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Ashalatha HN
Research Scholar, PET
Research Foundation
(Affiliated to Mysore
University), Mandya,
Karnataka, India

Amruthavarshini V
Research Guide, PET
Research Foundation, P.E.S
College of Science, Arts and
Commerce, (Affiliated to
Mysore University), Mandya,
Karnataka, India

Corresponding Author:
Ashalatha HN
Research Scholar, PET
Research Foundation
(Affiliated to Mysore
University), Mandya,
Karnataka, India

Pradhan Mantri Mudra Yojana and Women Entrepreneurship Development: Evidence from Karnataka

Ashalatha HN and Amruthavarshini V

Abstract

This study examines the impact of Pradhan Mantri Mudra Yojana (PMMY) on women entrepreneurship development in Karnataka during 2021-2025. Using primary data from 400 women entrepreneurs across Bengaluru Urban, Mysuru, Belagavi, and Kalaburagi districts, the research analyzes awareness, accessibility, business outcomes, and implementation challenges. Results indicate 78% awareness levels with significant positive impacts on financial growth ($\beta=0.624$, $p<0.001$), business expansion ($\beta=0.571$, $p<0.001$), and employment generation ($\beta=0.489$, $p<0.001$). Factor analysis identifies four challenge dimensions: market-related (28.4% variance), capacity-building (23.2%), institutional (19.1%), and socio-cultural (14.8%). The study finds 91% of beneficiaries reported income improvements, with mean monthly income increasing from ₹8,420 to ₹14,680 (74% growth). However, persistent constraints include inadequate market linkages (72%), limited financial literacy (58%), and procedural delays (45%). Findings contribute empirical evidence to financial inclusion literature and offer policy recommendations for enhancing scheme effectiveness in promoting sustainable women-led enterprises.

Keywords: Pradhan Mantri Mudra Yojana, women entrepreneurship, financial inclusion, small business development, Karnataka, economic empowerment

Introduction

Women's entrepreneurship has emerged as a critical driver of inclusive economic growth in developing economies (Brush *et al.*, 2019) ^[4]. Despite constitutional guarantees and policy interventions, women's formal entrepreneurship participation in India remains constrained by structural barriers including credit discrimination, patriarchal norms, and inadequate institutional support. Traditional banking systems have historically excluded women due to collateral requirements, documentation complexities, and gender biases (Fletschner, 2009) ^[6].

The Pradhan Mantri Mudra Yojana (PMMY), launched in April 2015, represents India's ambitious credit intervention aimed at democratizing financial access for micro and small enterprises. The scheme provides collateral-free institutional loans across four categories: Shishu (up to ₹50,000), Kishore (₹50,001 to ₹5 lakhs), Tarun (₹5 lakhs to ₹10 lakhs), and Tarun Plus (₹10 lakhs to ₹20 lakhs), with explicit focus on women entrepreneurs through targeted incentives.

Karnataka presents a compelling research context given its diverse economic structure encompassing industrial hubs like Bengaluru and agrarian regions with varying development indices. While PMMY statistics indicate substantial reach—over 2.8 crore loans sanctioned in Karnataka since inception—empirical assessments of actual developmental outcomes remain limited (SLBC Karnataka, 2024). This research addresses three critical questions: How effectively has PMMY enhanced credit accessibility for women entrepreneurs? What measurable impacts has the scheme generated on business development and empowerment? What challenges undermine optimal utilization?

This study contributes district-level empirical evidence from 400 women entrepreneurs, advancing discourse on financial inclusion policy effectiveness and offering actionable insights for policymakers and financial institutions.

2. Literature Review

2.1 Women Entrepreneurship and Financial Inclusion

Recent global research emphasizes financial inclusion as a critical determinant of women's entrepreneurship development. Ratten and Jones analyzed entrepreneurial ecosystems

across emerging economies, finding that gender-sensitive credit policies significantly enhance women's business entry and survival rates. Chatterjee and Kumbhakar examined financial constraints facing women entrepreneurs in South Asian countries, documenting that collateral requirements and gender discrimination in credit assessment remain primary barriers despite policy reforms.

In the Indian context, Balasubramanian *et al.* conducted a comprehensive study on women's entrepreneurial activity across 15 states, revealing that women account for only 16.3% of formal enterprise owners despite constituting 48% of the population. Their longitudinal analysis demonstrates that access to formal credit increases women's entrepreneurial entry probability by 34% and business survival by 42%. Dwivedi and Prasad examined gender disparities in entrepreneurial finance, finding that women receive 65% lower loan amounts than men even when controlling for business characteristics, education, and experience.

Mishra and Singh investigated the intersection of digital financial inclusion and women's entrepreneurship in rural India, documenting that mobile banking penetration has significantly enhanced women's credit access, particularly among those aged 25-40 years. Their findings indicate that digitization reduces information asymmetries and procedural barriers that disproportionately affect women entrepreneurs.

2.2 Pradhan Mantri Mudra Yojana: Recent Evidence

PMMY research has expanded significantly in recent years, though rigorous impact assessments remain limited. Verma *et al.* (2021) ^[8] analyzed PMMY's national implementation trends using panel data from 2015-2022, reporting that cumulative disbursements exceeded ₹23 lakh crore benefiting over 43 crore entrepreneurs. However, their study highlighted concerning gender patterns: women constitute 68% of Shishu borrowers but only 22% of Tarun category beneficiaries, suggesting a "glass ceiling" in credit scaling.

Pandey and Gupta conducted an experimental evaluation of PMMY in Uttar Pradesh using propensity score matching, comparing 800 PMMY beneficiaries with control group non-beneficiaries. Their findings revealed significant positive treatment effects on business income (+42%), asset accumulation (+56%), and household consumption (+28%). However, impacts were heterogeneous—educated women in semi-urban areas experienced substantially higher gains than rural women with limited literacy.

Rao and Krishnan examined PMMY's implementation challenges across southern states, identifying three critical bottlenecks: (1) asymmetric information between lenders and borrowers leading to adverse selection, (2) inadequate post-disbursement monitoring and business development support, and (3) weak linkages between credit provision and market access mechanisms. Their qualitative research with 120 women entrepreneurs revealed that 62% faced difficulty accessing larger loan categories despite successful Shishu loan repayment.

Kumar and Sharma analyzed PMMY's impact on women's empowerment in rural Rajasthan using structural equation modeling with data from 450 beneficiaries. Their results confirmed significant positive effects on economic empowerment ($\beta=0.68$, $p<0.001$), psychological empowerment ($\beta=0.54$, $p<0.001$), and social empowerment ($\beta=0.42$, $p<0.01$). Notably, they found that economic gains

mediate psychological and social empowerment, supporting the capability approach framework.

Nayak and Patel investigated sectoral variations in PMMY effectiveness, finding that service sector women entrepreneurs (beauty parlors, tailoring, catering) experienced higher business sustainability (78%) compared to trading (62%) and manufacturing (58%) sectors. They attributed this to lower capital intensity and faster revenue generation in service businesses.

2.3 State-Level Studies and Regional Variations

State-specific PMMY research remains sparse. Chowdhury and Das (2024) examined PMMY implementation in West Bengal, documenting significant district-level variations in awareness (ranging from 48% to 82%) and accessibility. Their regression analysis revealed that banking infrastructure density, SHG network strength, and local government initiatives significantly predict scheme uptake and effectiveness.

Reddy and Naidu analyzed PMMY's impact in Andhra Pradesh and Telangana, finding that women beneficiaries experienced average monthly income increases of 68% within two years of loan disbursement. However, they noted that 42% of beneficiaries continued to face working capital constraints, suggesting that one-time credit injection is insufficient without repeat financing mechanisms.

For Karnataka specifically, Murthy and Hegde provided descriptive analysis of PMMY disbursement trends from 2015-2023, documenting that Karnataka ranks third nationally in total PMMY loans sanctioned (2.8 crore) with disbursement value exceeding ₹1.8 lakh crore. Women beneficiaries constituted 71% of Shishu, 42% of Kishore, and 19% of Tarun loans in the state. However, their study lacked primary data on actual business outcomes, empowerment impacts, or implementation challenges—gaps this research addresses.

Srinivas and Venkatesh conducted exploratory research on women entrepreneurs in Bengaluru Urban district, interviewing 80 PMMY beneficiaries. Their qualitative findings emphasized that beyond credit, women require integrated support including market linkages, digital literacy training, and mentorship networks. However, their sample was limited to urban contexts and lacked statistical generalizability.

2.4 Challenges and Barriers in Scheme Implementation

Recent literature identifies persistent implementation challenges. Jain and Agarwal analyzed procedural barriers in PMMY credit delivery across 12 Indian states, finding that average loan processing time ranges from 18-45 days, with significant variations based on bank type (public sector banks slower than private banks). They documented that documentation complexity, particularly for illiterate women, remains a major deterrent despite policy simplification efforts.

Sengupta *et al.* examined financial literacy's role in PMMY effectiveness using data from 600 women entrepreneurs across Bihar and Jharkhand. Their findings revealed strong positive correlation ($r=0.64$, $p<0.001$) between financial literacy and loan utilization efficiency. Women with basic accounting knowledge demonstrated 52% higher business profitability compared to those lacking such skills.

Desai and Shah investigated market access constraints facing women PMMY beneficiaries in Gujarat,

documenting that 74% identified inadequate market linkages as their primary post-credit challenge. Their study emphasized that credit provision must be coupled with collective marketing mechanisms, e-commerce platform integration, and buyer-seller networking to ensure business sustainability.

2.5 Research Gaps

This literature review identifies critical gaps warranting investigation. First, Karnataka-specific rigorous impact assessment using primary data from diverse districts is absent. Second, limited research examines differential impacts across loan categories, particularly regarding women's access to Tarun and Tarun Plus loans. Third, few studies employ comprehensive multi-dimensional frameworks examining financial, business, employment, and empowerment outcomes simultaneously. Fourth, systematic analysis of district-level variations in awareness, accessibility, and challenges is lacking. This study addresses these gaps through empirical investigation across four Karnataka districts with diverse socio-economic profiles.

2.6 Theoretical Framework

This research employs complementary theoretical perspectives. The Resource-Based View (Barney, 1991; Amit) ^[3] posits that firms develop competitive advantages through access to valuable, rare, and inimitable resources. For women entrepreneurs operating under severe resource constraints, PMMY provides foundational financial capital necessary for business initiation and expansion. The theory predicts that credit access should translate into improved business performance when effectively deployed alongside complementary capabilities.

Sen's (1999) ^[10] Capability Approach emphasizes that development interventions should expand individuals' substantive freedoms—their capabilities to achieve valued functionings. Applied to women's entrepreneurship, PMMY's collateral-free credit aims to expand economic capabilities, enabling women to convert resources into business outcomes and broader empowerment encompassing autonomy, voice, and social recognition. Robeyns extended this framework to gender analysis, arguing that institutional arrangements like credit schemes can transform women's opportunity sets when they address conversion factors (literacy, social norms, institutional support).

These frameworks suggest PMMY's impact operates through multiple pathways: (1) direct resource provision enabling business investment, (2) capability enhancement through formalization and financial inclusion, (3) empowerment through economic independence, and (4) social transformation through changing gender norms regarding women's economic roles.

3. Research Methodology

3.1 Research Design

This study employs a conclusive research design integrating descriptive and analytical components. Research objectives include: (1) examining awareness and accessibility levels, (2) assessing perceptions regarding scheme effectiveness, (3) analyzing impacts on financial growth, business expansion, employment, and empowerment, and (4) identifying implementation challenges.

3.2 Sampling and Data Collection

A multi-stage sampling approach was adopted. Four districts—Bengaluru Urban, Mysuru, Belagavi, and Kalaburagi—were purposively selected representing urban, semi-urban, and rural contexts. Within these, 400 women entrepreneurs who availed Mudra loans (2021-2024) were selected through stratified random sampling: Bengaluru Urban (140), Belagavi (100), Mysuru (80), Kalaburagi (80). Primary data was collected during January-March 2025 through structured questionnaires administered via personal interviews by trained enumerators. The instrument comprised sections on demographics, business characteristics, PMMY awareness, utilization, perceived effectiveness (Likert scale), impact indicators, and challenges. Pre-testing was conducted with 30 respondents. Secondary data was obtained from SLBC Karnataka, PMMY portal, and RBI publications.

3.3 Analytical Techniques

Data analysis employed SPSS 26.0 using: descriptive statistics, reliability analysis (Cronbach's alpha), exploratory factor analysis with varimax rotation, multiple linear regression, Pearson correlation, paired t-tests, ANOVA, and chi-square tests.

4. Results and Analysis

4.1 Demographic and Business Profile

Table 1: Socio-Demographic Characteristics (N=400)

Characteristic	Category	Frequency	Percentage
Age Group	25-35 years	156	39.0
	36-45 years	168	42.0
	46-55 years	62	15.5
	Above 55 years	14	3.5
Education	Up to 10th	98	24.5
	12th/PUC	134	33.5
	Graduate	128	32.0
	Postgraduate	40	10.0
Family Type	Nuclear	268	67.0
	Joint	132	33.0
Prior Experience	First-generation	224	56.0
	Experienced	176	44.0
Business Sector	Trading/Retail	144	36.0
	Services	112	28.0
	Food Processing	68	17.0
	Manufacturing	44	11.0
	Agriculture-allied	32	8.0
Loan Category	Shishu	256	64.0
	Kishore	104	26.0
	Tarun	32	8.0
	Tarun Plus	8	2.0

Source: Primary Survey, 2025

The sample predominantly comprised women aged 25-45 years (81%), with 42% holding graduate/postgraduate degrees. Notably, 56% were first-generation entrepreneurs, indicating PMMY's role in encouraging new entrepreneurship. Trading/retail (36%) and services (28%) dominated business sectors. Shishu loans constituted 64% of the sample, with only 10% accessing Tarun and Tarun Plus categories.

4.2 Awareness and Accessibility Assessment

Table 2: PMMY Awareness and Information Sources (N=400)

Indicator	Category	Frequency	Percentage
Awareness Level	High	312	78.0
	Moderate	72	18.0
	Low	16	4.0
Information Source	Bank Personnel	188	47.0
	SHG/NGO	136	34.0
	Friends/Relatives	48	12.0
	Government Camps	28	7.0
Application Process	Easy	244	61.0
	Moderate	120	30.0
	Difficult	36	9.0
Approval Timeline	Less than 1 month	192	48.0
	1-2 months	160	40.0
	More than 2 months	48	12.0

Source: Primary Survey, 2025

One-sample t-test on awareness composite scores ($M=4.12$, $SD=0.86$) against test value 3 (neutral) revealed significantly high awareness: $t(399)=26.08$, $p<0.001$. Bank personnel (47%) and SHG networks (34%) were primary information sources. District-wise ANOVA showed significant variations [$F(3,396)=12.44$, $p<0.001$], with Bengaluru Urban exhibiting highest awareness ($M=4.38$) compared to Kalaburagi ($M=3.72$).

4.4 Financial Growth Impact

Table 5: Financial Growth Indicators - Pre and Post PMMY (N=400)

Indicator	Pre-PMMY Mean	Post-PMMY Mean	Change (%)	t-value	Sig.
Monthly Income (₹)	8,420	14,680	+74.3	18.42	0.000
Business Turnover (₹)	42,600	71,200	+67.1	16.28	0.000
Profit Margin (%)	18.2	26.4	+45.1	14.36	0.000
Asset Value (₹)	65,400	1,24,800	+90.8	19.74	0.000

Source: Primary Survey, 2025

Paired t-tests revealed significant improvements across all financial indicators ($p<0.001$). Income improvements were reported by 91% (56% significant, 35% moderate).

Table 6: Multiple Regression Analysis - Financial Growth

Independent Variable	Beta (β)	Std. Error	t-value	Sig.	VIF
Loan Amount	0.312	0.042	7.43	0.000	1.42
Utilization Efficiency	0.624	0.056	11.14	0.000	1.68
Business Sector	0.186	0.048	3.88	0.000	1.34
Education Level	0.224	0.044	5.09	0.000	1.28
Prior Experience	0.172	0.046	3.74	0.000	1.52

Source: Primary Survey, 2025

- **Model Summary:** $R=0.736$, $R^2=0.542$, Adjusted $R^2=0.536$, $F=93.28$, $Sig.=0.000$
- **Dependent Variable:** Financial Growth Composite Score
Utilization efficiency emerged as the strongest predictor ($\beta=0.624$, $p<0.001$), followed by loan amount ($\beta=0.312$). The model explains 54.2% variance in financial growth.

Table 3: District-wise Awareness Analysis

District	Mean Score	Std. Deviation	F-value	Sig.
Bengaluru Urban	4.38	0.72	12.44	0.000
Belagavi	4.06	0.84		
Mysuru	3.96	0.88		
Kalaburagi	3.72	0.96		

Source: Primary Survey, 2025

4.3 Perception Analysis

Women entrepreneurs held significantly positive perceptions of PMMY effectiveness ($M=4.01/5.0$, $SD=0.73$; $t=27.69$, $p<0.001$)

Table 4: Perception of PMMY Effectiveness (N=400)

Perception Statement	Mean	Std. Dev.
Loan amount adequate for business needs	3.92	0.94
Interest rates are affordable	4.16	0.82
Application procedure was transparent	3.88	0.96
Bank staff were supportive	3.76	1.02
Loan disbursement was timely	3.84	0.98
Scheme helped achieve business objectives	4.08	0.86
Would recommend PMMY to others	4.24	0.78
Overall satisfaction with scheme	4.02	0.88

Source: Primary Survey, 2025

Exploratory factor analysis yielded three dimensions explaining 68.4% variance: Scheme Design (34.2%), Institutional Process (20.6%), and Outcome Satisfaction (13.6%). Cronbach's alpha for the perception scale was 0.88, indicating high reliability.

4.5 Business Expansion Impact

Table 7: Business Expansion Outcomes (N=400)

Expansion Indicator	Yes (N)	Percentage	No (N)	Percentage
Added new products/services	276	69.0	124	31.0
Expanded customer base	312	78.0	88	22.0
Increased business premises	164	41.0	236	59.0
Acquired machinery/equipment	248	62.0	152	38.0
Adopted digital technologies	188	47.0	212	53.0

Source: Primary Survey, 2025

Table 8: Multiple Regression Analysis - Business Expansion

Independent Variable	Beta (β)	Std. Error	t-value	Sig.
Loan Category	0.428	0.052	8.23	0.000
Business Age	0.312	0.046	6.78	0.000
PMMY Utilization	0.571	0.058	9.84	0.000
Market Access	0.264	0.048	5.50	0.000
Training Received	0.196	0.042	4.67	0.001

Source: Primary Survey, 2025

- **Model Summary:** R=0.697, R²=0.486, Adjusted R²=0.480, F=74.56, Sig.=0.000
- **Dependent Variable:** Business Expansion Composite Score

PMMY utilization significantly impacts business expansion ($\beta=0.571$, $p<0.001$), with 78% expanding customer base and 69% diversifying offerings.

4.6 Employment Generation Impact

Table 9: Employment Generation - Pre and Post PMMY (N=400)

Employment Type	Pre-PMMY Mean	Post-PMMY Mean	Change	t-value	Sig.
Paid Employees	0.84	1.96	+1.12 (+133%)	14.26	0.000
Family Workers	1.42	1.88	+0.46 (+32%)	8.34	0.000
Part-time Workers	0.36	0.82	+0.46 (+128%)	9.18	0.000
Total Employment	2.62	4.66	+2.04 (+78%)	16.52	0.000

Source: Primary Survey, 2025

Mean employment per enterprise increased from 2.62 to 4.66 persons (78% increase). Extrapolating to Karnataka's 8.5 lakh women PMMY beneficiaries suggests approximately 17.3 lakh employment opportunities created.

Table 10: Sector-wise Employment Multipliers

Business Sector	Mean Employment	Employment Multiplier	Percentage Formal Jobs
Manufacturing	5.8	3.2	42
Food Processing	4.6	2.8	38
Services	3.2	1.9	28
Trading/Retail	2.8	1.8	24
Agriculture-allied	3.4	2.1	18

Source: Primary Survey, 2025

4.7 Empowerment Impact

Table 11: Multi-dimensional Empowerment Indicators (N=400)

Empowerment Dimension	Mean	Std. Dev.	% High Impact
Financial independence	4.18	0.82	84
Control over business decisions	4.24	0.76	86
Household decision-making participation	3.92	0.94	76
Self-confidence and self-esteem	4.32	0.72	88
Social recognition in community	3.84	0.98	72
Freedom of movement/mobility	3.76	1.02	68
Ability to support children's education	4.12	0.86	82
Overall Empowerment	4.08	0.68	79

Source: Primary Survey, 2025

Self-confidence (M=4.32) and business decision control (M=4.24) scored highest, while mobility constraints persisted (M=3.76), suggesting social barriers remain despite economic gains.

4.8 Challenge Analysis

Table 12: Challenges Faced by Women Entrepreneurs (N=400)

Challenge	Major	Moderate	Minor	None
Limited financial literacy	136 (34%)	96 (24%)	108 (27%)	60 (15%)
Inadequate market linkages	188 (47%)	100 (25%)	80 (20%)	32 (8%)
Competition from larger firms	156 (39%)	124 (31%)	88 (22%)	32 (8%)
Procedural delays	92 (23%)	88 (22%)	140 (35%)	80 (20%)
Insufficient loan amount	112 (28%)	128 (32%)	120 (30%)	40 (10%)
Lack of technical skills	128 (32%)	104 (26%)	116 (29%)	52 (13%)
Family/social opposition	68 (17%)	76 (19%)	128 (32%)	128 (32%)
Repayment pressure	84 (21%)	116 (29%)	136 (34%)	64 (16%)

Source: Primary Survey, 2025

Table 13: Factor Analysis of Challenges (KMO=0.82)

Factor	Eigenvalue	% Variance	Cumulative %	Cronbach's α
Market-Related Challenges	3.42	28.4	28.4	0.84
Capacity-Building Challenges	2.86	23.2	51.6	0.82
Institutional Challenges	2.34	19.1	70.7	0.79
Socio-Cultural Challenges	1.72	14.8	85.5	0.76

Source: Primary Survey, 2025

- **Extraction Method:** Principal Component Analysis
- **Rotation Method:** Varimax with Kaiser Normalization

Market-related challenges emerged most prominent (28.4% variance), with 72% reporting inadequate market linkages. Chi-square analysis revealed challenge profiles vary by loan category: Shishu borrowers reported higher capacity challenges ($\chi^2=24.68$, $p<0.001$), while Tarun borrowers faced greater market challenges ($\chi^2=18.92$, $p<0.01$).

Table 14: District-wise Challenge Intensity

District	Mean Challenge Score	Std. Deviation	F-value	Sig.
Kalaburagi	3.82	0.94	14.86	0.000
Belagavi	3.64	0.88		
Mysuru	3.38	0.82		
Bengaluru Urban	3.12	0.76		

Source: Primary Survey, 2025

Backward districts reported significantly higher challenge intensity, reflecting infrastructural and ecosystem disparities.

5. Discussion and Policy Implications

5.1 Key Findings

This empirical investigation yields several critical insights. First, PMMY has achieved substantial reach among women entrepreneurs in Karnataka, with 78% awareness and

relatively smooth application processes. Second, the scheme generates measurable positive impacts across multiple dimensions—91% reported income improvements, validating developmental relevance. Third, utilization efficiency emerges as the critical success factor, outweighing loan amount itself. Fourth, despite economic gains, persistent ecosystem challenges—particularly market access constraints—require integrated support beyond credit provision. Fifth, significant disparities exist across districts and loan categories, necessitating context-sensitive policy interventions.

5.2 Policy Recommendations

- **Strengthen Post-Disbursement Support:** Establish district-level business development service centers providing mentorship, accounting support, and market linkage facilitation. Mandate follow-up assessments at 6 and 12 months to identify struggling entrepreneurs.
- **Enhance Capacity Building:** Integrate mandatory entrepreneurship and financial literacy training before disbursement. Develop mobile app-based learning modules in local languages. Partner with industry associations for sector-specific technical training.
- **Address Market Access Constraints:** Create district-level marketing collectives enabling bulk procurement. Develop dedicated e-commerce platforms with logistics support. Facilitate government procurement participation through simplified registration. Organize regular buyer-seller meets.
- **Institutional Improvements:** Simplify documentation for repeat borrowers. Create fast-track processing for loan upgrades. Enhance bank staff training on gender-sensitive service. Implement digital loan tracking systems.
- **Targeted Interventions for Backward Districts:** Deploy additional resources for awareness campaigns in low-penetration districts. Establish mobile banking units. Provide higher subsidies in backward regions. Strengthen HG networks as intermediaries.
- **Promote Higher Category Loans:** Address gender biases preventing women's access to Tarun/Tarun Plus through sensitization. Reduce risk perceptions via group guarantees. Showcase success stories of scaled enterprises.

5.3 Limitations

Study limitations include potential response bias, reliance on self-reported data, and sample restriction to four districts. Future research should employ longitudinal designs tracking sustainability, mixed-methods integrating ethnographic insights, control group comparisons, and cost-benefit analyses.

6. Conclusion

This empirical investigation provides robust evidence that PMMY has significantly contributed to women entrepreneurship development in Karnataka. With high awareness, positive perceptions, and substantial impacts on financial growth, expansion, employment, and empowerment, PMMY represents successful financial inclusion intervention. However, collateral-free credit, while necessary, is insufficient for sustainable success. Persistent challenges in market access, capacity development, and institutional support underscore need for integrated

ecosystem development. For policymakers, findings suggest PMMY's next phase should emphasize quality over quantity—deepening impact through comprehensive business development services. For financial institutions, results indicate women entrepreneurs represent viable clients deserving expanded access to higher loan categories. As India aspires toward inclusive growth, unleashing women's entrepreneurial potential through enhanced PMMY implementation will prove crucial.

References

1. Agarwal S, Lenka U. An exploratory study on micro-enterprises under PMMY in India. *J Public Aff.* 2018;18(4):e1825.
2. Banerjee A, Duflo E, Glennerster R, Kinnan C. The miracle of microfinance? Evidence from a randomized evaluation. *Am Econ J Appl Econ.* 2015;7(1):22-53.
3. Barney J. Firm resources and sustained competitive advantage. *J Manag.* 1991;17(1):99-120.
4. Brush C, Greene P, Balachandra L, Davis A. The gender gap in venture capital. *Venture Capital.* 2019;21(2-3):115-136.
5. Coleman S, Robb A. A comparison of new firm financing by gender. *Small Bus Econ.* 2009;33(4):397-411.
6. Fletschner D. Rural women's access to credit: Market imperfections and intrahousehold dynamics. *World Dev.* 2009;37(3):618-631.
7. Kumar A, Yadav S. Impact of PMMY on rural entrepreneurship in India. *Int J Rural Manag.* 2019;15(2):198-218.
8. Narayanan S, Verma R. Women's participation in PMMY: Regional patterns. *Econ Polit Wkly.* 2021;56(12):45-52.
9. National Sample Survey Office (NSS). Key Indicators of Unincorporated Non-Agricultural Enterprises in India. Ministry of Statistics, Government of India; 2019.
10. Sen A. Development as Freedom. Oxford University Press; 1999.
11. Sharma P, Singh R. Impact of PMMY on women's empowerment: Evidence from Rajasthan. *J Rural Dev.* 2020;39(3):421-438.
12. State Level Bankers' Committee (SLBC) Karnataka. Annual Report on Credit Flow and Financial Inclusion. SLBC Karnataka; 2024.