



From Potential to Prosperity

Credit Plus Solutions for
Women-Led Enterprises

April 2026

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Foreword

At UMED-Maharashtra State Rural Livelihood Mission (MSRLM), our objective is to enable women's economic empowerment through social mobilization, financial inclusion, sustainable livelihoods, and improved access to entitlements. We strive to strengthen self-managed, financially sustainable community institutions led by rural women and to create pathways for their social and economic advancement.

Our work focuses on expanding women's access to business development workshop and continuously innovating channels to deliver these services in ways that reflect rural women's business realities. While access to credit remains essential, it must be complemented by strong non-financial business capabilities.

In partnership with Women's World Banking, we launched the EmpowerHer initiative that, in many ways, mirrored a mini management course for rural women entrepreneurs, helping them gain critical knowledge in bookkeeping, business formalization, sound financial behaviour, and digital marketing for market expansion.

The outcomes have been encouraging. Women demonstrated strong adoption of digital business tools, including bookkeeping applications, and began using marketing platforms more effectively to reach customers beyond their local markets. We saw a surge in entrepreneurs taking part in the annual and regional SARAS melas (trade fairs), we organize, which provide women entrepreneurs greater exposure and access to new buyers. Simple, practical interventions such as the "Five Steps to 5x Growth" trainings and short knowledge-sharing videos, delivered through messaging and social media platforms, made continuous learning and reinforcements easy and engaging.

This structured capacity-building model is both scalable and replicable. It offers a roadmap for other State Rural Livelihood Missions and ecosystem partners to strengthen women entrepreneurs' business acumen and enable the productive use of credit. Together, such initiatives will help realize the vision of a *Viksit Bharat* (A Developed India), where women are not only economic participants but also drivers of local economies, job creation, and community upliftment.

CEO
UMED- Maharashtra State Rural Livelihoods Mission

Acknowledgment

We would like to express our sincere gratitude to all who contributed to the successful completion of this initiative. Our heartfelt thanks go to UMED-Maharashtra State Rural Livelihood Mission for partnering with us to advance women's economic empowerment and entrepreneurship.

We also extend our appreciation to Community Resource Persons (CRPs) and the women entrepreneurs who took part in the initiative for their support in executing the project. Their willingness to share their experiences and perspectives has enhanced our understanding of their needs, aspirations, and concerns, driving solutions throughout all stages of the program. The hard work, dedication, and empathy of these women continue to inspire us.

Lastly, we acknowledge the London Stock Exchange Group (LSEG) for its strong commitment and support that made this initiative possible and we could enhance business and financial management skills of women, aiding in their business growth and financial journeys.



Executive summary

Women-led nano and micro enterprises in rural India are crucial levers of inclusive economic growth. These women entrepreneurs – often embedded in Self-Help Groups (SHG) – however, lack formal business management experience and face other barriers such as low digital and financial literacy, weak market linkages, and constrained access to formal systems. This limits their ability to effectively utilize credit. This is an opportunity for financial institutions and policymakers to offer women structured non-financial support.

Women's World Banking partnered with UMED, the Maharashtra State Rural Livelihoods Mission, to design and implement the EmpowerHer program across four districts in Maharashtra. At the core of the program was the "1X to 5X Business Growth" framework, which translated enterprise growth into five actionable steps: goal setting and credit discipline, business formalization, bookkeeping, digital payments, and market access. It aimed to strengthen business capabilities, financial management, digital readiness, and market access for over 100,000 women entrepreneurs.

The program was delivered through Community Resource Persons (CRP) embedded within the SHG ecosystem, leveraging trusted local networks to reinforce behavioral change. It was implemented in two phases, with pilot districts followed by scale-up. Its effectiveness was assessed through two rounds of surveys covering 883 women entrepreneurs in Wave I (September 2024) and 894 in Wave II (March 2025), complemented by qualitative insights.

- Clear shift toward more structured bookkeeping
 - Formal non-digital practices increased from 21.4% to 27%
 - Informal or no bookkeeping declined from 36% to 24%
 - Digital bookkeeping adoption doubled from 2.5% to 5%, indicating early digital uptake
- Market access expansion beyond hyper-local markets
 - Businesses selling to other towns or online increased from 1.8% to 10.9%
 - Enterprises limited to friends and family declined from 56.1% to 43.4%
 - Increased use of exhibitions and digital platforms
 - Platforms like SARAS fairs improved visibility, buyer access, and brand recognition
- There is a gradual shift towards formal registrations
 - There is a strong link between bookkeeping and formalization
 - Financial discipline is a general precursor to engaging with formal systems

The EmpowerHer program demonstrates that behavioral changes in financial management, market engagement, and business planning will lead to improved confidence and capability among women entrepreneurs. Financial services providers, State Rural Livelihoods Missions, and organizations supporting women entrepreneurs and collectives should offer structured and integrated approaches that combine access to finance with market linkages, capability building, and sustained institutional support. Key recommendations:

- **Build peer-led ecosystems:** Leverage women mentors as digital and business champions to drive trust-based learning and sustained adoption.
- **Simplify formalization processes:** Provide clear, localized support and link compliance to tangible benefits such as credit and market access.
- **Design inclusive digital solutions:** Develop low-literacy, user-friendly tools tailored to local contexts and device constraints.
- **Strengthen market linkages:** Expand access to exhibitions, digital platforms, and buyer networks to enable scale beyond local markets.
- **Enable continuous learning:** Institutionalize refresher training, peer groups, and digital nudges to reinforce skills and behaviors.
- **Adopt data-driven monitoring:** Use simple tools and dashboards to track progress and adapt interventions in real time.
- **Tailor support by segment:** Align NFS interventions to enterprise stage and sector for greater relevance and impact.
- **Foster public-private innovation:** Build partnerships to co-create and scale gender-responsive digital and financial solutions.

From 19.2 million today (ASUSE, 2023-24) to an estimated 45 million by 2047, women-led enterprises are set to become a central pillar of India's Viksit Bharat growth vision. Unlocking this potential requires more than access to finance. Women entrepreneurs benefit when finance is combined with capability building, digital tools, and stronger market linkages.

State of women entrepreneurs in India



Women are emerging as powerful, yet often understated, drivers of India's entrepreneurial growth. As many step into entrepreneurship for the first time without formal business training, their needs go well beyond access to affordable credit. They require structured support in business management, financial planning, and market engagement to effectively identify and pursue growth opportunities.

Scale, resilience, and untapped growth potential

India's entrepreneurial landscape is anchored by a vast base of nano and micro enterprises (NMEs), estimated at 73.3 million¹. Women own approximately 26.2% of these enterprises, translating to 19.2 million businesses. Within this segment, nearly 9 million are formally registered under Udyam, reflecting gradual but important progress toward formalization. Women-led enterprises span a wide spectrum, from home-based production units to *kirana* (grocery) stores and service enterprises, playing a vital role in sustaining household incomes and local economies.

Notably, women's entrepreneurship is more prevalent in rural India, where women-owned enterprises account for 22.24% of all enterprises, compared to 18.42% in urban areas². This underscores the centrality of women's economic participation in rural growth and highlights an important opportunity to strengthen local value chains through targeted support.

A landscape defined by resilience, yet constrained growth

Despite their scale and significance, the current state of women's entrepreneurship is characterized by low productivity and limited growth trajectories. Much of women's enterprise activity remains concentrated in subsistence-level businesses, often driven by necessity rather than opportunity.

While rising rates of self-employment among women are frequently interpreted as a positive trend, the quality of this employment presents a more complex picture. Recent data indicates that the average real monthly earnings of self-employed women remain lower than those of women engaged in casual labor, and significantly below those in salaried employment. This signals that a large proportion of women-led enterprises are yet to transition into sustainable and growth-oriented businesses.

These enterprises are often informal, small-in-scale, and highly vulnerable to market fluctuations. Their persistence reflects resilience and adaptability but also points to structural constraints that limit their ability to scale³.

Structural barriers shaping women's enterprise growth

Women entrepreneurs operate within a set of interconnected constraints that influence business outcomes:

- **Limited access to formal finance** due to lack of collateral, documentation, and credit histories.
- **High time poverty**, with women balancing enterprise activities alongside unpaid care and household responsibilities

¹ ASUSE 2021-22 survey: India - Annual Survey of Unincorporated Sector Enterprises (ASUSE) of 2021-2022

² Ministry of MSME, 2018

³ Non-Financial Services: The Key to Unlocking the Growth Potential of Women-led Small and Medium Enterprises for Banks, International Finance Corporation, 2020: <https://www.ifc.org/content/dam/ifc/doc/mgmt-pub/ifc-fmo-final-publication.pdf>

- **Restricted access to networks and mentorship**, limiting exposure to new markets and business practices
- **Low digital and financial footprints**, constraining participation in formal financial systems
- **Concentration in low-capital, low-return sectors**. Globally, nearly 70% of women-led enterprises are concentrated in wholesale, retail, and service sectors, which tend to be less capital-intensive and generate lower returns compared to male-dominated sectors such as manufacturing or technology⁴.

Importantly, these constraints do not reflect a lack of capability or ambition. Rather, they point to gaps in the ecosystem, particularly in access to relevant non-financial support and market-enabling infrastructure.

The credit opportunity and the need for ‘credit plus’

The demand for finance among women entrepreneurs is both significant and underserved. An estimated 3.85 million women-led NMEs currently seek credit, representing a market opportunity of approximately ₹75,028 crore (USD 9.0 billion) across ticket sizes, including ₹12,388 crore (USD 1.49 billion) in the ₹5–20 lakh segment (US\$6,000–24,000) alone.

Over 100 million women across 9.1 million Self-Help Groups have accessed capitalization support of ₹48,290 crore (US\$ 5.22 billion). Women accounted for 44.6% of total loan disbursements under MUDRA between 2019 and 2024. However, access to credit alone has not translated into sustained enterprise growth. Approximately 35% of women-owned MSMEs continue to face a credit gap⁶, while 41% cite market competition as a key constraint.

Although mature, many women entrepreneurs continue to operate from home.

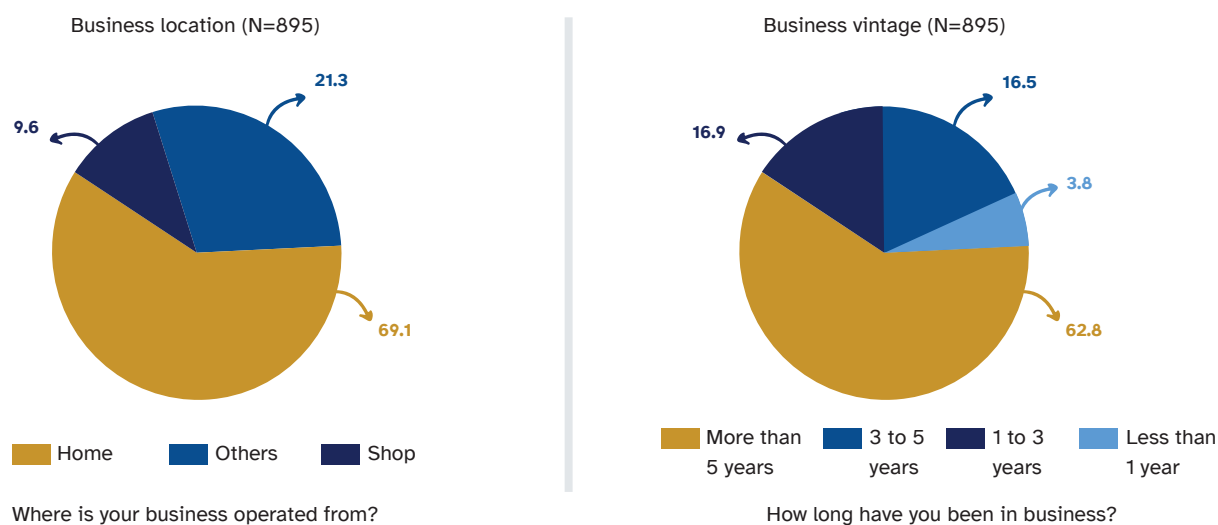


Figure I: Location and duration of women’s businesses

⁴ Global Entrepreneurship Monitor 2018/2019 Women’s Report, 2019: <https://www.gemconsortium.org/file/open?fileId=50405>

⁵ Ministry of Finance, Department of Financial Services, 2025: https://sansad.in/getFile/loksabhaquestions/annex/184/AU53_YAoYZN.pdf?source=pqals

⁶ Understanding the Indian MSME sector, SIDBI, 2025: https://www.sidbi.in/uploads/Understanding_Indian_MSME_sector_Progress_and_Challenges_13_05_25_Final.pdf

Women’s businesses continue to be small.

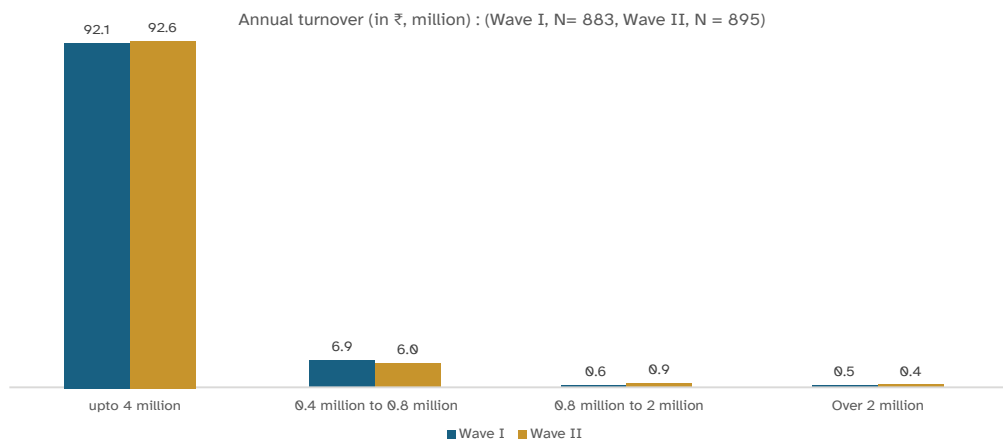


Figure II: Annual turnover of women’s businesses

Ultimately, these interventions help women graduate in their borrowing journeys and enable them to become more mature entrepreneurs. This is why we piloted UMED’s EmpowerHer solution to enhance women’s productive use of credit.

To solve this challenge for rural women entrepreneurs, the UMED-Maharashtra State Rural Livelihoods Mission (MSRLM) and Women’s World Banking (WWB) launched the UMED EmpowerHer project to strengthen financial and business development capabilities of 100,000 SHG women across the state.

To test the effectiveness of the solution, a survey was carried out with 883 women entrepreneurs in the first round (Wave I) and 894 in the second round (Wave II) across four districts – Wardha, Sindhudurg, Nashik, and Ratnagiri. The first survey took place in September 2024 and the second in March 2025.

Women who received Non-Financial Services (NFS) support were selected keeping in mind the diversity in location and business stage. In the first round, the program was active only in Sindhudurg and Nashik, which served as pilot districts, while Ratnagiri and Wardha were non-pilot districts and did not receive any intervention. By the second round, the program had expanded to all four districts.

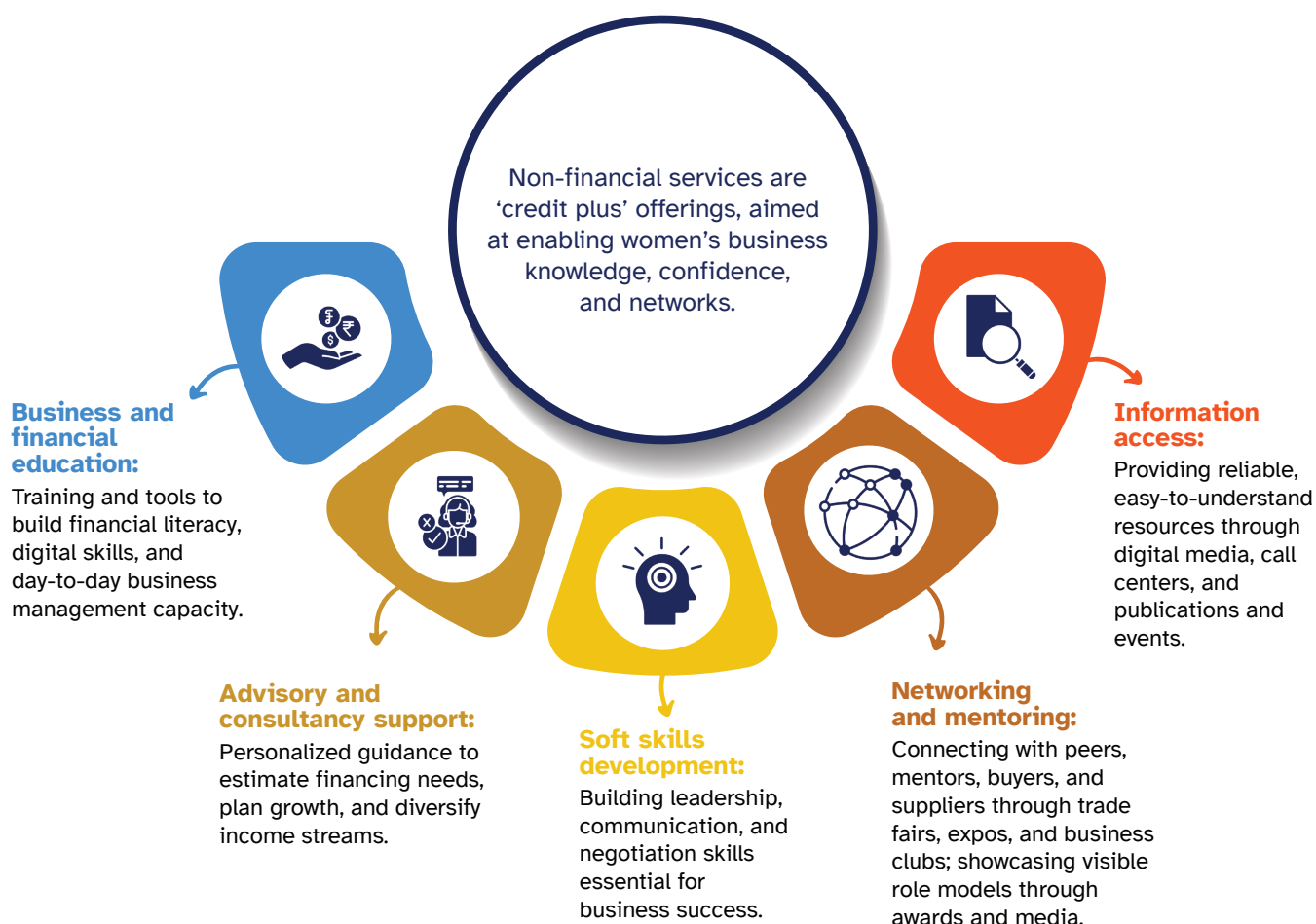
The study compared data from both rounds to understand changes in women entrepreneurs’ business practices, formalization, and access to markets. In the next sections, we elaborate on what non-financial services are, our intervention, and the insights the program revealed.

How Non-Financial Services improve women's business outcomes

Non-Financial Services (NFS), often referred to as “credit-plus” services, are complementary interventions that build the capabilities of women entrepreneurs alongside access to finance. By strengthening business management, financial literacy, confidence, and market linkages, NFS enable women-led nano and micro enterprises to grow more sustainably.

Many women entrepreneurs are first-time business owners with limited exposure to core practices such as bookkeeping, pricing, inventory management, and customer acquisition. In the absence of such support, enterprises often remain small and informal, constraining their ability to effectively utilize credit and scale.

While several national and state initiatives focus on credit and skilling, ecosystem support remains uneven. Market access, a critical driver of growth, continues to be under-addressed, with only 18% of central schemes and 7% of state schemes explicitly focusing on it. Strengthening NFS can help bridge these gaps by enabling women to manage enterprises more effectively, expand into new markets, and engage with formal systems, translating financial inclusion into sustained income growth and economic resilience.



EmpowerHer: A partnership for inclusive enterprise growth in Maharashtra

Maharashtra offered a strong foundation for advancing women’s entrepreneurship, anchored in a robust Self-Help Group (SHG) ecosystem. As of March 2024, the state had over 1.63 million SHGs, nearly 85% of which were women-led, reflecting the scale and depth of women’s collective economic participation.

Despite its leadership in economic growth and financial inclusion, gaps remained in translating this momentum into equitable entrepreneurial outcomes. These challenges were most evident among women running micro and small enterprises, which often remained informal, under-capitalized, and constrained by limited access to structured financial tools, business training, and scalable market linkages.

This context underscored a clear opportunity. Strengthening women’s enterprise capabilities could improve productivity, stabilize incomes, and support a shift from subsistence activities to growth-oriented businesses.

In response, Women’s World Banking partnered with UMED, the Maharashtra State Rural Livelihoods Mission (M-SRLM), to design and implement the EmpowerHer program. The initiative focused on building business management skills, financial capability, and digital readiness among over 100,000 women entrepreneurs from the SHG ecosystem across rural Maharashtra.

The program was grounded in a key insight: while SHG members had developed financial discipline through savings and internal lending, additional support was needed to translate these capabilities into enterprise growth, stronger credit profiles, and deeper engagement with formal financial systems. The EmpowerHer program was implemented in two phases, beginning with a pilot in Nashik and Sindhudurg, and subsequently expanding to Wardha and Ratnagiri based on early learnings, while continuing in the initial pilot districts.

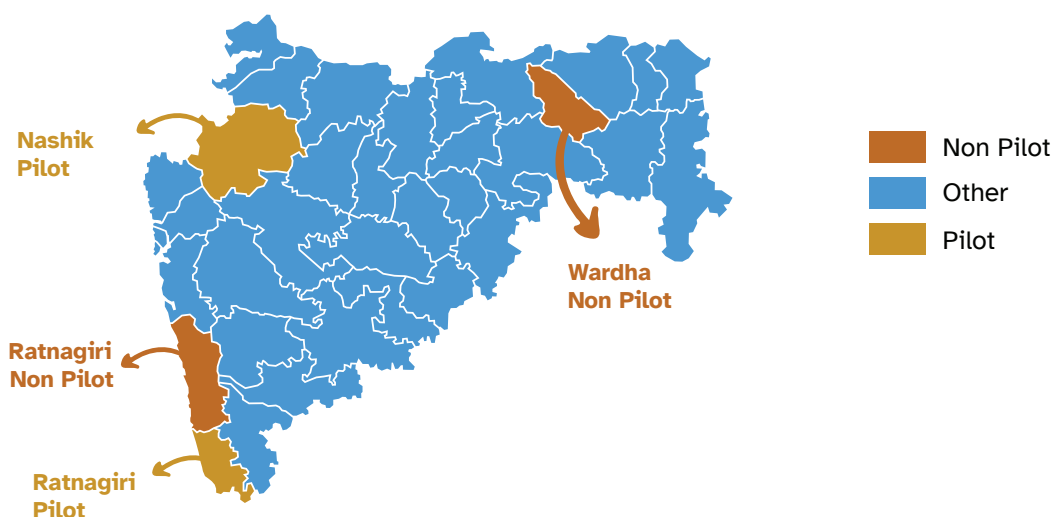
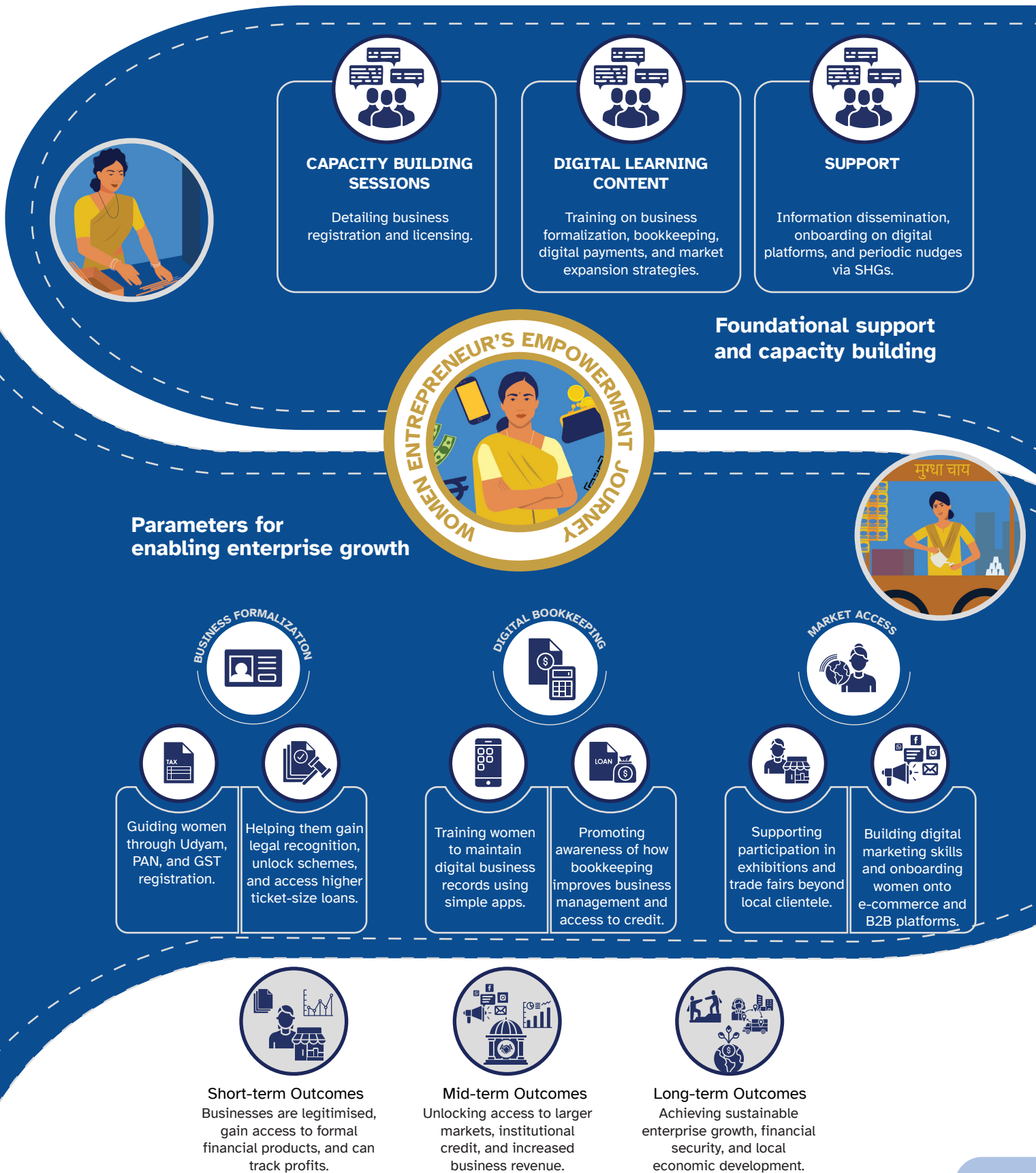


Figure III: Maharashtra – focus state for the business and financial management intervention

¹⁵ Directorate of Economics and Statistics, Government of Maharashtra, 2024.

The EmpowerHer solution elements

Theory of change and solution:



Designing a program grounded in women’s realities

The business management, financial capability, and digital readiness program was designed with a strong focus on simplicity, relatability, and practical relevance. Women entrepreneurs participating in SHGs often manage businesses alongside significant household responsibilities. Training models therefore needed to adapt to their realities rather than expecting women to adapt to traditional classroom formats.

The program adopted a women-centered design approach, ensuring that content was:

- practical and immediately applicable to everyday business activities
- delivered in simple, easy-to-understand formats
- accessible through multiple channels, including digital platforms
- structured to reinforce learning over time

A key design principle was ensuring that training did not remain limited to workshops. Instead, the program transformed women’s mobile phones into ongoing learning tools, delivering bite-sized content through videos, images, and short modules that could be easily shared via WhatsApp groups and accessed through M-SRLM’s YouTube channels.

This approach allowed women entrepreneurs to learn at their own pace, revisit content when needed, and share knowledge within their peer networks.

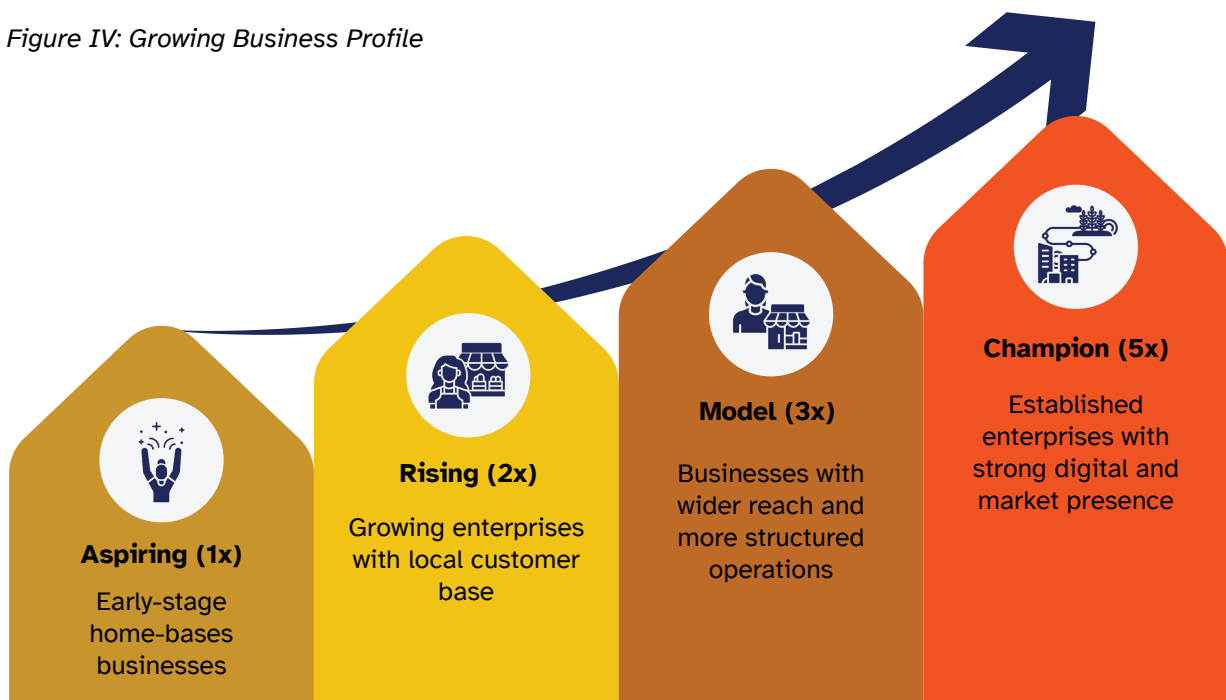
A structured framework for business growth: From 1X to 5X

To make business growth concepts tangible and aspirational, the program introduced a simple but powerful framework called “1X to 5X Business Growth.”

The model helps women visualize how their enterprises can grow step by step, moving from very small household businesses to more structured and profitable ventures.

Each stage reflects the progressive strengthening of business practices as enterprises grow, including increased time dedicated to the business, more structured bookkeeping, greater adoption of digital payments, formalization through business registrations, and expansion into wider markets. This staged approach helped women entrepreneurs clearly understand what steps are required to move their businesses from one level to the next, making enterprise growth feel achievable rather than abstract.

Figure IV: Growing Business Profile



Creating sustainable entrepreneurial trajectories for women: Five steps to 5x business growth

The financial and business development program for women microentrepreneurs charts out five clear and memorable steps that aim to instil confidence, enhance visibility, and open pathways to finance, markets, and long-term sustainability.



Goal setting:

- Set and track clear business goals.
- Use simple tools (e.g., goal cards) to build discipline and focus.
- Strengthen positive credit behaviour.



Business formalization:

- Register your enterprise (Udyam/Udyam Assist, PAN, and GST).
- Benefits: Builds trust and legal identity, unlocks government schemes, and enables higher ticket-size loans.



Bookkeeping:

- Maintain financial records to track income, expenses, and profit.
- Use registers or digital apps (e.g., Mera Bills⁷).
- Become credit-ready with accurate data.



Digital payments:

- Adopt UPI and digital payment platforms.
- Ensures faster, safer transactions and improves customer convenience.
- Builds a digital footprint for lenders.



Marketing access and e-commerce:

- Workshops cover marketing, promotion, and digital commerce.
- Learn to grow visibility and improve sales.
- Leverage platforms (WhatsApp Business, Meesho, Amazon, Flipkart) to reach beyond hyper-local networks.
- The ultimate goal is to expand income streams.

Adapting the 1X–5X framework for retail, manufacturing, and services enterprises

Field engagements with women entrepreneurs across Maharashtra revealed that the 1X–5X business growth framework needed to reflect the diversity of enterprises women operate. Three primary segments emerged, namely manufacturing, services, and retail, each with distinct operational realities and growth needs.

While there were common capability requirements across these segments, important differences shaped how women engaged with specific business practices. For instance, manufacturing enterprises placed greater emphasis on localized market linkages at the village level, with relatively limited need for broader promotional activities. In contrast, women in services and retail required more active marketing and customer outreach to sustain and grow their businesses.

Similarly, the relevance and feasibility of bookkeeping varied across segments. Women in manufacturing and services found structured bookkeeping more applicable to their operations. However, for retail entrepreneurs managing high-frequency, low-value transactions, maintaining detailed records or using digital applications for every transaction proved more challenging.

These insights informed the refinement of the 1X–5X model, ensuring that it incorporated tailored learning modules and practical guidance relevant to manufacturing, services, and retail enterprises, while retaining a unified framework for business growth.

Delivery through trusted community networks

Capability building was most effective when delivered through trusted, proximate, and community-based channels. The program was delivered through Community Resource Persons (CRPs) embedded within the SHG ecosystem. This locally anchored delivery model ensured learning was contextual and relatable and that behavioural nudges were reinforced, ultimately making women more confident in adopting new practices.

⁷ Merabills: It is a free, easy-to-use mobile application that supports women business owners to digitize sales, track cash flow, manage inventory, and gain real-time insights for growth. The app is available in 11 different languages, which drives grassroots adoption, particularly among first-time digital users.

Measuring change: Impact of the EmpowerHer intervention

Under the EmpowerHer program, we conducted a study to assess the effectiveness of the 1X to 5X intervention for women entrepreneurs (WEs) implemented across Nashik, Sindhudurg, Wardha, and Ratnagiri in 2024. The program was initially launched as a pilot in Nashik and Sindhudurg and was subsequently scaled to additional geographies based on early feedback and observed outcomes.

This study employed a mixed-method quasi-experimental design to assess the impact of the intervention. The following section outlines the key findings of the study.

Profile of women entrepreneurs in Maharashtra

Women entrepreneurs in the EmpowerHer program represent a diverse cross-section of rural and semi-urban Maharashtra, with distinct socio-economic and business characteristics.

- **Demographics and Education:** Over half of the women are aged 36–45, balancing household responsibilities with income aspirations. While more than 80% have completed secondary education, only about 15% hold college degrees, which shapes their confidence in using digital tools and navigating formal processes.
- **Livelihood Base:** Households are primarily agrarian, with 29% dependent on agriculture, followed by business (26%) and wage/salaried work (20%), indicating a gradual shift toward diversified income sources.
- **Enterprise Profile:** Most businesses are home-based, spanning services (30%+), manufacturing (23%), and retail/trading (23%). Enterprises often operate with support from SHG networks and reflect a mix of family-run, group-based, and employment-generating models. Many women manage multiple or seasonal income streams, enhancing livelihood resilience.
- **Business Maturity:** Although over 60% of enterprises have been operating for more than five years, most report annual turnovers below ₹4 lakh (≈US\$4,800), indicating limited scale despite experience. At the same time, nearly one-third are relatively new businesses, highlighting a steady influx of entrants and growing aspirations for self-employment, particularly in regions with limited formal job opportunities.
- **Credit Access:** Access to finance is heavily reliant on SHG-based loans (70%), with only about 35% accessing formal credit, such as MUDRA, highlighting gaps in financial inclusion and access to larger growth capital.

Profiles of the women entrepreneurs we worked with:



69% operate their business from home



Most are married



₹29,031
Average monthly per capita income = US\$ 327



Over **50%** are between 36-45 years



80%+ completed secondary school
Only **15%** completed college

Rural and semi-urban women in Maharashtra are motivated, resilient, and ready for digital and business capability growth.

The effectiveness of the EmpowerHer solution



Bookkeeping practices

Accurate and timely bookkeeping is essential to improve the financial health of a business. Particularly for women-led small enterprises, basic bookkeeping can help formalize operations, build financial credibility, and open pathways to formal growth capital.

Women entrepreneurs were trained to use Mera Bills through group sessions, peer demonstrations within SHGs, and one-on-one handholding from CRPs. The knowledge was reinforced through simple nudges via user videos shared over WhatsApp.

Increased awareness about digital bookkeeping solutions

The study found a statistically significant increase (significant at 10% level) in awareness about bookkeeping software among women entrepreneurs. Approximately 33% of the respondents reported familiarity with digital bookkeeping app, indicating a growing reach of this tool among the business owners.

There is a gradual shift from informal to more structured bookkeeping practices over time.

Almost 40% of women used a combination of informal and formal methods of record keeping.

Convenience continues to drive recordkeeping behaviors

A segment of women (24%) continued to prefer their original bookkeeping methods, while 33% reverted to less formal practices – likely due to usability challenges with the digital bookkeeping applications introduced under the project, limited perceived value, or behavioral responses such as the Hawthorne effect, where individuals temporarily change their behavior due to increased attention during the study.

Frequency of bookkeeping showed limited change between survey waves, with declines in weekly and monthly updates and a rise in “as-needed” entries, indicating that convenience continues to drive recordkeeping behaviors. The most cited barriers to maintaining records were lack of time (52.5%) and lack of knowledge or training (42.3%), followed by the complexity of bookkeeping (15.2%) and low perceived benefits (8.8%).

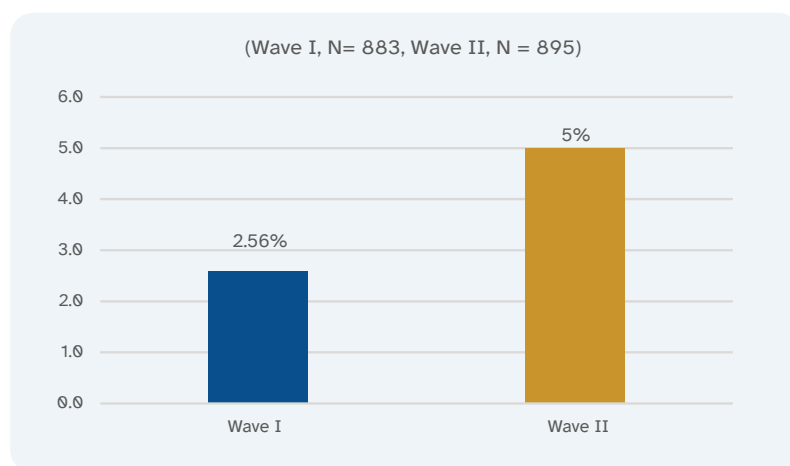


Figure V: Digital bookkeeping adoption



Evolution in bookkeeping methods showed a gradual shift towards formalization. Among women who began with no or informal methods, 70% shifted to either hybrid or formal practices, though most stopped short of digital adoption. Of those starting with semi-formal methods, 34.73% progressed to more formal or digital approaches. A share of women (24%), however, preferred their original methods of bookkeeping, and 33% reverted to less formal methods – possibly due to challenges in usage, limited perceived value, or the Hawthorne¹⁶ effect.

Frequency of bookkeeping showed limited change between survey waves, with declines in weekly and monthly updates and a rise in “as-needed” entries, indicating that convenience continues to drive record-keeping behaviors. The most cited barriers to maintaining records were lack of time (52.5%) and lack of knowledge or training (42.3%), followed by the complexity of bookkeeping (15.2%) and low perceived benefits (8.8%).

App adoption patterns also varied across sectors. Women in agriculture and allied activities were most likely to use informal methods (40.43%), followed by semi-formal recordkeeping (31.91%). Those in manufacturing were more inclined toward semi-formal (43.14%) and formal non-digital (30.88%) methods. Service-based businesses showed a relatively even distribution across informal, semi-formal, and formal non-digital practices, while retail and trading businesses leaned toward semi-formal approaches.

Despite these challenges, the link between bookkeeping and business formalization is clear: women who maintained records were significantly more likely to have formalized their enterprises (65.7%) than those who did not (54.76%).

These findings suggest that digital bookkeeping adoption is most effective when approached as a staged journey – from informal to semi-formal, then to formal non-digital, and finally to digital – supported by hands-on workshops, user-friendly design, and clear linkages to tangible benefits such as credit and market access.

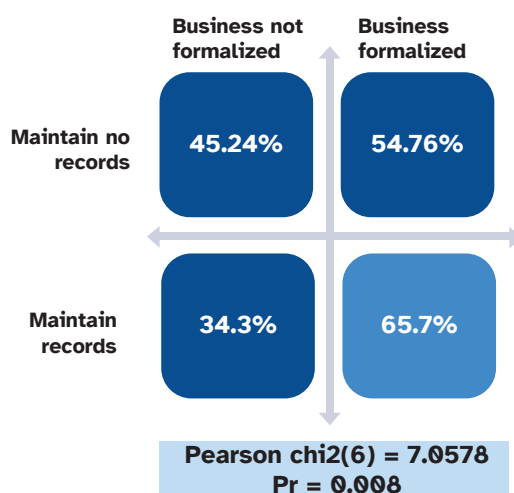


Figure VI: Impact of record-keeping on business formalization

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Traditionally, we maintained a physical register only for bookkeeping. We did not take it very seriously. However, since using Mera Bills, we can see our expenses and savings more clearly. It is an effective tool in gauging our profits.

- An entrepreneur from Sindhudurg running an optometry center

When work used to be pressuring, I never got the time to open my book. With Mera Bills, whenever I open my phone or something crosses my mind, I immediately log it in the app.

- An entrepreneur from Ratnagiri running a tailoring business

¹⁶ The Hawthorne effect refers to a phenomenon in which individuals temporarily modify their behavior in response to the attention they receive from researchers or program staff, rather than due to the intervention itself (Sedgwick and Greenwood, 2015). In this context, the early adoption of digital bookkeeping may have been driven more by heightened engagement and perceived monitoring during the intervention phase than by intrinsic motivation or capacity. These findings underscore the importance of designing behavior change interventions that extend beyond initial nudges and the need for ongoing support, ensuring that new practices are sustained even in the absence of external support.



Business formalization

Under the EmpowerHer program, women entrepreneurs were encouraged to formalize their businesses and were provided guidance on key regulatory requirements as they grow. This included emphasizing the importance of obtaining a PAN card to establish business identity, access higher-value loans, and enable formal financial transactions, as well as securing Shop Act licenses for legal recognition and as a foundation for further registrations such as Goods and Services Tax (GST) and Food Safety and Standards Authority of India (FSSAI). Women were also supported in registering on the Udyam Assist Platform (UAP) to obtain their Udyam Registration Number (URN) and Udyam Assist Certificate (UAC), which are critical for MSME recognition, access to formal credit, and integration into digital systems; this has been a key priority for M-SRLM, supported through awareness camps and training led by Community Resource Persons (CRPs). Additionally, the program highlighted the importance of GST registration and Income Tax Return (ITR) compliance in enhancing business credibility, improving access to formal financial services, and enabling expansion into wider markets

“

As a Community Resource Person (CRP), I encourage women who have set up their new businesses to register for Udyam registration and guide them to visit the nearest centre. I tell them that for any loans and financial behaviour, this registration is a must.

- A CRP from Wardha district

Business formalization: A slow but foundational shift

Business formalization emerged as a critical yet gradual outcome of the intervention. While the share of women entrepreneurs with formal registrations increased modestly from 60.7% in Wave I to 63.6% in Wave II, the change was not statistically significant, indicating that formalization remains a complex and evolving process. Despite targeted efforts through Community Resource Persons to simplify formalization, persistent barriers remain. These include limited digital literacy, perceived regulatory complexity, and unclear short-term benefits, particularly for micro-scale enterprises. In some cases, registrations were externally facilitated without full understanding, limiting their effective use.

There is a strong linkage between bookkeeping and formalization.

Among women maintaining financial records, 65.7% were formalized, compared to 54.8% among those without records. This underscores that record-keeping acts as a foundational capability, enabling women to build financial discipline, confidence, and readiness to engage with formal systems such as Udyam registration, PAN, or GST.

At the same time, there are emerging signals of aspiration-led formalization. Women in manufacturing, in particular, demonstrated stronger intent to obtain registrations such as Udyam and food licenses, recognizing their importance for accessing digital marketplaces and expanding beyond local markets. Formalization, in these cases, is increasingly viewed as a pathway to improved visibility, credibility, and customer trust.



Overall, the findings highlight that formalization is not a one-time compliance step but a progressive journey. Strengthening this pathway will require integrated support that combines financial capability, simplified compliance processes, and clear linkages to market access opportunities, enabling women entrepreneurs to translate formal status into tangible business growth.

4 out of 10 women entrepreneurs lack key documentation



Reasons:

- Bureaucratic complexity
- Missing or incomplete info
- Lack of awareness
- Deprioritized in business operations

“

I learned about e-commerce platforms and wanted to list my products on Amazon. In the workshops, I understood that GST registration is mandatory for onboarding on such platforms. So, I visited a Chartered Accountant, who helped me complete my GST and ITR registration.

- A woman entrepreneur from Wardha district, running a food business





Access to markets

While capital helps start a business, market access helps it expand; it turns credit into income and builds sustainable businesses. However, women face unique barriers in accessing markets – their businesses run closer to home and, because they are first-time entrepreneurs with no formal training, they have limited networks and often rely on middlemen for sales. Without buyers, visibility, or access to digital platforms, many women-led businesses risk remaining small and disconnected from demand. To address market access challenges, the EmpowerHer program introduced strategic marketing practices, encouraging women to leverage both offline and digital platforms, and helping them move beyond hyper-local networks and tap into newer, wider customer bases.

To strengthen women entrepreneurs’ understanding of market linkages, dedicated workshops were conducted on marketing and business visibility, highlighting the importance of branding in building customer trust and recognition, and the role of effective packaging in enhancing product appeal. Women were guided on leveraging social media platforms such as WhatsApp Business, Facebook, Instagram, and digital catalogues to promote their products, engage with customers, and expand their business presence online. The workshops also introduced participants to e-commerce platforms such as Meesho, Flipkart, and Amazon, with practical guidance on onboarding processes and how digital marketplaces can help women entrepreneurs diversify sales channels and access wider customer bases.

Gradual shift from hyper-local to expanded customer base

Women entrepreneurs demonstrated a clear transition beyond hyper-local markets. Businesses limited to friends, family, and neighbors declined from 56.1% in Wave I to 43.4% in Wave II, while those expanding to other towns or online platforms increased from 1.8% to 10.9%. Enterprises with both online and offline presence also grew from 0.7% to 4.1%.

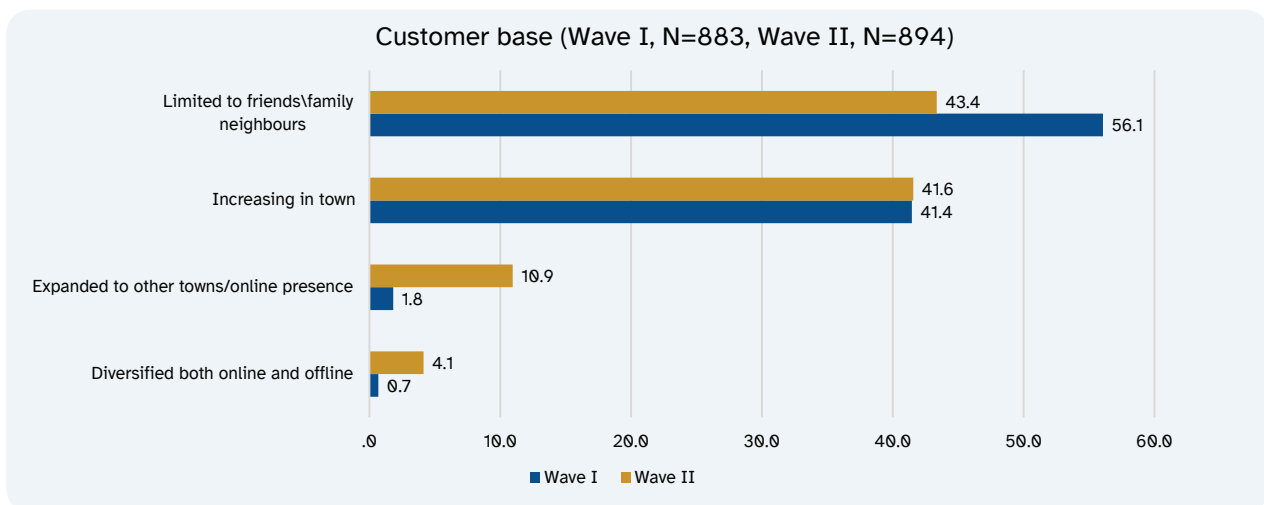


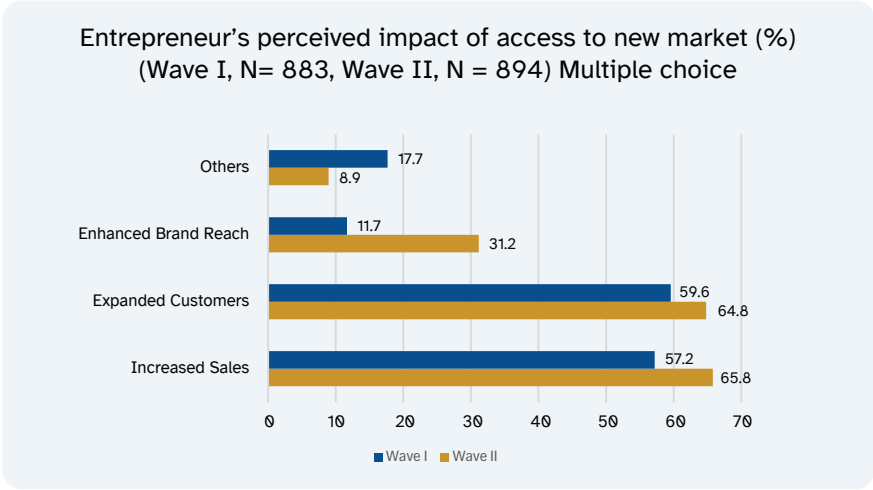
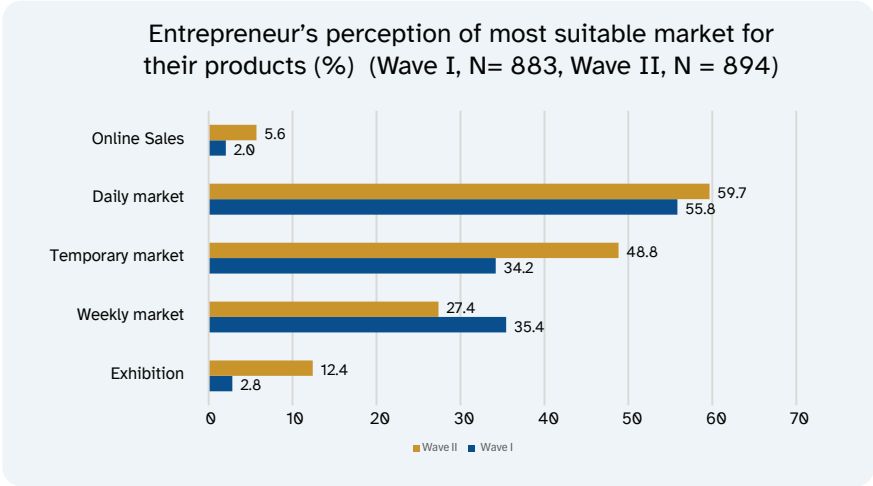
Figure XII: Comparison of customer base/reach between the two waves (in percentage)

This shift reflects early but meaningful progress in market expansion and digital adoption. Sectoral trends indicate that manufacturing (32.4%) and trading (28.6%) enterprises are leading this expansion, while Agri-allied businesses remain more localized, highlighting the need for tailored market linkage strategies across sectors. The relationship between business type and customer reach was statistically significant ($p = 0.041$), reinforcing the importance of segment-specific interventions.

Rising preference for flexible and modern sales channels

Women entrepreneurs showed increasing openness to diversified and flexible sales platforms. While daily markets remained dominant (nearly 60% in Wave II), there was a notable shift toward alternative channels. Preference for temporary markets increased from 34.2% to 48.8%, and exhibitions rose sharply from 2.8% to 12.4%, reflecting their growing importance in accessing higher-value and diverse customer segments.

Emerging digital readiness was also evident, with preference for online sales increasing from 2.0% to 5.7%. At the same time, reliance on weekly markets declined from 35.4% to 27.4%, indicating a gradual move away from traditional formats toward more dynamic and opportunity-driven platforms.



Market access driving tangible business outcomes

Improved market access translated into measurable business gains. Women entrepreneurs reported increased sales, expanded customer bases, and enhanced brand visibility as key outcomes of the intervention. Exposure to platforms such as SARAS melas and digital marketplaces like UMED Mart enabled women to move beyond localized networks and engage with wider and more diverse customer segments.

Quasi-experimental (DiD) results further confirmed that pilot districts experienced significantly higher market expansion, validating the effectiveness of early program rollout. Participation in exhibitions and digital platforms supported bulk orders, repeat customers, and stronger brand credibility, particularly in sectors such as food processing, textiles, and handicrafts.

Overall, these findings indicate that structured market access interventions can accelerate women’s transition from local, informal sales to more scalable and sustainable business models.



Exhibitions have helped me gain new customers. Now, even traders contact me directly to place orders. These traders operate large retail shops and collect products from me. Given this is a tourist town, exhibitions help me sell my products to tourists as well.

- An entrepreneur from Ganpatipule, running a cashew processing business

Recommendations

The non-financial services (NFS) interventions under the EmpowerHer initiative have strengthened women entrepreneurs' business and financial management capabilities. While digital adoption remains gradual, there is clear progress in women's ability to manage finances, access markets, and engage with formal systems. These shifts underscore that building enterprise capability is as critical as expanding access to credit for enabling sustainable business growth.

For State Rural Livelihoods Missions and organizations working with women entrepreneurs and collectives, the evidence highlights the need for structured approaches that integrate finance with market access, capability building, and sustained institutional support. Key recommendations include:

1. Strengthen peer networks: Empower women mentors as digital champions



Building trusted, peer-led support systems can accelerate digital and business capability adoption among women entrepreneurs.

- **Identify and nurture digital champions:** Select digitally confident women within SHGs or enterprise clusters to serve as peer mentors, leveraging their credibility and local influence.
- **Institutionalize structured mentorship:** Design simple, ongoing mentorship models where champions provide hands-on guidance, troubleshoot daily challenges, and share practical business experiences.
- **Sustain engagement through incentives:** Introduce recognition mechanisms, performance-linked incentives, or modest stipends to ensure continued mentor motivation and accountability.
- **Enable experiential learning platforms:** Facilitate peer-led exposure visits, storytelling forums, and digital learning circles through civil society partners to build confidence through shared experiences.
- **Integrate into existing SHG systems:** Embed peer mentorship within SHG training cycles and community platforms, with State Missions amplifying success through local recognition and events.
- **Leverage proven models:** Draw on approaches such as Digital Sakhi and UPI Chhoti Dukaan, which have demonstrated how relatable, women-led examples can build trust and drive adoption.

2. Simplify formalization: Create clear and supportive compliance pathways



Simplifying formalization processes can enable more women entrepreneurs to transition into the formal economy and unlock access to growth opportunities.

- **Develop clear, localized guide:** Provide step-by-step, easy-to-understand guides in local languages for key processes such as Udyam, PAN, and GST registration.
- **Enable doorstep support through CRPs:** Train Community Resource Persons to assist women with documentation, digital applications, and form submissions, reducing reliance on external intermediaries.
- **Facilitate access through local camps:** Organize regular registration drives in partnership with District Industries Centers, Common Service Centres, and MSME departments to streamline processes.
- **Link formalization to tangible benefits:** Clearly demonstrate how registration improves access to credit, insurance, government schemes, and market opportunities, making the value proposition visible.
- **Encourage bundled offerings by FSPs:** Promote integrated solutions where financial institutions combine registration support with tailored financial products and preferential lending terms.
- **Build aspiration through recognition:** Celebrate women who achieve formalization milestones, positioning compliance as a marker of business growth and credibility.

3. Simplify digital interfaces: Design for low-literacy and local contexts



Designing inclusive digital tools is critical to enable meaningful adoption among women entrepreneurs with diverse literacy and connectivity constraints.

- **Adopt intuitive, low-text design:** Prioritize visual, audio, and local-language interfaces to reduce dependence on text and improve ease of use.
- **Embed user-centered design practices:** Conduct regular testing with women entrepreneurs to identify usability barriers, refine navigation, and ensure relevance to real business needs.
- **Co-create with ecosystem partners:** Collaborate with SRLMs and technology providers to tailor tools for different enterprise types and local contexts.
- **Ensure accessibility and reliability:** Optimize applications for low-cost devices and enable smooth functionality in low-bandwidth or intermittent connectivity environments.

5. Reinforce learning: Enable continuous engagement and skill retention



Sustained capability building requires ongoing reinforcement to prevent skill attrition and support consistent business practices among women entrepreneurs.

- **Institutionalize refresher learning:** Conduct periodic sessions to reinforce core skills such as bookkeeping, digital payments, record-keeping, and marketing, aligned with business growth stages.
- **Leverage peer-based digital communities:** Create WhatsApp groups within SHGs and clusters to share updates, practical tips, and bite-sized learning modules, enabling continuous peer learning.
- **Use timely digital nudges:** Deploy SMS and app-based reminders to encourage regular business practices such as recording transactions, meeting compliance requirements, and maintaining customer engagement.
- **Incentivize progress through recognition:** Introduce milestone-based recognition such as certificates, digital badges, or SHG-level awards to sustain motivation and participation.
- **Embed in SRLM systems:** Integrate continuous learning and reinforcement cycles into SRLM training calendars to ensure structured, ongoing engagement rather than one-time capacity building.

4. Expand market linkages: Enable scale beyond local market



Strengthening market linkages is central to helping women entrepreneurs transition from localized, low-volume sales to diversified and sustainable revenue streams.

- **Institutionalize multi-channel market platforms:** Build and scale structured platforms that connect women entrepreneurs to retail customers, wholesale buyers, and institutional markets. Proven models such as SARAS Mela and UMED Mart demonstrate how curated physical and digital channels can expand geographic reach and demand.
- **Scale exhibitions and buyer linkages:** Organize regular district and state-level fairs that bring together entrepreneurs, private sector buyers, and industry associations. These platforms can catalyze bulk procurement, strengthen supply chain linkages, and improve price realization.
- **Strengthen always-on digital commerce:** Promote continuous engagement through e-commerce platforms that enable year-round sales, support region-specific products, and stabilize incomes. Digital channels can also drive improvements in packaging, logistics, and product standardization.
- **Invest in pre-market readiness:** Provide targeted training on pricing, packaging, branding, cataloguing, and digital listings so that women entrepreneurs can effectively participate in exhibitions and compete in formal markets.
- **Enable access to working capital:** Partner with banks and NBFCs to offer short-term, flexible financing solutions, including vendor financing, to help women scale production ahead of large sales events and manage order cycles.
- **Drive participation through SRLM systems:** Set clear participation targets within State Rural Livelihoods Missions and SHG networks to encourage consistent engagement in exhibitions and digital platforms, supported by peer mentoring and community-level accountability.

6. Track behavioral progress: Enable adaptive, data-driven support



Light-touch monitoring systems can help track behavioral shifts while keeping the process simple and non-intrusive for women entrepreneurs.

- **Deploy low-cost tracking tools:** Use SMS-based surveys, voice check-ins, and basic app analytics to capture trends in business practices and digital adoption.
- **Build simple MIS dashboards:** Integrate a lightweight dashboard within SRLM systems to monitor usage patterns and identify areas requiring additional support.
- **Enable adaptive program design:** Use behavioral insights to continuously refine interventions, ensuring they remain responsive to women's evolving needs and constraints.
- **Strengthen accountability loops:** Conduct periodic joint reviews with implementing partners to assess progress, share learnings, and improve implementation quality.

7. Segmented support: Tailor NFS to enterprise stage and sector needs



Targeted, stage-wise support can significantly improve the relevance and effectiveness of non-financial services for women entrepreneurs across diverse business types.

- **Differentiate by sector needs:** Design NFS solutions that respond to the distinct requirements of retail, manufacturing, and services enterprises, while maintaining a common foundation of business growth principles.
- **Support, Enable, and Strengthen entrepreneurs at different stages:** For early-stage entrepreneurs, focus on confidence building, exposure visits, and mentoring to establish foundational financial and digital behaviors. For growth-stage enterprises provide support for credit linkage, business expansion planning, and adoption of digital marketing to scale operations. For women with established businesses, offer advanced assistance on formalization, taxation, compliance, and transition to structured digital systems. This segment-based approaches ensure efficient deployment of resources and sustained relevance as women's enterprises evolve.

8. Foster inclusive digital innovation: Strengthen public-private partnerships



Building gender-responsive digital ecosystems requires coordinated efforts between public institutions, financial service providers, and technology innovators.

- **Enable co-creation of inclusive solutions:** Foster partnerships between SRLMs, fintechs, and digital innovators to design low-cost, women-centered tools that address real business constraints.
- **Simplify core financial processes:** Promote inclusive design to make compliance, payments, and loan management more intuitive and accessible for low-literacy users.
- **Catalyze innovation through dedicated funding:** Establish a Tech Innovation Fund in collaboration with NABARD, SIDBI, and state missions to pilot and scale solutions tailored to women entrepreneurs.
- **Build scalable innovation pipelines:** Encourage structured collaboration between SHG federations, financial service providers, and private sector players to develop and deploy locally relevant digital innovations at scale.

The non-financial services interventions under the EmpowerHer program demonstrated measurable improvements in women entrepreneurs' ability to manage enterprises, access markets, and engage with formal systems. These outcomes reinforce the value of embedding structured capability building within livelihoods and financial inclusion strategies.

Sustaining this progress will require continued investment in ongoing learning, peer-led reinforcement, stronger institutional convergence, and inclusive digital ecosystems. By scaling gender-intentional non-financial services and strengthening collaboration between government systems, financial institutions, and technology partners, State Rural Livelihoods Missions and allied organizations can enable women entrepreneurs to build resilient enterprises, expand economic participation, and contribute to more inclusive and sustainable growth.

Case studies: The journeys of rural women entrepreneurs

1 How EmpowerHer transformed Mansi's business journey transitioning from an informal business to a growth-oriented enterprise

Mansi, 40, lives in Maharashtra's Ratnagiri district. Since 2015, she has been running a home-based mango pulp business. After joining her local Self-Help Group (SHG) in 2017, she began accessing small loans to purchase raw materials.

However, her enterprise remained largely disconnected from formal financial systems and digital tools. While she maintained handwritten records, they did not fully capture her business expenses. She lacked formal registration and documents. For all bank-related work, she depended on her husband and found formal procedures like Udyam registration and Goods and Services Tax (GST) compliance intimidating and irrelevant to her microenterprise. Most of her sales were confined to her immediate community market.

In 2024, Mansi underwent business and financial management training under the UMED EmpowerHer initiative. She attended two SHG-based workshops led by a Community Resource Person (CRP) and received personalized support in downloading and using the digital bookkeeping app. She learned the importance of business formalization, along with basic concepts of digital marketing, branding, and market linkage.

Although initially hesitant, Mansi began recording her daily transactions in the digital bookkeeping app with CRP support. Within three months, she was able to track profits more efficiently and started reinvesting strategically. Under the guidance of the workshop facilitators, she completed her Udyam registration, opened a dedicated business bank account, and participated in a SARAS trade fair, where she marketed her packaged mango pulp to new customers beyond her neighbourhood for the first time.

Mansi's journey illustrates how digital tools, business formalization, and market linkages are crucial to enabling women entrepreneurs to move beyond subsistence and build thriving enterprises.



2 Expanding a home-based enterprise through digital empowerment

Trupti, 42, lives in Maharashtra's Ratnagiri district, where she has been running a home-based sweet confectionery business since 2015.

For several years, her sales were confined to friends, neighbours, and family members. She lacked the exposure, networks, and tools to reach wider markets.

In 2024, Trupti underwent business and financial management training under the UMED EmpowerHer initiative. She participated in two Self-Help Group-based workshops facilitated by a Community Resource Person (CRP), where she learned about the importance of marketing, branding, and using digital platforms for business promotion.

Trupti created social media pages for her products on Facebook and Instagram. She also began using WhatsApp Business to showcase her products and talk to customers. She also participated in the SARAS exhibition, which provided her with direct access to new buyers and traders.

With consistent efforts in online marketing and customer engagement, Trupti's business network expanded significantly. Earlier, she relied on a single trader for orders; today, five to six traders regularly purchase her products, many of whom operate large retail outlets.

Located in a popular tourist destination, her products have now gained visibility across other districts as well as in other states. Through exhibitions, word-of-mouth promotion, and digital outreach, she has built a growing customer base and enhanced brand recognition.

Trupti's journey demonstrates how targeted training in marketing, branding, and digital literacy can help rural women entrepreneurs expand beyond their local markets.

Trupti Runs a sweets and confectionery business in Ratnagiri



Sales rarely extended beyond personal circles due to low brand visibility and no presence on digital channels.

Created social media pages for her business and strategised product branding.

Community women-led workshops on business and financial management.

Exhibited products at SARAS trade fair.

Regular supplier of traders, multi-state visibility, growing brand recognition and customers.

Abbreviations:

B2B	Business-to-Business
BDS	Business Development Services
CRP	Community Resource Person
DFC	Digital Financial Capability
FSP	Financial Services Provider
GST	Goods and Services Tax
ITR	Income Tax Return
LSEG	London Stock Exchange Group
MIS	Management Information System
MSME	Micro, Small, and Medium Enterprise
MSRLM	Maharashtra State Rural Livelihoods Mission
NFS	Non-Financial Services
NABARD	National Bank for Agriculture and Rural Development
PAN	Permanent Account Number
SHG	Self-Help Group
SIDBI	Small Industries Development Bank of India
SRLM	State Rural Livelihood Mission
UAC	Udyam Assist Certificate
UAP	Udyam Assist Platform
UPI	Unified Payments Interface
WWB	Women's World Banking

Annexure

Study methodology

This study adopted a mixed-methods quasi-experimental design combining quantitative and qualitative approaches to assess program impact.

Quantitative: Surveys were conducted with 883 women entrepreneurs (Wave I, Sept 2024) and 894 women entrepreneurs (Wave II, Mar 2025) across Wardha, Sindhudurg, Nashik, and Ratnagiri using CAPI via KoboToolbox.

Qualitative: In-depth interviews with 10 purposively selected women entrepreneurs using digital bookkeeping tools captured diverse business profiles. The data was coded to identify key themes, sub-themes, and user archetypes.

Sampling: Participants were women entrepreneurs receiving BDS support under UMED. Initially, Sindhudurg and Nashik were pilot districts, while Wardha and Ratnagiri served as non-pilot (control). By Wave II, the intervention expanded to all districts.

Estimation Approach: The study used a pre-post comparison framework supported by descriptive and inferential analysis (t-tests and Chi-square tests) to assess changes in business practices, digital financial behavior, and market access.

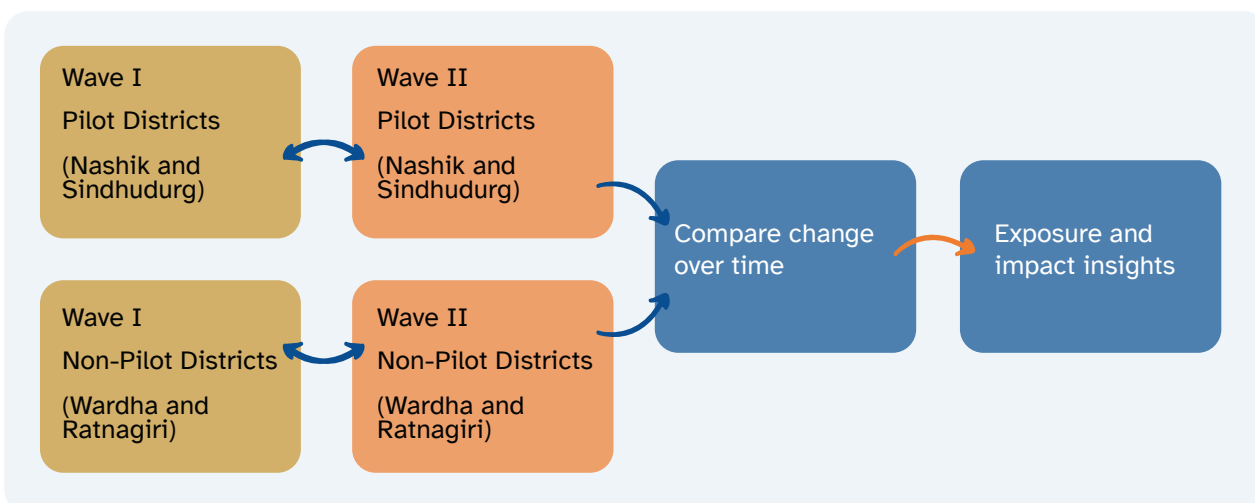
Comparative Analysis:

- Compared outcomes across Wave I and Wave II pooled samples to capture overall changes
- Compared non-pilot districts across waves to estimate baseline-driven impact

Causal Analysis: A Difference-in-Differences (DiD) approach was applied to estimate the intervention's causal impact by comparing changes between early (pilot) and later (non-pilot) intervention groups.

The chosen methodology allows us to go beyond simple before-and-after comparisons, by estimating the true impact of the BDS-NFS intervention. The use of a Difference-in-Differences approach, along with information on how long beneficiaries were exposed to the program, helps distinguish real program effects from background changes over time. This robust design ensures that the findings can meaningfully inform future program improvements, scale-up decisions, and resource allocation.

Figure 1: Study Design



List of Tables

Table 1: Mean differences and significance levels for outcomes and control variables

Wave 1					
Variable	Mean (Pilot district)	Mean (Non-Pilot)	Mean (Overall)	Mean Difference (Pilot - Non-Pilot)	p-value
Key Impact Variables					
Bookkeeping Practices (Digital/Formal/Semi-Formal)	0.69	0.58	0.64	0.10	0.0008***
Business Formalization	0.61	0.60	0.60	0.01	0.6888
Market Access (Broad customer base)	0.44	0.43	0.43	0.01	0.6202
Other socio-economic variables					
Age (36+ years)	0.67	0.72	0.70	-0.05	0.1067
Education (Secondary and above)	0.79	0.88	0.84	-0.08	0.0006***
HH Monthly Expenditure (≥ ₹10,000)	0.13	0.17	0.15	-0.04	0.0851*
Enterprise Type (Services/Trading)	0.84	0.73	0.79	0.11	0.000***
Enterprise Location (Shop)	0.37	0.28	0.33	0.086	0.0066**
Credit Access (Any source)	0.92	0.89	0.91	0.02	0.1644

*** p < 0.01, **p < 0.05, * p < 0.10

Table 2: Bookkeeping methods practiced by entrepreneurs

Bookkeeping Method	Wave I	Wave II
Informal	36%	24%
Semi-formal	40%	44%
Formal non-Digital	21%	27%
Digital	3%	5%

Table 4: Summary of transition probability in bookkeeping (in percentage)

	Percentage
Improved	42.3
Static	24.2
Some downward movements	33.5
Overall Improvement Ratio	8.8

Table 7: Distribution of business category by customer base/reach (in percentage)

	Agri and Allied	Manufacturing	Others	Services	Trading	Total
Both online and offline	8.13	32.43	10.81	27.03	21.62	37
Expanded to other towns/online presence	6.12	26.53	5.1	33.67	28.57	98
Limited to friends and neighbors	16.49	21.39	8.76	33.23	20.1	388
Increasing in town	18.33	22.37	5.12	28.57	25.61	371
Total	15.77	22.82	6.94	31.1	23.38	894
Pearson chi2(12) = 21.6961					Pr = 0.041	

The Chi-Square test is a statistical method, and a p-value of 0 indicates that our findings are statistically generalizable.

Table 9: Reinforcement content in the form of videos that were sent to women entrepreneurs over WhatsApp

Some videos can be viewed here:

<https://youtube.com/playlist?list=PLxk7Eos9N9vYoBleXXIFYLjqp6qf9JY5-andsi=ajKHFTGfmiiekKp6>

Table 3: Transition probability matrix of bookkeeping methods (in percentage)

	Informal	Combination of informal and formal	Formal-Non-Digital	Digital	Total
Informal	25.18	40.07	30.85	3.9	282
Semi-formal	39.23	26.05	30.23	4.5	311
Formal-Non-Digital	28.74	42.51	22.16	6.6	167
Digital	25	50	25	0	20
	246	275	223	36	780

The Transition Probability Matrix shows the likelihood of women entrepreneurs moving between different categories of bookkeeping sophistication (no/informal, semi-formal, formal-non-digital, and formal-digital) from the first survey wave to the second. Each number in the matrix represents the percentage chance that an entrepreneur who was in one specific bookkeeping category at Wave-1 later moved to any of the four categories by Wave-2. We are demonstrating that more women have transitioned from informal to formal modes during our intervention.

Table 5: Distribution of bookkeeping methods by business category (in percentage)

	Digital	Formal non digital	Semi formal	Informal	
Agri and Allied	2.13	25.53	31.91	40.43	141
Manufacturing	3.92	30.88	43.14	22.06	204
Others	0	38.71	17.74	43.55	62
Services	6.47	27.34	33.45	32.73	278
Trading	5.74	32.54	38.28	23.44	209
Total	4.59	29.87	35.46	30.09	894
Pearson chi2(12) = 38.3307			Pr = 0.000		

Table 6: Distribution of business formalization by recordkeeping frequency (in percentage)

Financial record keeping	Business Not Formalized	Business Formalized	Total
Maintaining no records	45.24	54.76	168
Maintaining records	34.30	65.70	726
Pearson chi2(6) = 7.0578			Pr= 0.008

Table 8: Digital bookkeeping user archetypes

Ankita	Ashwini	Aparajita
<p>Personal Background</p> <p>Age: 28</p> <p>Education: Completed graduation</p>	<p>Personal Background</p> <p>Age: 39</p> <p>Education: Graduate and Postgraduate</p>	<p>Personal Background</p> <p>Age: 44</p> <p>Education: 10th</p>
<p>User environment</p> <p>Location: Home</p>	<p>User environment</p> <p>Location: Home, online, exhibitions</p>	<p>User environment</p> <p>Location: Home, online</p>
<p>Business category: Manufacturing (papad making, amla candy, Flour mill)</p> <p>Business experience – 7 months</p> <p>Business registration: Udyam Aadhaar, and yet to secure a food license</p>	<p>Business category: Services such as tailoring, optometry, and trading/retail</p> <p>Business experience – more than 10 years</p> <p>Business registration: Udyam Aadhaar registration, and secured a food license</p>	<p>Business category: Services and manufacturing (seasonal spice business)</p> <p>Business experience – 5 to 10 years</p> <p>Business registration: Udyam Aadhaar and GST registration, and secured a food license.</p>
<p>Digital financial capability</p> <ul style="list-style-type: none"> • Leverages digital bookkeeping “I received help from trainers and quickly got used to the digital bookkeeping App. Now, I even teach other women how to use it.” • Maintains daily records • Uses a digital mode of payment 	<p>Digital financial capability</p> <ul style="list-style-type: none"> • Leverages digital bookkeeping along with physical record keeping in a register • Maintains daily records • Uses a digital mode of payment 	<p>Digital financial capability</p> <ul style="list-style-type: none"> • Leverages digital bookkeeping • Maintains daily records • Uses a digital mode of payment • Uses digital social media platforms for marketing
<p>User goals: Better financial control and aspires to use online marketing platforms, such as UMED Mart, to expand her market reach. “If my products were available online, they would sell in greater numbers, reaching beyond my village to other villages and cities.”</p>	<p>User goals: Better financial control. “Before using the digital bookkeeping App, we maintained a physical register, but we couldn’t clearly understand our expenses or savings. However, after adopting the app, we are now able to track our business performance more effectively and understand how much profit we are making.”</p>	<p>User goals: Better financial control. “The accuracy of transactions has improved. Previously, there were some discrepancies, such as mismatched amounts. But now, thanks to the digital bookkeeping app, I can manage everything properly.”</p>

List of Figures

Figure II: Business categories of women entrepreneurs (in percentage)

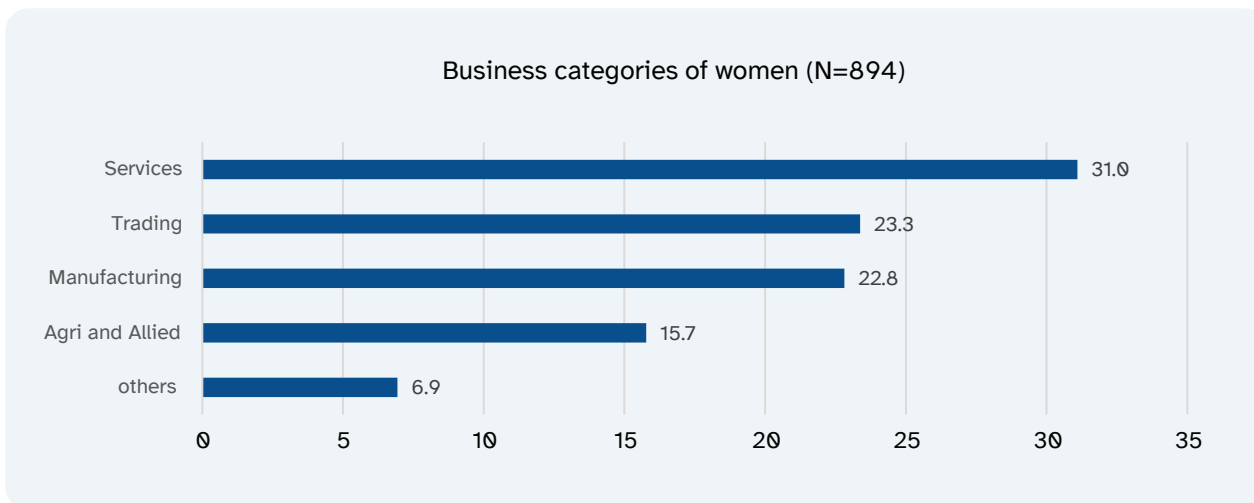


Figure III: Duration of business (in percentage)

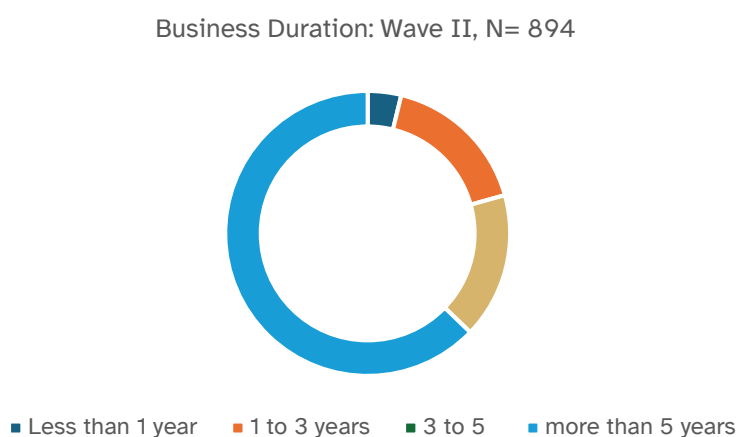


Figure IV: Types of loans accessed by the entrepreneurs (in percentage)

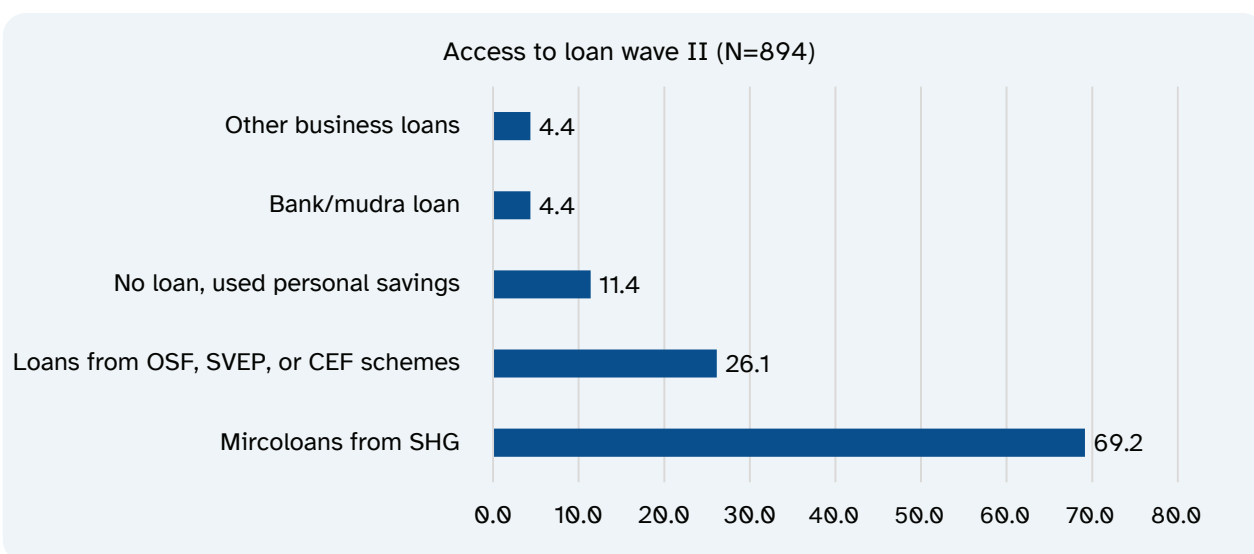


Figure V: Comparison of the frequency of bookkeeping between two waves (in percentage)

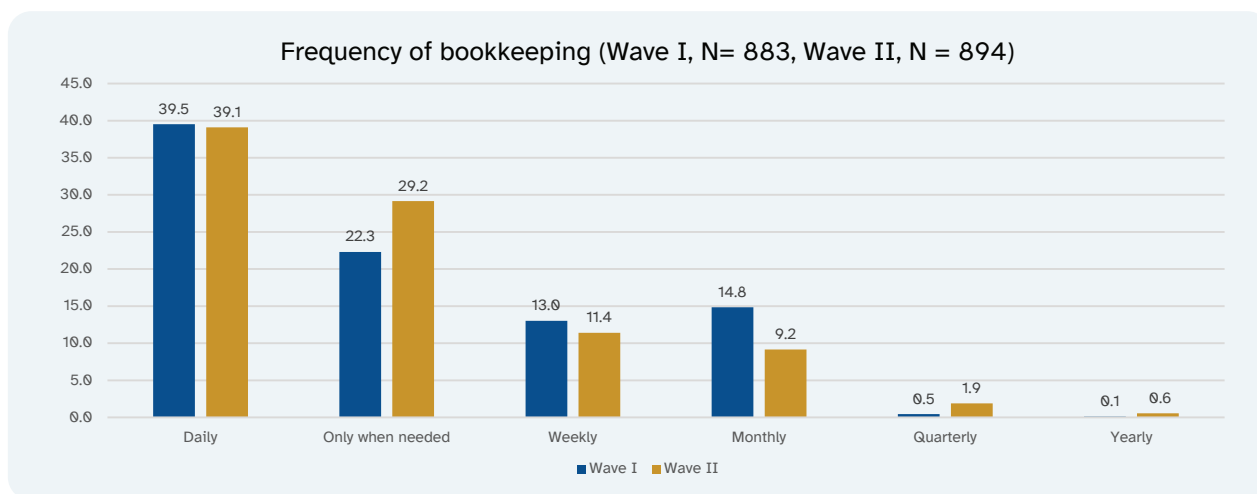


Figure VI: Comparison of customer base/reach between the two waves (in percentage)

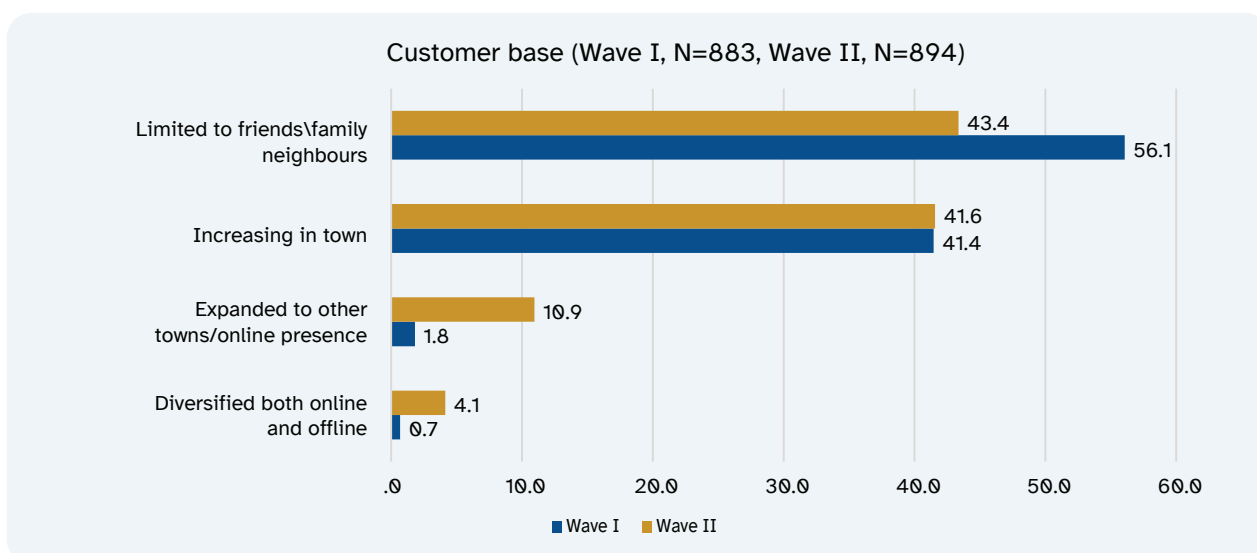


Figure VII: An entrepreneur’s perception of the most suitable market for her products (in percentage)

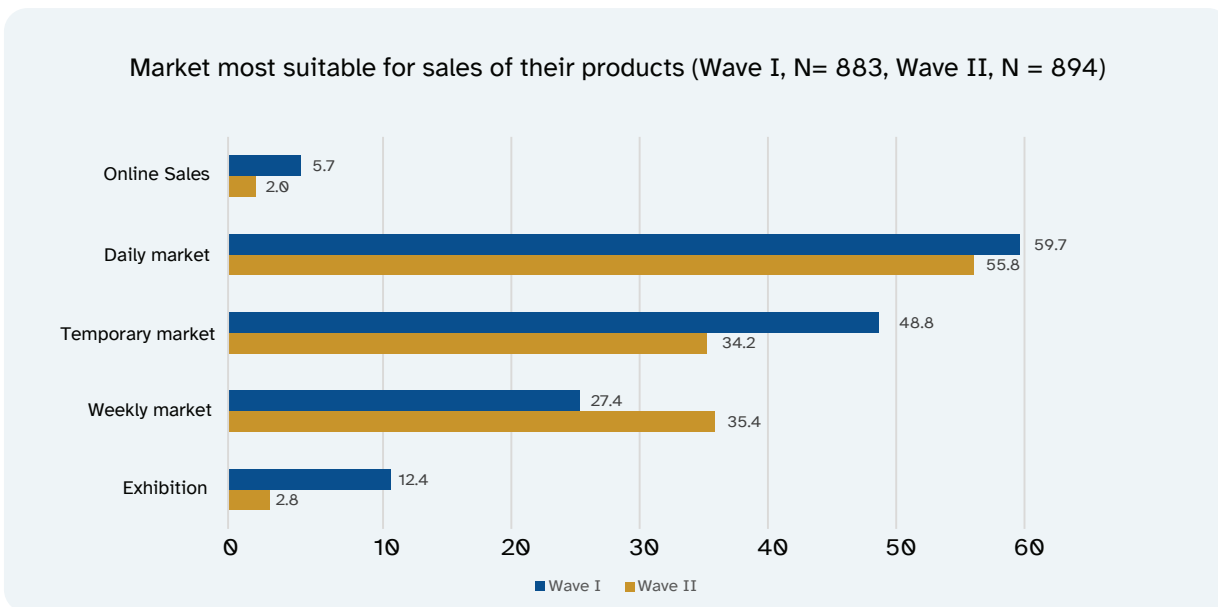
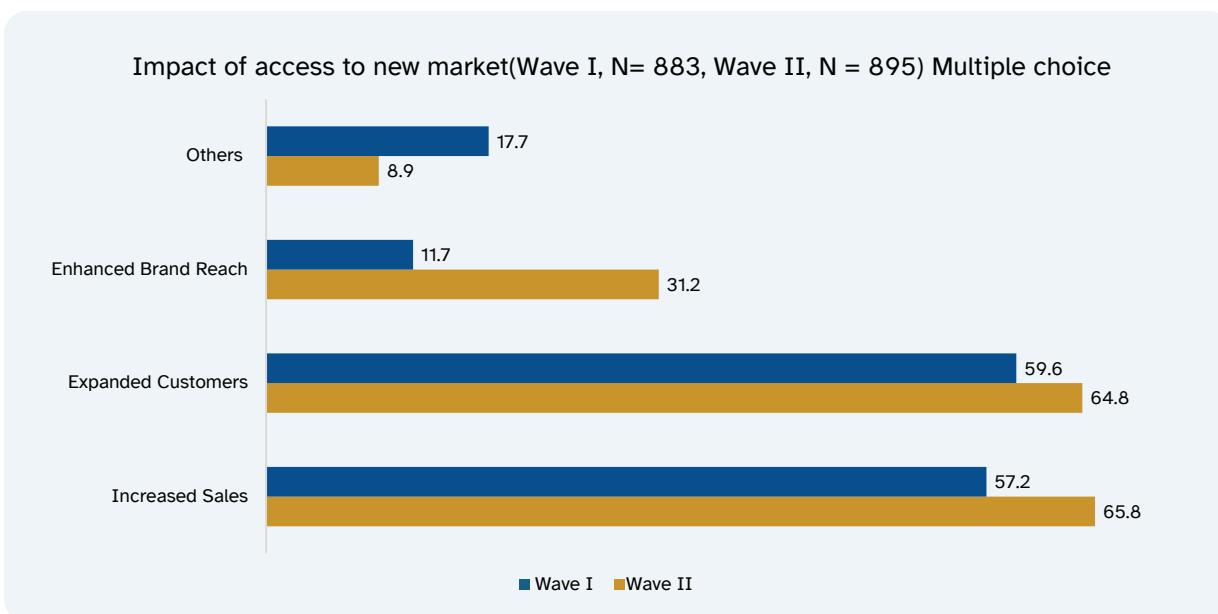


Figure VIII: An entrepreneur’s perceived impact of access to new market (in percentage)





Women's World Banking