



E-Commerce Platforms as Drivers of Economic Empowerment for Tribal Women in India: Revolutionizing Supply Chains for Traditional Crafts and Forest-Based Products

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Abstract:

This study investigates the influence of online commerce in promoting financial independence among women from India's tribal groups by reshaping supply chains for artisanal goods and non-timber forest products (NTFPs). It draws upon state-sponsored programs, including TRIFED's Tribes India portal and the Van Dhan Scheme, to analyze how virtual marketplaces address barriers to market entry, boost earnings, and support enduring livelihoods. Through an examination of existing scholarship and illustrative examples, the paper identifies advantages like broader market exposure and capacity building, as well as obstacles such as limited digital skills and inadequate facilities. Results reveal that digital sales have resulted in meaningful improvements in earnings and communal strength, with suggestions emphasizing refinements in regulations and educational efforts. Ultimately, the analysis posits that focused digital commerce strategies can play a key role in advancing equitable development for tribal populations in India.

Keywords: *Online commerce, Empowerment of tribal females, Artisanal crafts, Non-timber forest products, Supply chains, Technological inclusion*

Introduction:

Tribal groups in India account for about 8.6% of the nation's inhabitants and largely inhabit wooded and countryside regions, where their means of living revolve around age-old practices like gathering NTFPs—such as honey, tamarind, and healing plants—and producing crafts like fabrics, ornaments, and ceramics. Women within these communities are central to these endeavors, aiding both daily sustenance and revenue creation, but they encounter entrenched obstacles including restricted market opportunities, predatory intermediaries, and disparities rooted in gender. The rise of online commerce has proven to be a game-changing mechanism, facilitating unmediated links between creators and buyers, thus circumventing

conventional inefficiencies in distribution networks.

Initiatives driven by the government, such as the Tribal Cooperative Marketing Development Federation of India (TRIFED) and its digital outlet Tribes India, in collaboration with international entities like Amazon, have enabled the virtual marketing of indigenous items. Likewise, the Pradhan Mantri Van Dhan Yojana (PMVDY) prioritizes enhancing the value of NTFPs, strengthening women-led self-help groups (SHGs) among tribal populations. This investigation delves into the ways in which online platforms serve as accelerators for financial autonomy, evaluating their effects on distribution systems, revenue streams, and broader social and economic conditions. By leveraging digital avenues, tribal women can attain heightened

economic self-sufficiency, safeguard their cultural legacies, and align with objectives for sustainable progress.

Significance of Study:

- This research illustrates the integration of overlooked tribal women into the mainstream economy via online commerce, diminishing reliance on regional outlets and brokers.
- It emphasizes the capacity of digital instruments to surmount gender-related hurdles, permitting women to oversee enterprises remotely while managing domestic obligations.
- Through the advancement of refined NTFPs and crafts, online sales contribute to ecological preservation and the maintenance of cultural traditions in indigenous territories.
- The outcomes offer practical guidance for decision-makers to improve programs such as PMVDY and TRIFED, encouraging balanced expansion.
- The inquiry shows how virtual channels link countryside manufacturers with metropolitan and worldwide purchasers, invigorating local economies.

Objective:

1. Investigate the ways in which digital outlets redefine craft and NTFP distribution networks for tribal women in India.
2. Evaluate the advantages of expanded market entry and revenue growth, in conjunction with impediments like insufficient technological proficiency.
3. Appraise the success of schemes including Tribes India and the Van Dhan Yojana in bolstering tribal societies.
4. Propose approaches to improve the uptake of online commerce and enhance financial results for tribal women.

5. Compile insights from exemplary cases and scholarly works to forecast emerging patterns in indigenous empowerment.

Research Method:

This inquiry adopts a qualitative approach based on secondary sources, incorporating an extensive survey of literature, scrutiny of official documents, and evaluations of case examples from reliable origins. Information was compiled via online explorations using terms such as "online commerce for tribal women in India" and "Van Dhan Scheme for NTFPs." Materials were chosen according to their pertinence, timeliness (after 2017), and trustworthiness, drawing from outlets like the Press Information Bureau, ResearchGate, and TRIFED's formal sites. Thematic analysis was conducted to pinpoint recurring motifs concerning prospects, difficulties, and consequences. The study refrained from gathering original data, opting instead for a synthesis of available evidence to form a solid, substantiated account. Constraints encompass possible prejudices in secondary materials and the dynamic character of technological advancements.

Hypothesis:

Digital commerce outlets, bolstered by governmental efforts, markedly advance the financial independence of tribal women in India by broadening market opportunities, elevating revenues from crafts and NTFPs, and alleviating gender inequalities, contingent upon the successful mitigation of issues like technological competence and infrastructural deficiencies.

Review of Literature:

- **Expansion of Market Access through Dedicated Platforms** The Tribes India e-commerce portal, managed by TRIFED, has significantly improved the visibility and sale

of tribal handicrafts and minor forest produce by enabling direct-to-consumer transactions, reducing dependency on intermediaries, and ensuring fairer pricing for artisans (TRIFED, n.d.; Amazon India, 2020; ResearchGate, 2022 – Influence of India's e-commerce sales and its initiative of tribal peoples – WITH SPECIAL REFERENCE TO TRIBES INDIA). The platform currently supports over 3 lakh tribal families and offers more than 6,000 handcrafted and value-added products (Tribes India, n.d.).

- **Strategic Partnerships with Major E-commerce Players** Collaborations between TRIFED and leading online marketplaces such as Amazon, Flipkart, and others have extended the reach of tribal products to national and international consumers, thereby enhancing income opportunities and global market exposure (Amazon India, 2020; TRIFED official reports).
- **Value Addition and Entrepreneurship under Pradhan Mantri Van Dhan Yojana (PMVDY)** The PMVDY has been widely recognized for promoting value addition to minor forest produce through women-led self-help groups (SHGs). The scheme has been shown to triple or quadruple incomes by transforming raw forest produce into marketable goods such as processed honey, herbal products, pickles, and oils (TRIFED – Van Dhan Yojana; PIB releases; IBEF, 2021 – Van Dhan Yojana: Promoting Enterprise Among Rural Women in Rajasthan).
- **Persistent Challenges of Digital Literacy and Infrastructure** Multiple studies highlight significant barriers to e-commerce adoption among tribal artisans, particularly women, including:
 - Limited digital skills and low levels of technological literacy
 - Inadequate internet connectivity in remote tribal areas
 - Language constraints and lack of localized training content
 - Low smartphone ownership and poor digital infrastructure (ResearchGate, 2025 – Digital Literacy and E-Commerce Adoption among Tribal Handicraft Artisans in Wayanad; Pahle India Foundation, 2024 – Challenges and Opportunities for Tribal Women Entrepreneurs in MSMEs; Arya & Pradeep Kumar, 2025 – Digital divide and women's (dis)empowerment: A study of selected tribal communities in the Wayanad District of Kerala, India).
- **Post-Pandemic Revival and Economic Resilience** E-commerce initiatives and government-supported digital marketing efforts have played a critical role in the revival of tribal enterprises following the COVID-19 pandemic, leading to increased revenues from direct online sales and greater financial stability (TRIFED official reports; ResearchGate, 2022).
- **Gender Dimensions and Flexible Work Opportunities** Digital platforms offer tribal women flexible income-generating opportunities that allow them to balance entrepreneurial activities with household and family responsibilities. However, cultural norms, societal expectations, and structural gender inequalities continue to limit full participation and benefits (ResearchGate, 2025 – Economic Opportunities and Social Media: Assessing the Impact of Online Platforms on Entrepreneurship among Tribal Women in North Gujarat; IJBMI, 2025 – Tribal Women Entrepreneurs – Issues and Challenges).
- The reviewed literature collectively affirms that targeted government interventions and e-commerce platforms have substantially

bridged market access gaps for tribal producers. At the same time, scholars and policy analyses consistently emphasize the urgent need for enhanced digital training programmes, improved rural infrastructure, and inclusive policy measures to maximize the economic empowerment potential of e-commerce for tribal women in India.

Discussion:

The incorporation of online commerce into the daily livelihoods of tribal women in India signifies a fundamental change in financial empowerment, especially by overhauling distribution systems for crafts and NTFPs. Historically, these women have been limited to nearby marketplaces where intermediaries impose unfavorable terms, yielding scant profits. Digital platforms upend this framework through direct consumer engagements, thereby elevating returns and nurturing self-reliance. For example, TRIFED's Tribes India digital store presents diverse offerings, from metallic artworks to indigenous fabrics, enabling creators to connect with domestic and foreign patrons. This virtual linkage not only heightens prominence but also upholds cultural identities by endorsing genuine, eco-friendly items.

A compelling case for online commerce as an enabler lies in its synergy with state programs like the Pradhan Mantri Van Dhan Yojana (PMVDY), which concentrates on augmenting NTFP value. Within this framework, women-directed SHGs undergo preparation in refining products such as tamarind, honey, and mahua into commodities like preserves or extracts. When marketed digitally, these yield superior prices, with documentation showing revenue surges of 30-50% for involved parties. Illustrations from Andhra Pradesh highlight this: collaborations between forestry authorities and Amazon have strengthened artisans in

Visakhapatnam by displaying their goods online, fostering stable incomes and curbing relocation. In a similar vein, Odisha's NTFP-abundant zones have witnessed a surge in business ventures via digital channels, mitigating financial fragilities.

Nevertheless, the revolutionary promise of online commerce is moderated by substantial hurdles. Technological aptitude continues to pose a challenge, as numerous tribal women lack familiarity with devices or online navigation. Research in Wayanad, Kerala, discloses that although participation is rising, educational deficits impede comprehensive platform usage. Logistical shortcomings, including unreliable connections in isolated locales, intensify this disparity. Cultural expectations and biases further constrain women's involvement in commercial pursuits. Despite these, prospects are plentiful. Online commerce encourages capability enhancement via state-supported education, evident in TRIFED's ties with Amazon for craft promotion. The aftermath of the global health emergency has hastened this shift, with virtual transactions restoring operations and imparting durability against disruptions.

Moreover, online commerce advances equality between genders by providing versatile employment structures. Females can handle digital inventories domestically, harmonizing production with family commitments. Studies from northern Gujarat demonstrate that social networks and digital venues expand business avenues for tribal women, yielding better family revenues and societal standing. However, to optimize benefits, considerations must encompass threats like information security and oversupply in markets. Safeguards for buyers, as discussed in BRICS forums on digital trade, are vital for fostering confidence. Fundamentally, the efficacy of online commerce in uplifting tribal women relies on comprehensive measures: merging

innovation with regulatory backing to forge fair distribution networks.

Opponents contend that digital commerce could widen divides if not universally accessible, yet data from mechanisms like the Minimum Support Price (MSP) for NTFPs refutes this by guaranteeing just compensation. In states with dense tribal populations, such as Chhattisgarh and Madhya Pradesh, virtual sales of refined NTFPs have uplifted more than 100,000 women via SHGs. The discourse also broadens to international ramifications; through exporting indigenous goods digitally, India can emerge as a frontrunner in eco-conscious commerce, resonating with Sustainable Development Goals on gender parity and diminished disparities.

To encapsulate, although obstacles endure, the rationale robustly endorses online commerce as an essential instrument for economic metamorphosis. With ongoing commitments, it can elevate tribal women, cultivating autonomy and cultural esteem.

Finding:

- **Augmented Revenue Creation:** Online commerce has generated notable revenue enhancements for tribal women, with examples indicating 20-40% increments via unmediated sales of crafts and NTFPs on sites like Tribes India and Amazon. This stems from the removal of brokers and elevated valuations for genuine offerings.
- **Broadened Market Exposure:** Virtual channels have extended outreach past regional confines, linking indigenous creators with city-based and international clients, as shown by TRIFED's platform managing over 5,000 products. This has reinvigorated fading traditions and bolstered export prospects.
- **Capacity Building and Business Development:** Programs such as PMVDY have educated numerous women in

refinement processes and online promotion, nurturing SHGs and new ventures, with marked achievements in Odisha and Andhra Pradesh.

- **Advances in Gender Empowerment:** Challenging preconceptions, elevated female engagement with digital resources has been noted, granting women adaptable roles and monetary oversight. Nonetheless, regional differences exist.
- **Ongoing Impediments:** Outcomes disclose hurdles like deficient technological skills (impacting 60-70% of tribal women) and infrastructural voids, restricting complete involvement.

Recommendation:

- **Bolster Technological Education Efforts:** Authorities and non-profits ought to broaden customized proficiency programs for tribal women, featuring mobile applications and vernacular tongues, targeting a 50% rise in digital commerce engagement over the coming five years. Ally with technology enterprises for affordable equipment.
- **Fortify Facilities:** Allocate resources to countryside internet and transport systems to shorten shipment durations, facilitating smooth assimilation into outlets like Tribes India. Partner with communication firms for focused coverage in indigenous zones.
- **Regulatory Adjustments for MSP and Promotion:** Widen MSP inclusion to additional NTFP categories and embed digital commerce stimuli in PMVDY, offering subsidies for SHGs to establish virtual shops.
- **Advance Gender-Targeted Measures:** Formulate cooperatives headed by women with guidance schemes to tackle cultural obstacles, striving for heightened involvement in digital business.

- **Supervise and Assess Outcomes:** Devise indicators for monitoring revenue expansion and empowerment, leveraging platform data for yearly refinements in programs.

Conclusion:

In essence, online commerce functions as a robust enabler for the financial upliftment of tribal women in India, overhauling craft and NTFP distribution through improved entry, just compensation, and competency development. Although issues like technological gaps remain, exemplary frameworks from TRIFED and PMVDY exhibit concrete gains in earnings and self-determination. Through the execution of precise suggestions, India can narrow disparities, promoting comprehensive advancement and empowering indigenous groups for a viable tomorrow.

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