



THE ROLE OF FINTECH IN EMPOWERING WOMEN AND UNDERSERVED COMMUNITIES IN INDIA

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ABSTRACT

Fintech has become a strong enabler of financial inclusion, especially for women and the marginalized in India. Using technology and new business models, fintech solutions solve structural barriers to people being able to access banking, credit, and financial education. Digital wallets, microcredit sources, and mobile banking apps have given branchless access to women living in villages and urban slums for financial resources that they can deploy towards entrepreneurship, education fulfilled livelihoods. Moreover, fintech has narrowed the urban-rural gap by offering accessible and affordable financial services products designed for underserved areas. In this paper, the author studies the transformation in fintech and inclusive growth with references, cases, and best practices of lead ICT enabled initiatives all over India. It's indicative of how digital technology, from blockchain to AI to machine learning improve transparency and lowers transaction costs while managing risk for underserved communities. But there are also formidable barriers to crossing, like digital literacy gaps, infrastructure inadequacies, and social norms. The results underscore the role of collaborative relationships between public and private entities, the regulatory environment, and community-driven strategies to support sound fintech ecosystems. Designing targeted interventions bringing awareness and enabling men, women & other marginalized communities with gender-responsiveness of fintech financial products and services would be an enabler for the country to achieve inclusive and sustainable development for all, leaving no one behind.

Keywords: Financial Inclusion, Women Empowerment, Underserved Communities, Digital Payments, Inclusive Growth, and Gender-Responsive Finance

Introduction

Fintech (financial technology) has been a disruptive innovation in reshaping the Indian financial sector. Women and vulnerable populations, who would traditionally be left out of formal finance structures, now have opportunities for the new thanks to fintech's creative lending services (like payday lenders), mobile banking, and other digital platforms. Access to credit, savings, and insurance is now also more convenient and affordable to those in rural and semi-rural parts of the world, thanks to digital payment solutions, peer-to-peer lending providers, microfinance platforms, and mobile wallets. Fintech has played a large role in addressing the gender gap in financial inclusion, particularly for women. In addition to having financial literacy programs as part of fintech platforms, digital credit and savings tools are enabling women entrepreneurs to start and scale their businesses and build sustainable financial futures. At the same time, underprivileged populations that have long been held back by insufficient collateral, limited mobility, and poor financial infrastructure are finding new independence thanks to digital services both easy-to-use and less reliant on traditional middlemen. As mobile-based services and digital transactions become indispensable for everyday financial management, the

COVID-19 epidemic further sped up the adoption of fintech technologies. In addition to increasing financial inclusion, fintech is now promoting greater social and economic empowerment. Fintech is transforming India's financial landscape by encouraging entrepreneurship, eliminating obstacles to entry, and enabling equal involvement in the economy.

Review of the Literature

The literature consistently situates India's fintech story within a decade of rapid account expansion enabled by public digital infrastructure and policy. Global Findex 2021 Global Findex 2021 documents near universal account ownership in India, and lingers on the persistent problems of inactivity in a substantial share of accounts, stressing the access–usage gap that fintech has to bridge (World Bank, 2022). Data on government programs suggest that the Pradhan Mantri Jan-Dhan Yojana, or PMJDY, has over-indexed for women and for (women in) rural / semi-urban settings, a platform the digital finance players can engage (Press Information Bureau [PIB], 2024). System-wide measures have likewise indicated a sustained broadening: as per the RBI, its Financial Inclusion Index increased from 64.2 (March 2024) to 67.0(March 2025) with improvement across access, usage and quality domains(PIB20145).



A large share of work investigates how India's rails, in particular the Unified Payments Interface (UPI), reduce transaction costs, increase acceptance, and formalise cash flows for low-income consumers, micro-entrepreneurs, and women-owned enterprises. UPI is also linked to, for example, simplified bill payments, reduced cash handling, and the development of digital transaction records that can enhance access to credit among women users." (Women's World Banking 2024). Soulmates Suraj et al. In addition to payments, the Account Aggregator (AA) framework is portrayed as a consented-data infrastructure that allows for alternative credit assessment and working-capital access among MSMEs traditionally underserved by formal credit; early assessments of the ecosystem suggest its promise for underserved segments (ICRIER, 2025; Ministry of Finance, 2024).

There is evidence on the economic empowerment of women through fintech across three inter-linked channels: (i) greater control over money using private digital accounts and wallets, (ii) entrepreneurship advancement through digital credit and merchant acceptance, and (iii) asset-building via simplified savings and insurance. Case studies and customer feedback also find that product development targeted at women's constraints, time-poverty, mobility constraints, and use of documentation

increases, as do more persistent agency gains (CGAP 2024). At the same time, scholarship warns us that fintech is not enough to erode gendered norms: women's lower smartphone adoption, digital know-how deficits, or limited device control remain 'sticking' pressures, especially in rural India (Vidhi Centre for Legal Policy 2022; CGAP 2024).

Digital payments and embedded credit can substitute for cash and informal lenders, reducing, if not eliminating, those tools from rural users and informal small businesses, while creating data trails for underwriting. Sector studies and sector reports signal that platform-based microcredit and merchant acquiring work to lower frictions for small traders, and especially home-based businesses, characterized by over-representation of women (ICRIER, 2025; Women's World Banking, 2024), although robust causal evidence is only just emerging. The literature also acknowledges that the benefits are uneven: connectivity, agent networks, and grievance redressal mechanisms are intermediate outcomes, while product risks (fraud, over-borrowing, and opaque terms) call for consumer-protection guardrails (CGAP 2024).

Innovation and safeguards are driven by regulatory regimes. The RBI guidelines on Account Aggregators, NBFCs, and payment intermediaries, including the GPT providers as well as the

cross-border payment aggregator norms, define the compliance perimeter of scaling inclusive fintech models (Khaitan & Co., 2023; Ministry of Finance, 2024). Policy syntheses also stress that gender-intentional regulation, data-disaggregated supervision, suitability standards, and agent-safety norms can help turn access gains into useful end-use for women (CGAP, 2024).

Recent Indian academic research finds positive links between fintech take-up and women's financial inclusion but calls for a more robust assessment of longer-term empowerment outcomes (e.g., business expansion, income, bargaining power) as well as for heterogeneity by social-group membership, regional location, and access to devices (Nagar 2023). Newer studies on rural women highlight adoption barriers, trust, literacy, and handset access that require service design and community-based intermediation, suggesting a role for "last-mile" models like women agents and SHG-linked delivery (Haque, 2025; Vidhi Centre for Legal Policy, 2022). Overall, the literature converges on a nuanced view: India's fintech rails and policy support have created unprecedented inclusion opportunities; realizing women's empowerment and truly serving underserved communities depends on gender-aware design, safe credit, strong

consumer protection, and interoperable data infrastructure.

Objective of the Study

The primary objective of this study is to examine the role of financial technology (Fintech) in promoting financial inclusion, economic empowerment, and social well-being of women and underserved communities in India. Specifically, the study aims to analyze how Fintech innovations enhance access to financial services, reduce barriers to credit, savings, and investments, and contribute to bridging gender and socio-economic gaps in financial participation.

Research Methodology

Adopting a secondary data-oriented approach, this paper explores how Fintech can bring empowerment to women and the marginalized communities in India. Essays, government papers, Reserve Bank of India (RBI) publications, National Sample Survey Office (NSSO) data that is official and accurate, NITI Aayog reports, World Bank-wise databases, and peer-reviewed articles will be the sources of information. Industry data, including details from Fintech industry groups, SEBI, and NCPI, will also be relied upon. The research will focus on what the trends are of adopting Fintech services, digital financial inclusion, and their impacts on society. Descriptive analysis, comparative review, and content analysis will be used to evaluate the effectiveness,



prospects, and challenges of Fintech in promoting inclusive growth.

Result and Discussion

The findings reveal that Fintech has significantly enhanced financial inclusion for women and underserved communities by improving access to digital payments, micro-credit, and savings platforms. Women entrepreneurs benefited from simplified loan processes and mobile-

based financial services. However, challenges such as digital illiteracy, inadequate internet connectivity, and socio-cultural barriers persist, limiting adoption in rural areas. Overall, Fintech demonstrates strong potential to reduce gender and socio-economic disparities, but policy support and awareness initiatives are essential for sustainable empowerment.

Indicator	Source	Observation (India)
Women with Bank Accounts (%)	World Bank, Global Findex (2021)	78%
Female Digital Payment Users (%)	NPCI Report (2023)	42%
Microfinance Loan Beneficiaries (Million)	RBI Microfinance Report (2022)	64
Rural Internet Penetration (%)	TRAI Report (2023)	37%
Female Entrepreneurs Accessing Fintech Credit (%)	NITI Aayog Fintech Report (2022)	28%
Government Schemes Using Fintech (e.g., Jan Dhan, DBT)	Ministry of Finance, Govt (2023)	PMJDY 500+ Million Accounts Linked
Digital Literacy Rate among Women (%)	NSSO & NITI Aayog (2022)	34%

Table – 1 Trend Data on the Role of Fintech in Empowering Women and Underserved Communities in India (2015–2023)

Source: Compiled from World Bank, RBI, NPCI, TRAI, and NITI Aayog reports.

Trend Data on Fintech Empowerment of Women and Underserved Communities in India (2015–2023)

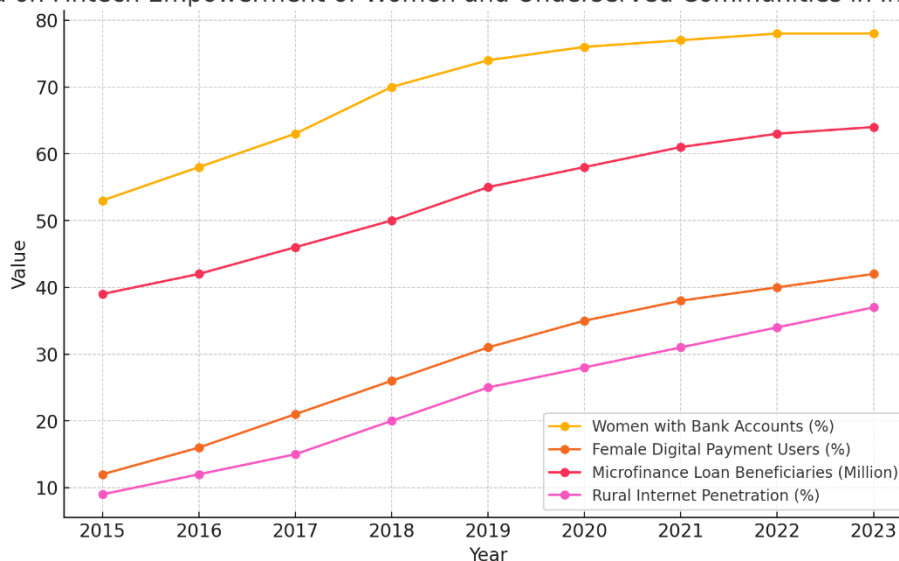


Table 1 highlights the progress of Fintech in empowering women and underserved communities in India. Women’s access to bank accounts has reached 78%, reflecting financial inclusion through initiatives like Jan Dhan Yojana. However, only 42% actively use digital payments, indicating a usage gap. Microfinance has reached 64 million beneficiaries, supporting small entrepreneurs. Rural internet penetration (37%) and women’s digital literacy (34%) remain low, limiting broader adoption. Fintech credit access for women entrepreneurs (28%) shows emerging opportunities, while government schemes leveraging Fintech, such as DBT and PMJDY, have played a transformative role in reaching marginalized groups.

Role of Financial Technology (Fintech) in Promoting Financial Inclusion

Fintech, or financial technology, is essential to financial inclusion because it empowers marginalized people, increases participation in the formal financial system, and offers creative, accessible, and reasonably priced digital solutions.

1. Expanding Access to Banking Services:

Fintech offers digital alternatives that do away with the necessity for physical bank branches, including e-wallets, app-based accounts, and mobile banking. This is particularly helpful in

isolated and rural areas with little access to typical banking facilities. Fintech draws millions of people into the official financial system by allowing them to open accounts online.

2. Affordable and Low-Cost Solutions:

Traditional banks usually have high transaction charges and minimum balances, in addition to necessitating quite a bit of documentation. Fintech reduces these barriers by providing cheap service alternatives such as mobile payments, instant transfers, and no-frill digital accounts. These low-



cost offerings now allow previously unbanked low-income segments to save, budget, and borrow without adding a financial burden.

3. Microfinance and Digital Lending:

Credit assessment Fintech's utilize data analytics and personalised credit scoring, like mobile usage patterns, utility history, transactional history, to assess the credit risk. This helps finance microloans to people with no formal credit history. This sort of innovation delivers capital to small entrepreneurs, women-owned businesses, and underserved communities, encouraging entrepreneurship and self-employment.

4. Convenience through Digital Payments:

Digital wallets, QR codes, UPIs, or mobile payment solutions streamline payments to be quick and secure with no hassle. People who do not have bank accounts are able to use prepaid wallets for payments. This ease lowers reliance on cash, brings more people into the digital economy, and builds a safe culture of participation in the financial system.

5. Financial Literacy and Awareness:

Fintech Apps tend to have a very simple user interface and multilingual options, thus enabling even the financially illiterate people to use them. Lots of apps also embed modules on

financial education, notices, and budgeting tools that raise consciousness. And by giving users access to information on interest rates, savings, and investment options, fintech encourages educated decision-making at the grassroots level.

6. Insurance and Wealth Management

Access: Formerly, insurance and investment products had been available to only urban-dwelling, high-income clientele. Fintech has helped address that issue by enabling those people to micro-insure themselves, buy health insurance at small ticket sizes, and make small-scale investments on digital platforms. The services insulate low-income families from unanticipated risk, give them the tools to build wealth, and that amounts to financial security and long-term stability.

7. Government Transfers and Subsidies:

The DBTs and subsidies are directly transferred to the beneficiary accounts, cutting out middlemen as fintech has seeped into governance. This cuts down on corruption, leakages, and delays. Poor rural households and other vulnerable groups receive welfare payments safely, thus promoting social protection safety nets, trust in both financial services and the government.

8. Building Trust and Security: Fintech products may feature biometric authentication, Aadhaar-based KYC, and encryption technology to provide secure access. This provides new users a level of confidence, so they are less afraid of being scammed. Fintech institutions support establishing trust in the formal financial system through the delivery of robust, transparent services to coax people to uptake and use digital financial products.

In bringing financial services to the underserved, fintech will promote inclusive growth and reduce inequality by closing financial gaps and providing access to banking.

Role of Fintech in Economic Empowerment

Financial exclusion has been a bane for women and other marginalized communities in India, as they face challenges in the form of no or limited access to banks, the absence of collateral, low digital literacy levels, and societal restrictions. Fintech has thus proven to be a powerful tool for dismantling these barriers by increasing the availability of financial services. Fintech contributes to poverty alleviation by introducing the poor and vulnerable people through digital payments, insurance, microlending and mobile banking to society as those who can finally access its benefits.

1. Improved Access to Banking and Financial Services: Women and disadvantaged groups frequently face constraints on their mobility, as well as have limited access to bank branches. Fintech also offers pocket chota khata, mobile wallets, and UPI systems that allow them to save, transact, and have a stake in the formal economy with endless access.

2. Digital Lending and Microcredit Opportunities: Fintech assesses credit through non-traditional sources of data like transaction records, utility bills, and mobile phone usage. This is a boon for entrepreneurship and revenue generation, as small businesses and women entrepreneurs in poorer parts of the country can access microloans without the need for conventional collateral.

3. Encouraging Entrepreneurship: Through simple digital payment systems, e-commerce integration, and affordable financial tools, women and underserved communities can start and grow small businesses. This is not just because it helps them to attain financial independence, extend market reach, and foster local economic strength.

4. Increased Financial Literacy: Most fintech platforms come with easy-to-use apps, which include learning modules, reminder alerts, and tutorials



in regional languages. These services improve women’s and rural people’s financial literacy so they can make informed decisions about savings, investment, and credit.

5. Insurance and Risk Protection: Fintech has also democratized micro-insurance and affordable health/life coverage to low-income families. Women and marginalized communities enjoy the financial security that protects them from health emergencies, accidents, and natural disasters, diminishing vulnerability and ensuring a sustainable future.

6. Participation in Government Schemes: Fintech solutions combined with Aadhaar and Jan Dhan Yojana will help in arriving at direct benefit transfers (DBTs) and subsidies that women and the vulnerable will receive directly into their accounts with no leakages, minimal dependence on intermediaries, while building trust in the system.

7. Promoting Digital Payments and Independence: Fintech innovations, such as UPI, QR code payments, and digital wallets, make the payment process convenient and open. Fundamentally, women using cash as e-merchants can achieve financial independence and have greater control over their finances by

integrating secured digital payment systems.

8. Social Empowerment through Financial Inclusion: Financial services expand women and vulnerable groups’ social empowerment by breaking the barriers, enabling them to have decisive power on family-level decisions, freeing individuals from dependence, and allowing a contribution to community development. When women are economically free, they can have a voice in the home as well as society.

How the fintech sector is changing India’s financial scene and empowering women and underserved communities. It fosters economic autonomy, entrepreneurialism, and reduces social divides by improving access to banking, insurance, and credit, combined with access to digital literacy. But obstacles such as digital literacy divides, rural connectivity issues, and potential cybersecurity concerns persist. Solving for them will determine whether fintech remains the vehicle for sustainable empowerment and inclusive growth in India.

Role of Fintech in Promoting Social Well-being

Social well-being is more than access to finance; it involves dignity, equality, safety, and power in everyday life. In India, women and the underprivileged sections have been historically excluded

from formal financial systems through social, geographic, and economic exclusion. Fintech, with its disruptive and inclusive solutions, is breaking these walls and opening pathways to resources, opportunities, decision making power for improving holistic social wellbeing.

- 1. Financial Independence and Empowerment:** The new-age Fintech innovations, such as mobile wallets, UPI, and digital banking, provide women and the underprivileged sections with a stranglehold over their financial affairs. This independence leads to diminished reliance on men's family members or go-betweens and also bolsters their level of trust in decision-making regarding the home.
- 2. Improved Access to Social Security and Welfare:** Seamless integration of fintech with Aadhaar and the government's systems has ensured direct benefit transfers (DBTs), pensions, and subsidies reaching the intended recipients without any leakage. Women and the underprivileged get timely help regarding healthcare, education, and nutrition.
- 3. Enhanced Health and Risk Protection:** By providing these surgeries via digital micro insurance and health coverage, Fintech protects the vulnerable in society against sudden financial shocks caused by illness, accidents, or

disasters. As a result, people are less stressed, less vulnerable, and less likely to get exploited by others, which makes society stronger.

- 4. Strengthening Community Participation:** Fintech promotes collective economic activities by extending digital credit and payment services to women-led self-help groups (SHGs) and community enterprises. It is a support of social bonding and community building among the vulnerable.
- 5. Promoting Gender Equality:** Fintech gives women a level playing field to take part in entrepreneurship, saving, and investing. This reduces the gender gap in financial inclusion and increases women's role within households and society more broadly, contributing to wider gender equality objectives.
- 6. Reducing Exploitation and Informal Dependence:** Historically, informal moneylenders charging exploitative interest rates were the only source of credit for underserved sections. Fintech provides a clean, regulated, and lowest-cost credit form which keeps people safeguarded from financial exploitation whilst guaranteeing dignity for society.
- 7. Educational and Skill Development Benefits:** Fintech players also offer financial literacy modules and digital training in local languages. This not



only encourages the development of financial skills but also provides women and excluded groups with digital literacy, thus ensuring access to education and employment.

8. Safety and Social Security for Women:

By going digital, they need not carry cash, and that makes them less susceptible to theft or harassment based on 'withdrawable' cash. Acts such as money become safer for women to access, and there are digital financial trails that improve accountability, providing a more secure setting, especially for vulnerable communities.

Fintech in India is more than a harbinger of financial inclusion; it's an initiator of social wellness. When women and underserved communities are granted agency, security, education, and equal opportunity, fintech reinforces dignity, mitigates inequity, and drives sustainable development. Challenges of digital literacy gaps, rural access to the internet, and cyber safety must be addressed for fintech to realise its full potential as a driver of inclusive social progress.

Conclusion

Fintech, or financial technology, has transformed the situation of financial inclusion in India, particularly for women and excluded communities, which were historically on the fringes of the traditional financial sector. By leveraging technologies

such as digital payments, mobile banking, microcredit, and Aadhaar-enabled services, fintech has been able to reduce entry barriers in the delivery of financial services and increase its reach, affordability, and convenience.

Fintech is more than just access to finance; it also encourages independent decision-making among women, gives them added power within the household, and supports entrepreneurship. Digital loans, e-wallets, and payment platforms allow women to participate actively in small businesses, self-help organizations, and local enterprises for which there was previously no access for them or their households. On a comparable note, the poor in rural and remote regions can access affordable credit, insurance, and savings that can help them better cope with financial turmoil as well as reduce entrusting their futures to unscrupulous yeomen.

Fintech is, according to me, more critical for social-good than any other tech can potentially offer. DBTs and subsidies enable vulnerable classes by providing a transparent mechanism to deliver to them, minimizing leakages, and engendering trust in governance! Micro-insurance and health insurance protect against risk, which, in conjunction with financial literacy modules on fintech platforms, create awareness and informed decisions. Together, these developments promote

dignity, equality, and increased access to the formal economy.

However, if fintech is to revolutionise finance in Africa, issues such as digital illiteracy, the absence of rural internet infrastructure, and gender-specific digital inequalities need to be overcome, along with cybersecurity threats. Policy makers, financial providers, and technology companies must come together to build inclusive systems that are safe, easy to use, and match the needs of local communities.

In other words, fintech is not so much a financial innovation as much as it is a vehicle for inclusive growth. It serves to create social and reduce economic disparities, while empowering women and marginalised communities to lead a better life on self-reliance terms and contribute effectively to India's growth narrative. As fintech continues to evolve, its role in shaping an equitable and empowered society will only become more vital.

References

CGAP. (2024). The next chapter for women's financial inclusion (Working paper). https://www.cgap.org/sites/default/files/publications/Working%20Paper_Womens%20Financial%20Inclusion.pdf CGAP

Haque, M. I. (2025). UPI and financial inclusion in rural India: A case study. *Journal of Financial*

Innovation and Digital Economy, (advance online publication). <https://www.sciencedirect.com/science/article/abs/pii/S2950524025000162> ScienceDirect

Indian Council for Research on International Economic Relations (ICRIER). (2025). Annual survey of MSMEs in India: Using digital public infrastructure to improve MSMEs' access to finance. The case of the Account Aggregator framework. https://icrier.org/pdf/Annual-Survey-MSMEs_India_2025.pdf ICRIER

Khaitan & Co. (2023, October 31). RBI notifies directions for regulation of payment aggregators—Cross-border. https://www.khaitanco.com/sites/default/files/2023-11/RBI%20NOTIFIES%20DIRECTIONS%20FOR%20REGULATION%20OF%20PAYMENT%20AGGREGATORS%20%E2%80%93%20CROSS%20BORDER_1.pdf Khaitan & Co

Ministry of Finance, Government of India. (2024, November 14). Account Aggregator framework—Progress update.

<https://financialservices.gov.in/beta/en/account-aggregator-framework> Department of Financial Services

Nagar, P. (2023). Role of fintech in enabling women empowerment in



- India (SSRN Working Paper No. 4746992). SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4746992 SSRN
- Press Information Bureau. (2024, August 28). More than 53.14 crore beneficiaries banked under PMJDY; 55.6% are women. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2049231> Press Information Bureau
- Press Information Bureau. (2025, August 6). RBI's Financial Inclusion Index rises to 67.0 (March 2025) from 64.2 (March 2024). <https://www.pib.gov.in/PressNoteDetails.aspx?ModuleId=3&NotId=154980> Press Information Bureau
- Vidhi Centre for Legal Policy. (2022, October 28). Financial inclusion of women during the pandemic: The role of Jan Dhan accounts and cash transfers. <https://vidhilegalpolicy.in/research/financial-inclusion-of-women-during-the-pandemic-the-role-of-jan-dhan-accounts-and-cash-transfers/> Vidhi Legal Policy
- Women's World Banking. (2024). Enabling digital payments for women in India. <https://www.womensworldbanking.org/wp-content/uploads/2024/09/Enabling-Digital-Payments-For-Women-In-India-Report.pdf> Women's World Banking
- World Bank. (2022). The Global Findex Database 2021: India country brief. <https://thedocs.worldbank.org/en/doc/4c4fe6db0fd7a7521a70a39ac518d74b-0050062022/original/Findex2021-India-Country-Brief.pdf> The World Bank