Women Entrepreneurs Driving Sustainable Practices in India's E-commerce Sector: A Path Towards Inclusive Growth

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Abstract

This research study attempts to understand the shift in the dynamic role of women entrepreneurs from conventional business undertakings to sustainable e-businesses models. With the advancement in technology and shift in digital economy fempreneurs of the country progressed in their business endeavours by adopting green initiatives like that of green packaging, efficient allocation of resources, integrating zero waste practices and circular economy principles. However, the success of businesswomen of the country are also backed by various hurdles in their path of progress, such hurdles include economic limitations, cultural stereotypes, elevated sustainability expenses and structural shortcomings. By adopting a comprehensive review of literature, along with case studies of various women led entrepreneurial initiatives in India, this research study highlights how businesswomen of India drive sustainability towards building a resilient society, particularly for the marginalized community in the Indian economic landscape. Thus, this study explores how women entrepreneurs ensure a strong footing for India in the global e-commerce scenery because empowering women is empowering the nation.

Keywords: Women Entrepreneurs, E-commerce Sector, Sustainable Practices, Inclusive Growth, Economic Empowerment

I. Introduction

India is growing at a significant pace and so is the women of the country. Women of today are not just confined to the four walls of household but are actively taking up independent roles at par with men. They play a key role in the economic development of our nation. This changing world has created a space for women who want to own and operate their own businesses (Vasan, 2016). Today's women entrepreneurs are pioneers who have walked beyond conventional path, forging new opportunities for economic engagement and innovation. With the advent of economic reforms of 1990, technological landscape in the country grew, where advancements in internet connectivity made digital payment systems accessible to the growing consumer market in India which preferred online shopping platforms as their go to next door shop, that ultimately fueled the e-commerce sector in India (Shah, 2024). Smart women of the county saw opportunity and potential in these markets and emerged as dynamic entrepreneurs of the nation. From Falguni Nayar's Nykaa, Ghazal Alagh's Mamaearth to Aditi Gupta, Menstrupedia, India is brimming with success stories of women entrepreneurs across the country. These women entrepreneurs not just do business but also make efforts to ensure that mother earth is not damaged at the cost of human development. A significant number of fempreneurs integrate sustainable business practices such as green packaging, use of ecofriendly materials, ethical sourcing, zero-waste manufacturing and marketing into their entrepreneurial undertakings. These sustainability initiatives not only strengthen their business processes but also provide them with a global outlook and profound market standing in terms of customer base and visibility, thus driving inclusive economic growth.

Behind this light of success, there remains challenges for women entrepreneurs because of several structural and stereotypical barriers deep rooted in the Indian society. Access to capital and credit, no financial literacy, unfavourable policies and regulatory issues, digital accessibility, lack of mobility and business networking, eclipsed with patriarchy limits women participation in economic endeavours (Williams & Gurtoo, 2011; Rajamani, 2022). A report by IFC suggests that 90% of women entrepreneurs in India have lack of access to formal credit (Udaiti Foundation, 2024), while, another study by UNCTAD (2023) states that women entrepreneurs in India are 30% less likely than men to own online stores. Thus, hinting towards the barriers women entrepreneurs face in sustaining and scaling their entrepreneurial avenues. Irrespective of these shortcomings, women led e-commerce avenues like Okhai, Bare Necessities, Zouk, Sugar and many others continue to excel and expand their business roots with sustainable innovations and community driven environmental initiatives.

Demonstrating sustainability at the heart of entrepreneurship, this research paper, based on extensive literature review, attempts to explore and understand the role of women entrepreneurs in India's e-commerce

sector while promoting sustainability, amidst the challenges they face and their broader impact on economic inclusion and social stabilization.



Source: Authors' compilation

II. Review of Literature

Alzamel, (2024) examined the role of e-entrepreneurship in fostering the future economy, with a specific focus on Saudi women entrepreneurs. A quantitative and post-positivist approach has been undertaken in the study and it was found that e-entrepreneurship significantly impacts women's entrepreneurial and economic growth. Furthermore, the study also revealed that Saudi women entrepreneurs should receive more financial assistance and technical support to kick start their entrepreneurial journey.

Kalaivani et al., (2025) explored the challenges and opportunities female entrepreneurs face regarding access to finance, socio-cultural barriers, and regulatory environments. It seeks to understand the broader implications of women's economic empowerment on community development and regional stability. The findings demonstrated the need for an inclusive entrepreneurial ecosystem that recognizes and nurtures women entrepreneurs as a significant force behind economic development of a nation.

Dutta & Shivani, (2023) used a technology adoption approach to understand the factors that require women entrepreneurs of West Bengal and Jharkhand to use and adopt e-commerce into their entrepreneurial initiatives. The findings revealed that technology is user friendly and the use of it will enhance the populations e-commerce penetration.

Kumar & Shobana, (2023) explored the evolution of women entrepreneurship in India. Through a comprehensive review methodology, the study addressed the economic impact of women entrepreneurs in terms of job creation, GDP contribution, and empowerment of women in the workforce.

Gamage, (2023) examined the gender gap in e-commerce adoption barriers among entrepreneurs in Sri Lanka. The findings of the investigation highlighted substantial disparities in the perception of ecommerce adoption barriers between male and female entrepreneurs. Female entrepreneurs encounter difficulties pertaining to lack of e-commerce awareness, fear and reluctance to change, hurdles in delivery of goods, etc in e-commerce adoption, thus, underscoring the relevant influence of gender on shaping e-commerce adoption patterns.

Reddy, (2024) followed a case study approach and explored the various challenges and opportunities women entrepreneurs in the country of India face in their path of entrepreneurship. Where lack of access to credit, lack of business networking scope and societal expectations still pull the legs of these success bearers, many women entrepreneurs have emerged in the light of growing consumer market opportunities, awareness and acceptance of women in the changing business landscape and a supportive entrepreneurial ecosystem in the country.

Suganya & Thenmozhi, (2020) in their study suggested ways through which women entrepreneurs can overcome the hurdles in the path of their e-commerce entrepreneurial venture. Their study highlighted the significance of digital knowledge and technological knowhow on the part of women entrepreneurs to make them standout in the crowed.

Garg, (2025) identified the emerging issues such as digital divide and the impact of COVID-19 pandemic in the path of success of women entrepreneurs. The study suggests the need for targeted initiatives, capacity development programs, training and policy interventions on the part of government and other regulatory agencies to fuel up the spirit of entrepreneurship among the women of our country.

Kaur et al., (2025) in their research paper attempts to understand rural women's entrepreneurship in attaining Sustainability Development Goals (SDGs). It attempts to connect India's current SDGs index with the business led by females in rural areas and found that there are many factors responsible for the overall SDGs index of India, some of which includes Indian government policies, incubator centres, education, infrastructure, and technology. The study emphasized the significance of women entrepreneurs in rural India as a catalyst for economic development and social transformation.

Ramya, (2024) adopted a descriptive research design, alongside a case study-based approach to give an overview of the evolution of women entrepreneurship in India. The study highlights women-led businesses in India empowers the economy by reducing poverty and reshaping India's cultural standards.

Research Gap

Despite a significant number of studies cornering around women entrepreneurs, there's still a lot of work to be done to recognize the contributions of women entrepreneurs in driving sustainability in India's e-commerce sector.

This study is a modest attempt to fill that gap by exploring the various sustainable practices that women entrepreneurs of the country integrate into their business ventures, thus supporting the development of entrepreneurial ecosystem in a developing nation like India.

Objectives

- To explore the ways in which Indian women entrepreneurs are fostering sustainability into their business ventures.
- To highlight the challenges women entrepreneurs of India face in scaling their sustainable business practices.
- To understand the impact of women lead sustainable business practices on inclusive economic growth and societal advancement.

III. Research Methodology

This study employees a descriptive research design based on comprehensive review of literature and case studies of selective women entrepreneurs of the country. Secondary data has further been collected from the official websites of various business platforms like Rangsutra, Mamaearth, Amazon etc. UNCTAD, IFC and other official reports have been referred in the process of writing this research paper. The findings are ultimately derived on the basis of analysis and discussion of the reviewed work.

Case Studies of Select Women Entrepreneurs Driving Sustainable Business Practices in India's E-Commerce Sector

Case Study 1: Rangsutra - Empowering Artisans Through Sustainable E-Commerce

India has always been a land of traditional crafts and *Rangsutra* is one such initiative by Sumita Ghose, whose moto is to promote and preserve these crafts and empower the craftsman behind it. It employs women artisans of the country and provide them with a sense of empowerment and individualism through fair wages and ownership stakes. Sustainable business practices undertaken by *Rangsutra* are:

- Community Ownership: *Rangsutra* works with local artisans and craftsman collectively by providing them with substantial amount of stake in the business.
- Traditional Craftsmanship: *Rangsutra* prioritises traditional techniques and sustainable methods in creating their products that connects to the cultural roots of India.
- Fair Trade: *Rangsutra* ensures fair and equitable wages, better working condition and ethical practices that contributes to the sustainability of their skilled heroes.

Table1: Key Business Data of Rangsutra

Business Aspect	Details	
Founder	Sumita Ghose	
Year of Establishment	2006	
Headquarters	Bikaner, Rajasthan, India	
Main Product Categories	Apparel, home furnishings, accessories	
Number of Artisan Shareholders	Over 2,000	
Annual Revenue (2022-2023)	₹38.73 crore	
Reported Profit After Tax (2022-2023)	₹1.48 crore	
Major Sales Channels	Official website, collaborations with retailers like IKEA	
Global Reach	Products available in multiple countries	

Source: Rangsutra.com

Case Study 2: Mamaearth - Pioneering Sustainable Practices in India's E-Commerce Sector

In the recent years *Mamaearth* co-founded by Ghazal Alagh has positioned itself as one of the leading companies in India's e-commerce sector by providing toxin free and organic personal care products. Their sustainability moto is to promote green packaging, afforestation and use of ecofriendly sustainable supply chain. Sustainable business practices undertaken by *Mamaearth* includes the following:

- Plastic Offset: In the year 2018, *Mamaearth* has joined forces with GEM Enviro Management Limited to recycle polymer waste. As per the latest 2024 data, *Mamaearth* has recycled over 7,500 metric tons of plastic, resulting in building a plastic offset community.
- Tree Plantation: *Mamaearth* with its unique 'Plant Goodness' initiative, carries out the task of planting a tree for every order placed on its website. Through this initiative *Mamaearth* has planted over 800,000 trees, contributing to a green economy.
- Eco-Friendly Packaging: *Mamaearth* employs the principles of circular economy in their product packaging thus reducing their ecological footprint.

Table 2: Key Business Data of Mamaearth

Business Aspect	Details
Founders	Ghazal Alagh
Year of Establishment	2016
Headquarters	Gurugram, India
Main Product Categories	Baby care, skincare, haircare, colour cosmetics
Plastic Recycled	7,500+ metric tons (as of January 2024)
Trees Planted	800,000+ (since 2020)
Annual Revenue	₹1,970 crore (\$238 million) as of March 31, 2024
Employee Count	969 (as of January 31, 2025)
Stock Symbol	544014
Market Capitalization	\$829 million (as of March 7, 2025)

Source: Mamaearth.in

Case Study 3: Eco Femme - Empowering Women Through Sustainable Menstrual Products

Menstruation has always been a taboo in the Indian society but Auroville based Women entrepreneurs Kathy and Jessamijn introduced *Eco Femme* to us, which with its innovative washable cloth pads promotes menstrual health and environmental sustainability in the nation. *Eco Femme* demonstrates how a women lead business can defy the social stigma to drive change and promote sustainability. The sustainable business model undertaken by *Eco Femme* is discussed below:

- Product Design and Materials: *Eco Femme* makes their washables pads with unbleached cotton, thus ensuring biodegradability and menstrual hygiene.
- Environmental Impact: *Eco Femme* promotes the use of re-usable menstrual products, thus reducing dependency on plastic sanitary pads that are harmful for the environment.
- Women's Empowerment: The company contributes to women empowerment by employing female workers in the region of Tamil Nadu. It also organizes menstrual awareness workshops in various educational and communal institutions.

Table 3: Key Business Data of Eco Femme

Business Aspect	Details
Founder	Kathy Walkling
Year of Establishment	2010
Main Product Categories	Washable cloth pads, menstrual education programs
Number of Women Employed	150+ rural women
Environmental Impact	Prevents 500+ tons of sanitary waste annually
Global Reach	25+ countries through e-commerce
Major Sales Channels	Official website, sustainable e-commerce platforms

Source: Eco Femme.org

The success stories of these remarkable women lead entrepreneurial endeavours shows how Indian women are not just homemakers but nation builders. The above discussed case studies of *Rangsutra, Mamaearth* and *Eco Femme* culminates that woman driven e-commerce sector is thriving sustainability with its ethical sourcing, green packaging, sustainable supply chain initiatives, circular economy principles and environment friendly products. These organizations work towards preserving the nature by spreading the word of 'Sustainability' while giving a chance to our women to be financially empowered.

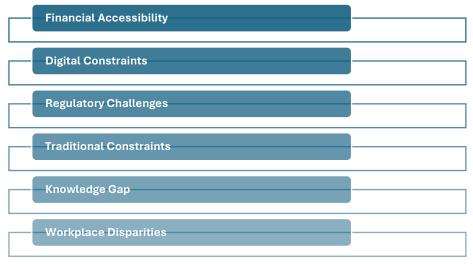
Challenges women entrepreneurs in India encounter in scaling sustainable business practices

Despite the growing success for Indian women entrepreneurs in the e-commerce sector, these business women have to face numerous hurdles in in their path of development, ranging from social to economic constraints. These barriers include:

- **Financial Accessibility:** Credit Constraints in the part of women has always been a major setback in the Indian business scenario. Rural businesswomen are unable to secure funding from formal financial institutions because of their lack of collateral security, which in turn lead them to rely on informal sources of credit that incurs high interest rates and stringent credit terms, thus affecting women entrepreneurs' ability to start and survive on their business ventures (Venkatesh & Srivastava, 2015).
- **Digital Constraints:** Though the digital scenario of the country has transformed to a great extent, still the women entrepreneurs tend to experience ample hurdles in adopting Information and Technology in their ventures. Certain hindrances have created blockages in fostering the growth of women led businesses in delivering a sustainable and resilient society using certain technological mechanisms to scale up their green practices (Olsson & Bernhard, 2021).
- Regulatory Challenges: Studies show, complying with complex regulatory standards and agency requirements along with environmental regulations can also become challenging for women entrepreneurs. The

flexible and ever-changing nature of these reforms and government laws pose stability issues and compliance dilemmas to the women entrepreneurs (Chunera, 2020).

- Traditional Constraints: Cultural prejudices and societal norms hinder the participation of women in various entrepreneurial undertakings limiting their exposure towards scaling up their ventures initiating sustainable practices. This limitation is prominently visible among the rural women entrepreneurs who face difficulties in getting the necessary funds and market exposure (Panda, 2018).
- Knowledge Gap: Lack of knowledge and awareness, along with undue mentorship and training on the part of women entrepreneurs have exaggerated the issue, restraining women entrepreneurs in scaling their sustainable business endeavours (Tass, 2021). Education of women in India has always been a setback in the Indian economy, which has widened the issue of knowledge gap for women entrepreneurs in the country, thus unbaling them to take up sustainable e-commerce ventures (Ministry of Education, 2021).
- Workplace Disparities: The deeply rooted patriarchal structure in the Indian culture has influenced women's role in the family as well as in workplace which has affected their work life. In their business operations, they face challenges related to gender discrimination which include mobility constraints, financial inequality, family responsibility, lack of confidence, competition from male which hinder their business expansion (Nirmal et al., 2023).



Source: Authors' compilation

Impact of Women Lead Sustainable Business Practices on inclusive economic growth and social development

Pre Impact Scenario

India's e-commerce sector has been hindered with several structural difficulties in their business ventures and gender gap is one such prominent difficulty in the path of women entrepreneur led sustainable business ventures. Fempreneurs faced hurdles such as limited access to capital and credit, societal biases topped with patriarchal norms, and a less developed sustainable business ecosystem in the country (Das, 2020). Initially the e-commerce sector was largely overshadowed by conventional, profit-driven businesses that prioritized profits over sustainability, leading to excessive waste and emission that degraded the environment at a large scale (Basu, 2019). Furthermore, rural business women struggled with easy access to market, thus restricting their participation in the economy (Sen, 2018). The lack of well build policy incentives discouraged the implementation of green business endeavours (Sharma & Verma, 2020). Nonetheless, the rise in the notion of sustainable future paved way for women entrepreneurs to be conscious about their business undertakings by not only just considering the profits but also making sure the nature is not hampered at the human cost.

Post Impact Scenario

The foreset of a changed Indian mindset paved way for many Indian women to take up entrepreneurial activity and contribute to the economic growth of the country. Gradually business women in India's e-commerce sector have bought in a dynamic shift in Indian business scenario by prominently transforming the landscape of economic development, compiled with greater gender equity and environmental sustainability. Technological advancement and the growing digital economy have enabled women to conquer conventional structural barriers prevailing in the country, providing them with access to finance, market exposure, and sustainable supply chains that support eco-friendly business initiatives such as green packaging, responsible sourcing and resource

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optimization (Goyal & Yadav, 2022; Basu, 2019). Additionally, consumer centric companies like Eco Femme, Mamaearth, and Rangsutra have bought in significant shift in consumer behaviour with growing consciousness and demand for green resources and environment friendly products, through their consumer awareness initiatives and education programmes on sustainability, leading to a steady increase in the market for green ventures (Rai, Mishra, & Gupta, 2022). Additionally, this growing entrepreneurial culture in the county has inspired many women to take up economic activities, enhanced rural employment by ensuring equity and fair wages to local skilled workers and contribute to the growing economy of the country by making India and its women financially resilient (Sen, 2018). In this path of entrepreneurship and sustainability, Government actions and legislative interventions have further reinforced the entire entrepreneurial ecosystem in the country by offering grants, financial resources and technical assistance to the growing women led startups and e-business in the nation (Sharma & Verma, 2020). As a result, of the continued success of female owned green business initiatives, the e-commerce sector of India is becoming more inclusive of equity and resilience, driving a continued social change and economic advancement while aligning with global environmental standards.

Economic Empowerment and Job Creation

Increased Digital and Financial Inclusion

Rise in Women-Led Sustainable Business

Environmental Conservation and Waste Reduction

Consumer Awareness and Market Shift Towards Sustainability

Figure: 5 key areas of post impact scenario

Source: Authors' compilation

Table 4: Examples of Women-Led Sustainable Business in India

Impact Area	Examples from India	Economic/Social Benefit
Employment Generation	Rangsutra (Handicrafts)	5000+ rural artisans (mostly women) employed in sustainable textile and handicrafts production.
Market Inclusion	Womaniya on GeM (Govt. eMarketplace)	7 lakh+ women SHGs onboarded, allowing small women-led businesses to reach national markets.
Sustainable Packaging Innovations	Bare Necessities (Zero-waste brand)	Reduces plastic waste in e-commerce through 100% biodegradable packaging solutions.
Circular Economy Contribution	Okhai (Handmade textiles)	Upcycles textile waste, reducing environmental impact and promoting ethical fashion.
Eco-Friendly Supply Chain Management	Ecoware (Biodegradable tableware)	Developed 100% compostable products, reducing reliance on single-use plastics.
Women's Leadership in Sustainability	Upasana (Ethical fashion)	Focuses on zero-waste fashion while empowering women artisans through fair wages.

Source: Authors' compilation

IV. Findings and Conclusion

The findings of this research paper demonstrate the dynamic shift in the role of women led businesses, from conventional business holdings to sustainable e-enterprises in India. The case studies highlighted in the current research like that of *Rangsutra*, *Mamaearth*, *and Eco Femme* shows the varied sustainable business models and initiatives undertaken by women entrepreneurs and how these businesses have flourished with time by integrating into green columns like that of ethical sourcing of raw materials, circular economy practices of recycle, reduce and reuse, along with fair and equitable wages to the local artisans engaged in these businesses. Apart from sustainable practices, these organizations have at the foremost created various employment opportunities for rural and marginalized women.

Inspite of these achievements, fempreneurs often struggle due to deep rooted structural obstacles like gender biases, societal expectations, familial restraints, lack of credit and market exposure, along with the lack of familiarity with technology and digital advancements. The findings further suggests that even though the Indian business women have come this far, still they have a long way to go and their success can be manifolded through targeted government and agency initiatives, capacity development programs and regulatory reforms. To sum things up, we can say that women-led entrepreneurial endeavours are not only reforming India's e-commerce sector but also actively working towards to make an inclusive India in terms of female empowerment, advancement of rural areas and sustainable development. Thus, placing India as a global convener in sustainable and inclusive e-commerce.

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