023). Climate Change 2023: Mitigation of Climate Change. Cambridge University Press.
- 2. Ministry of Environment, Forest and Climate Change (MoEFCC). (2023). State of Environment Report India 2023. Government of India.
- 3. Consumers International. (2024). World Consumer Rights Day 2025: A Just Transition to Sustainable Lifestyles. Consumers International Report.
- 4. United Nations Environment Programme (UNEP). (2022). Sustainable Lifestyles: Options and Opportunities. UNEP.
- 5. International Energy Agency (IEA). (2023). India Energy Outlook 2023. IEA Report.
- 6. Central Pollution Control Board (CPCB). (2023). Annual Report on Waste Generation and Management in India 2022-23.
- 7. World Bank. (2023). Bridging the Gap: Sustainable Consumption and Climate Action in Developing Economies.
- 8. Swachh Bharat Mission (SBM). (2022). Waste Management and Behavioral Change in India. Ministry of Housing and Urhan Affairs
- 9. Smart Cities Mission. (2023). Urban Sustainability and Green Infrastructure Development. Ministry of Urban Development.
- 10. United Nations Development Programme (UNDP). (2023). Advancing Circular Economy in India: Policy and Consumer Perspectives.

GREEN INSIGHTS January - March 2025 5

Green Entrepreneurship in India: Innovations and Challenges in the Sustainable Business Landscape

Historical Context

India's journey toward green entrepreneurship has been shaped by its unique developmental challenges and environmental context. Following economic liberalization in the early 1990's, India experienced accelerated industrialization and economic growth, often at significant environmental cost (Varma & Subramaniam, 2020). By the early 2000's, environmental degradation, resource depletion, and pollution had become pressing concerns, creating both social challenges and business opportunities.

The formalization of green entrepreneurship in India can be traced to several key developments: the establishment of the Ministry of New and Renewable Energy in 1992 (then called the Ministry of Non-Conventional Energy Sources), the National Action Plan on Climate Change in 2008, and the growing international emphasis on sustainable development goals (Sharma & Dutta, 2022). These developments created a more favourable policy environment for businesses seeking to address environmental challenges.



Current Landscape

As of 2024, India boasts an increasingly diverse ecosystem of green startups and social enterprises. According to data from the Department for Promotion of Industry and Internal Trade, environmental startups now account for approximately 9% of all registered startups in

India, representing a significant increase from less than 3% in 2015 (Ministry of Commerce and Industry, 2023).

This growth has been facilitated by several factors: increasing environmental awareness among consumers, greater availability of green technologies, supportive government policies, and growing interest from impact investors. The Indian green startup ecosystem is now valued at approximately USD 27 billion, with projections suggesting continued growth at a CAGR of 15% through 2030 (KPMG, 2023).

Key Sectors and Innovations

Renewable Energy

India's renewable energy sector. driven by abundant solar and wind resources, is a hub for green entrepreneurship. Ventures span solar product manufacturing, energy services, and rural mini-grids. Innovations include pay-asyou-go solar, solar-powered farm equipment, and community-owned projects. Companies like Freyr Energy, Fourth Partner Energy, and ZunRoof cater to both commercial and residential markets (Bhattacharya & Das, 2021). With ambitious targets-175 GW by 2022 and 450 GW by 2030the sector offers vast opportunities despite challenges like grid integration, land acquisition, and policy fluctuations.

Waste Management and Circular Economy

India generates 62 million tonnes of waste annually, making waste management both an environmental challenge and an entrepreneurial opportunity (CPCB, 2023). Green entrepreneurs drive innovation in waste collection, segregation, recycling, and upcycling. Saahas Zero Waste offers end-to-end solutions, Kabadiwalla Connect integrates informal waste collectors, and Banyan Nation advances plastic recycling (Prabhu & Mishra, 2022). The

6 January - March 2025 GREEN INSIGHTS

circular economy is gaining traction, with ventures like Chakr Innovation converting diesel emissions into ink and Pastiwala repurposing plastic waste for construction.

Sustainable Agriculture

Agriculture, employing nearly half of India's workforce, faces sustainability challenges like soil degradation, water scarcity, and climate vulnerability. Green entrepreneurs address these through organic farming, precision agriculture, and farm-to-table supply chains. Companies like Ecozen Solutions offer solar-powered cold storage to reduce post-harvest losses, while Digital Green promotes sustainable practices via technology, and AgroStar connects farmers to inputs and expert advice (Verma & Gupta, 2022). Sustainable agriculture enhances environmental benefits and improves smallholder farmers' livelihoods.

Overcoming Barriers to Sustainable Lifestyles

Enabling sustainable consumer choices requires systemic support from governments, businesses, and academia. Key priorities include:

- **1. Affordable Alternatives** Subsidies, tax breaks, and green tech investments can lower costs without compromising quality.
- **2. Awareness & Behavior** Nudging, social campaigns, and sustainability education can bridge the intention-action gap.
- **3. Sustainable Governance** Urban planning, transport, and circular economy initiatives must integrate sustainability.
- **4.** Localized Research Regional studies help shape policies tailored to consumer behavior and environmental impact.
- **5. Regulatory Strengthening** Stricter enforcement and corporate accountability drive green innovations and transparency.
- **6. Corporate Responsibility** Sustainable sourcing, packaging, audits, and CSR initiatives empower informed choices.

7. Future Directions:

- Policymakers Streamline regulations, offer incentives, and enforce environmental laws.
- Entrepreneurs Develop multi-value models, expand markets, and track environmental impact.
- Investors Align financing with green growth and provide technical support.

Collaboration across sectors can drive a just transition toward sustainable lifestyles, benefiting society and the environment.

Green entrepreneurship in India represents a promising approach to addressing environmental challenges while creating economic opportunities. The sector has shown significant growth and innovation over the past decade, particularly in renewable energy, waste management, and sustainable agriculture.

However, realizing the full potential of green entrepreneurship will require coordinated efforts to address financing constraints, policy implementation gaps, and market education challenges. As India continues its economic development trajectory, green entrepreneurs will play an increasingly vital role in shaping a more sustainable future.

The experience of Indian green entrepreneurs offers valuable lessons for other emerging economies navigating the complex relationship between environmental sustainability and economic development. Future research should focus on quantifying the environmental and social impacts of green ventures, assessing the effectiveness of different support mechanisms, and identifying strategies for scaling successful models across diverse regional contexts.

References

- Bhattacharya, A., & Das, K. (2021). Solar entrepreneurship in India: Models and market development. Renewable Energy, 178, 445-458.
- 2. Central Pollution Control Board (CPCB). (2023). Annual Report on Waste Generation and Management in India 2022-23.
- 3. Goyal, P., & Rahman, Z. (2021). Environmental sustainability in business: A study of emerging practices in India. Journal of Cleaner Production, 302, 126981.
- 4. Gopalan, S., & Venkataraman, R. (2021). Policy implementation challenges for green startups in India. Energy Policy, 156, 112431.
- 5. Impact Investors Council. (2023). India Impact Investment Trends 2022-23.
- 6. KPMG. (2023). Green Economy: The Indian Opportunity.
- 7. Kumar, R., & Jain, V. (2023). Sustainability entrepreneurship in emerging economies: A conceptual framework. Business Strategy and the Environment, 32(1), 432-447.
- 8. Ministry of Commerce and Industry. (2023). Indian Startup Ecosystem Report 2022-23. Department for Promotion of Industry and Internal Trade.
- 9. Nair, S., & Kumar, P. (2022). Incubation ecosystems for sustainability startups in India. Journal of Entrepreneurship in Emerging Economies, 14(2), 319-337.
- 10. Prabhu, J., & Mishra, S. (2022). Circular economy innovations in India's informal sector. Resources, Conservation and Recycling, 178, 106073.
- 11. Prasad, M., & Mishra, T. (2021). Green financing in India: Challenges and opportunities. Journal of Sustainable Finance & Investment, 11(3), 239-259.
- 12. Raj, A., & Sharma, R. (2021). Financing constraints for environmental entrepreneurs: Evidence from India. Small Business Economics, 57(4), 1801-1820.
- 13. Sharma, N., & Dutta, P. (2022). Evolution of climate policy and green business in India. Environmental Policy and Governance, 32(1), 44-57.
- 14. Singh, K., & Patel, R. (2022). Consumer attitudes toward green products in India: A market segmentation analysis. Journal of Consumer Marketing, 39(2), 221-235.
- 15. Varma, S., & Subramaniam, K. (2020). Historical development of environmental entrepreneurship in India. Business History Review, 94(3), 483-510.
- 16. Verma, D., & Gupta, S. (2022). Digital technologies for sustainable agriculture in India: A case study approach. Agricultural Systems, 196, 103318.

Events (January-March 2025)

1. An inspiring awareness session on eco-friendly products was held at Shree Adivasi Madhyamik School, Uchapan, Chota Udaipur, where 272 enthusiastic students participated. The session highlighted the importance of sustainable choices in daily life, encouraging the young minds to adopt eco-friendly practices and contribute to a greener future.





lecture 2. **CERC EIACP** PC RP conducted inspiring an on Mission LiFE at Advashi Madhyamik Sala, Dunger Vat, Chhota Udaipur. With the enthusiastic participation of 394 students, the session emphasized adopting eco-conscious lifestyles and driving positive change for the planet.

8 January - March 2025 GREEN INSIGHTS





3. CERC EIACP PC RP held a Mission LiFE lecture at Sat Kaival Vidyamandir, Ranbhun Ghati, inspiring 303 students to adopt eco-friendly habits. The session ended with the Mission LiFE pledge for sustainable living.





4. CERC EIACP PC RP conducted a Mission LiFE lecture at Utarbunyadi Adivasi Ashram Sala, Chichod, with 329 participants, promoting eco-conscious living and sustainability. The session concluded with the Mission LiFE pledge.





5. CERC EIACP PC RP conducted a lecture on Eco-Labelling at Rajiv Gandhi Ashram Sala, educating 433 students on eco-friendly products and sustainable choices. The session ended with the Mission LiFE pledge for a greener future.

GREEN INSIGHTS





6. CERC EIACP PC RP held a Mission LiFE awareness session at Shri V.R. Shah Sarvajanik School, Pavi Jetpur, where 1,480 students pledged to adopt sustainable living and protect the environment.





7. CERC EIACP PC RP conducted a Mission LiFE session at Regama Primary School, Ta. Mandvi, Dist. Surat, engaging 253 students and teachers in discussions on eco-friendly practices, waste reduction, and sustainability. The event concluded with the Mission LiFE pledge for responsible living.





8. CERC-EIACP PC RP conducted an interactive session on eco-friendly products at Government Primary School, Uteva, Mandvi, Surat, engaging 107 participants in sustainable choices. The event ended with the Mission LiFE pledge.

10 January - March 2025 GREEN IN GHTS





9. On 4th March 2025, CERC EIACP PC RP Information Officer, Mr. Hiren Chaudhari, enlightened students on "A Just Transition to Sustainable Lifestyles" at SPEC CAMPUS. He emphasized the importance of sustainable living and the role of Sustainable Development Goals (SDGs) in shaping a better future.



10. On 18th March 2025, CERC EIACP PC RP conducted an awareness session on Food Adulteration and Eco-Labelling at Primary School, Sonipur, Gandhinagar. Engaging 282 students, the session emphasized food safety, sustainable consumption, and informed choices. It concluded with the Mission LiFE pledge, reinforcing eco-conscious living.





GREEN INSIGHTS January - March 2025 11





11. CERC EIACP PC RP celebrated an ecofriendly Holi, promoting natural colors and sustainable festivities while discouraging harmful chemicals for a greener celebration.

12. On World Consumer Rights Day, CERC EIACP held an awareness session at Gujarat Vidyapith, Ahmedabad, on "A Just Transition to a Sustainable Lifestyle." 32 students. the Engaging session emphasized responsible consumption, ethical production, and sustainable living, promoting environmental consciousness.







Environmental Information, Awareness, Capacity Building and Livelihood Programme acronymed as EIACP erstwhile Environmental Information System (ENVIS) was implemented by the Ministry of Environment, Forest & Climate Change by end of 6th Five Year Plan as a Plan Scheme for environmental information collection, collation, storage, retrieval and dissemination to policy planners, decision makers, scientists and environmentalists, researchers, academicians and other stakeholders. MoEF&CC has identified Consumer Education and Research Centre (CERC), Ahmedabad, as one of the Resource Partner to collect and disseminate information on "Environment Literacy - Eco-labelling and Eco-friendly Products". The main objective of EIACP Programme centre- Resource Partner is to disseminate information on Environment literacy, Eco-products, International and National Ecolabelling programmes.

Periodical Printed & Published By

Programme Coordinator, CERC-EIACP Programme Centre, Resource Partner On Behalf of Consumer Education & Research Centre, 801, 8th Floor Sakar II Building, B/H Ellisbridge Shopping Centre, Ashram Road, Ahmedabad- 380 006, Gujarat, India.

Phone: 079-27489945/46

http://www.cercenvis.nic.in/

cerc@cercindia.org

@CERC.EIACP

@cerc_eiacp

@CERC-EIACP

in @cerc-eiacp

Write to us: We value your views and suggestions. Please send your feedback on this issue. We would also like to invite your contributions on the Eco Product

and Eco Labelling.

Disclaimer

The material used in this newsletter does not necessarily represent the views of CERC or EIACP. The images and contents provided in the publication are intended solely to provide information from secondary sources.

Print Express, Ahmedabad.