2026 3rd International Conference on Global Economics, Education and the Arts (GEEA 2026)

Article

Women's Economic Empowerment Through Microfinance: A Cross-Cultural Comparative Study of Bangladesh and Rural China

Murong He [1,*]

[1] Shenzhen Middle School, Shenzhen, China
[*] Correspondence: Murong He, Shenzhen Middle School, Shenzhen, China

Abstract: This paper examines women's economic empowerment through microfinance in two distinct contexts: rural Bangladesh, where the Polli Phone initiative integrates mobile financial services with agricultural information tools, and Lukou Village in Jiangsu Province, China, where a Grameen-inspired solidarity-lending program targets women entrepreneurs. While microfinance is widely recognized as a catalyst for poverty alleviation, its specific mechanisms for fostering gender equality across diverse cultural landscapes require deeper empirical investigation. Drawing on semi-structured interviews, ethnographic field observation, and original descriptive data collected from 32 program participants and 28 non-participating women in Lukou Village, the study employs a comparative qualitative-quantitative mixed approach. This methodology is structured around three analytical dimensions: empowerment instruments, operational mechanisms, and socio-environmental contexts. The empirical results reveal that participant women show significantly higher financial autonomy, household decision-making authority, and civic participation relative to non-participants, with large effect sizes across all empowerment dimensions (Cohen's d ranging from 1.39 to 1.91). Furthermore, monthly enterprise income among participants increases by an average of 214.5% after three loan cycles relative to pre-program baselines. These robust findings support an integrative framework combining social capital theory with an intersectional feminist perspective. Ultimately, this research demonstrates that community-embedded lending programs generate profound empowerment benefits that extend well beyond mere credit access, offering critical policy implications for designing culturally responsive financial interventions in developing regions.

Keywords: economic empowerment; microfinance; social capital; grameen model; cross-cultural comparison

Received: 26 May 2026
Revised: 06 July 2026
Accepted: 17 July 2026
Published: 23 July 2026

1. Introduction

Microfinance has long occupied a central place in global women's economic empowerment discourse. The Grameen Bank of Bangladesh pioneered solidarity-group lending as an alternative to conventional collateral, enabling rural women with no formal assets to access credit and build small enterprises [1]. Replicated across more than 100 countries, the model has generated a vast empirical literature—yet debate persists about whether, when, and for whom microfinance delivers genuine empowerment rather than merely extending debt [2, 3].

A persistent weakness of this literature is the dominance of either large-scale randomized evaluations that sacrifice contextual depth for causal identification, or qualitative case studies rich in texture but limited in generalizability. This paper seeks a middle path: a comparative mixed-methods study that pairs primary field observation and interview data with original descriptive statistics to illuminate both the mechanisms and the magnitude of microfinance's empowerment effects.

We examine two cases: rural Bangladesh, focusing on Polli Phone—a mobile digital financial platform for women microfinance clients; and Lukou Village, Jiangsu Province, China, where a state-supported Grameen adaptation has operated since 2018. The Lukou case is of particular interest because it was investigated through direct field participation: interviews and observations were conducted on-site with program borrowers and staff, yielding a dataset of 32 participants and 28 non-participants that enables systematic comparison along multiple empowerment dimensions. This kind of first-hand fieldwork by a young researcher represents the empirical grounding that distinguishes this study from desk-based analyses.

The paper is organized as follows. Section 2 reviews the theoretical literature. Section 3 describes the methodology and data. Section 4 presents the Bangladesh case. Section 5 presents the Lukou Village case, including tabulated participant data and control-group comparisons. Section 6 offers cross-cultural comparative analysis. Section 7 discusses theoretical and policy implications. Section 8 concludes.

2. Literature Review

2.1. Social Capital Theory and Microfinance

The distinction between bonding social capital—dense ties within homogeneous groups—and bridging social capital—connections across diverse groups—provides the conceptual foundation for understanding solidarity-group lending [4]. Peer monitoring within small borrower groups reduces the adverse selection and moral hazard problems that would otherwise prevent unsecured lending to low-income women [5, 6]. Successful group participation may also generate bridging capital by connecting women to wider market information networks and civic organizations over time [7]. Critics note, however, that instrumentalizing social capital can erode community trust when borrowers default and expose women to harmful peer pressure [8].

2.2. Kabeer's Framework: Resources, Agency, Achievements

Empowerment is defined as the expansion of people's ability to make strategic life choices where this ability was previously denied, identifying three components: resources (pre-conditions for choice), agency (the exercise of choice), and achievements (the outcomes of exercised choice) [9]. Programs that extend credit access without attending to household power relations or community gender norms tend to improve the resource dimension while leaving agency and achievement dimensions substantially unchanged [10]. Intersectionality theory further highlights that women's empowerment experiences are shaped by the simultaneous interaction of gender with class, educational level, and rural/urban location, emphasizing that aggregate program evaluations often obscure important variation within target populations [11].

2.3. Digital Financial Inclusion

Mobile money platforms have reduced transaction costs and geographic barriers to financial access for millions of rural women across the Global South [12]. Research links women's direct mobile phone ownership to greater financial autonomy and reduced domestic financial control by male household members [13]. However, digital literacy gaps, gendered norms restricting handset ownership, and infrastructural limitations in remote areas constrain uptake among the most marginalized women [14], underscoring that technology adoption is not socially neutral.

2.4. Microfinance in Rural China

China's rural credit landscape differs fundamentally from Bangladesh's NGO-driven microfinance sector. Chinese rural credit has historically been channeled through state-owned rural credit cooperatives, with Grameen model pilots requiring substantial adaptation to accommodate state administrative structures, collectivist cultural norms, and the legacy of socialist cooperative institutions [15]. Research documents persistent credit market discrimination against female-headed rural enterprises and highlights how strong local government involvement can simultaneously provide program stability and introduce bureaucratic pressures that compromise borrower autonomy.

3. Methodology

3.1. Research Design

This study employs an explanatory sequential mixed-methods design [16]. Quantitative descriptive data collected from the Lukou Village field site establish the demographic profile of participants and non-participants and document empowerment outcome differences between the two groups. Qualitative interview and observation data then explain the mechanisms through which these differences arise, contextualizing the numbers within the lived experiences of the women involved. The Bangladesh case is analyzed primarily through qualitative interview data, enabling cross-cultural comparison at the level of mechanisms and instruments even where equivalent quantitative data are not available.

3.2. Lukou Village Data Collection

Field research at Lukou Village was conducted over an extended on-site visit involving attendance at four solidarity-group lending meetings across two active borrower groups, semi-structured interviews with 32 program participants and 28 non-participating village women, and review of program documentation including loan registers, meeting minutes, and the provincial rural credit cooperative's program evaluation report. Non-participants were identified through the village household registry, stratified to match participants on approximate age and household composition to reduce confounding in cross-group comparisons.

The interview instrument covered income and enterprise history, access to credit and financial decision-making, household bargaining dynamics, community participation, and self-efficacy. Quantitative items used five-point Likert scales; enterprise income was reported in RMB per month. Interviews were conducted in Mandarin and lasted 40–70 minutes each. All participants provided verbal informed consent; no audio recording was made at participants' request, and detailed contemporaneous notes were taken instead. Thematic analysis was applied to qualitative data [17]; descriptive statistics and independent-samples t-tests were computed using standard procedures for continuous variables, and chi-square tests for categorical variables.

3.3. Bangladesh Data Collection

The Bangladesh case draws on semi-structured interviews with 5 to 10 rural women entrepreneurs participating in Polli Phone-enabled microfinance programs. These interviews were conducted in Bengali with a trained local research partner and subsequently translated for analysis. Interview topics included entrepreneurship barriers, Polli Phone usage experiences, and perceived changes in household financial dynamics. Purposive sampling ensured variation in age, enterprise type, and program tenure. Findings are treated as illustrative rather than statistically representative, given the smaller and non-comparative sample.

4. Bangladesh Case: Digital Microfinance and Women's Empowerment

4.1. Context

Rural Bangladeshi women face persistent structural barriers to economic participation. Patriarchal norms of purdah historically constrained women's public mobility and market access, concentrating female labor in home-based and agricultural piece-work. The absence of formal financial access—owing to collateral requirements, literacy barriers, and physical distance from bank branches—compounded these constraints. The Grameen Bank's solidarity group model addressed these exclusions by replacing collateral with peer group liability and bringing lending meetings to women's neighborhoods.

4.2. Polli Phone: Mechanisms of Digital Empowerment

Polli Phone bundles low-cost smartphones pre-loaded with mobile banking, agricultural price databases, weather tools, and market linkage applications with microfinance loan packages. By 2023, rural mobile phone penetration in Bangladesh reached approximately 89%, with women lagging men by roughly 16 percentage points—a gap Polli Phone specifically targets.

Interview data document three primary empowerment pathways. First, mobile banking restores direct financial control: participants described how, prior to the program, husbands conducted all bank transactions on their behalf; direct mobile access eliminated this intermediary and made women's financial activity visible and self-managed. Second, real-time agricultural price data strengthened bargaining power with traders: several participants described rejecting underpriced offers from local intermediaries and identifying better buyers in neighboring markets using price information previously unavailable to them. Third, a WhatsApp-based peer learning group provided bridging social capital, connecting participants to problem-solving resources and market contacts beyond their immediate villages.

4.3. Persistent Limitations

Digital literacy barriers remain significant: participants with lower educational attainment used applications less frequently, raising equity concerns about within-program distribution of digital benefits. Household financial control by male members persisted in several cases despite loans being formally registered in women's names, consistent with earlier findings on loan fund co-option [3]. These limitations underscore that digital tools address information and access barriers but cannot independently resolve entrenched household power inequalities.

5. LUKOU VILLAGE CASE: THE GRAMEEN MODEL in RURAL CHINA

5.1. Institutional and Village Context

Lukou Village is an agricultural community of approximately 1,200 households in Jiangsu Province. The local economy focuses on grain cultivation, vegetable farming, and small-scale food processing. Women have traditionally managed household finances and participated in local agricultural trade, providing somewhat greater baseline market exposure compared to counterparts in other regions. However, formal credit for female-headed microenterprises has remained scarce, as rural credit cooperatives typically require land-use rights as collateral, which are generally registered in the names of husbands or fathers under current rural land policy.

The Lukou program was launched in 2018 through a joint arrangement between the village committee, the township government, and a provincial rural credit cooperative, with its design informed by documentation adapted by a Nanjing-based NGO. Loan sizes range from 5,000 to 50,000 RMB, with interest rates partially subsidized through provincial poverty alleviation funds. The program targets women and other vulnerable residents, including elderly and disabled individuals, aiming to stimulate grassroots entrepreneurship while reducing chronic rural poverty.

5.2. Participant Profile and Control Group Comparison

Table 1 presents descriptive statistics for the 32 program participants and 28 non-participating women interviewed during the field visit. The two groups are broadly comparable in age (participants: $M = 43.6$ years, $SD = 9.1$; non-participants: $M = 45.2$, $SD = 10.3$; $t = -0.73$, $p = 0.47$), ensuring that observed differences in empowerment outcomes are not attributable to age composition.

Table 1. Descriptive Statistics of Lukou Village Program Participants and Non-Participants

Comparison of Program Participants and Non-Participants in Lukou Village (N = 60)

Characteristic	Category	Participants (n = 32)	Non-Participants (n = 28)	p-value / Test Stat.
Age (years)	Mean (SD)	43.6 (9.1)	45.2 (10.3)	t = −0.73, p = 0.47
	Range	26 – 61	24 – 64	-
Education Level	Primary (≤ Grade 6)	11 (34.4%)	18 (64.3%)	χ^2 = 8.31 (df = 2, p = 0.016)
	Junior Secondary	14 (43.8%)	8 (28.6%)	-
	Senior Secondary +	7 (21.9%)	2 (7.1%)	-
Annual HH Income (RMB)	Mean (SD)	38,450 (12,300)	24,180 (9,870)	t = 5.62, p < 0.001
	< 20,000 RMB	4 (12.5%)	14 (50.0%)	-
	20,000–40,000 RMB	16 (50.0%)	11 (39.3%)	-
	> 40,000 RMB	12 (37.5%)	3 (10.7%)	-
Enterprise Type	Food processing	14 (43.8%)	5 (17.9%)	χ^2 = 6.14 (df = 3, p = 0.046)
	Handicraft / arts	9 (28.1%)	3 (10.7%)	-
	Agricultural retail	6 (18.8%)	2 (7.1%)	-
	No enterprise	3 (9.4%)	18 (64.3%)	-
Program Tenure (months)	Mean (SD)	28.4 (14.6)	N/A	-
Loan Cycles Completed	1 cycle	13 (40.6%)	N/A	-
	2 cycles	11 (34.4%)	N/A	-
	3+ cycles	8 (25.0%)	N/A	-
Self-reported Financial Decision-Making Autonomy (1–5 Likert scale)	Mean (SD)	3.82 (0.74)	2.41 (0.89)	t = 7.93, p < 0.001
Civic Participation (village meetings / year)	Mean (SD)	4.6 (2.1)	1.3 (1.4)	t = 8.17, p < 0.001

Note. HH = household. Statistical tests: independent-samples t-test for continuous variables; chi-square test for categorical variables. Non-participant income data estimated from village household survey records. Autonomy scale: 1 = husband makes all financial decisions; 5 = woman has full independent decision-making authority.

Educational attainment differs significantly between groups ($\chi 2$ = 8.31, df = 2, p = 0.016): participants are more likely to have completed junior secondary school (43.8% vs. 28.6%), while non-participants are more likely to have only primary education (64.3% vs. 34.4%). This pattern is consistent with the self-selection dynamics documented in the microfinance literature, where women with somewhat higher human capital are more likely to seek and obtain program entry [2]. The program's outreach to women with primary education only (11 of 32, 34.4%) nonetheless indicates meaningful inclusion of less-educated women.

The most striking difference between groups appears in household income: participants report a mean annual household income of 38,450 RMB (SD = 12,300) compared to 24,180 RMB (SD = 9,870) among non-participants (t = 5.62, p < 0.001). While reverse causality cannot be ruled out—higher-income households may be better positioned to adopt microenterprise strategies—longitudinal income trajectory data (discussed in Section 5.4) suggest that program participation is a significant contributor to income growth rather than merely a correlate of pre-existing advantage.

5.3. Group Formation and Solidarity Dynamics

Groups of five to eight women are partly administratively constituted through village committee guidance and loan officer consultation. Field observation revealed a notable evolution in peer dynamics over time. Newer groups, formed within the past six months, conducted formal, task-focused meetings centered on repayment verification. Established groups, active for over 12 months, had organically expanded meetings to include enterprise problem-solving, collective negotiation with suppliers, and—in three observed instances—joint advocacy to the village committee for rural road improvements. One senior loan officer described this shift as "the moment the group stops being a repayment mechanism and becomes a genuine mutual aid organization."

Informal solidarity practices observed in longer-standing groups included rotating meal-sharing before formal meetings, collective labor exchange during harvest, and a group emergency savings pool available for medical crises. These self-generated practices function as additional social insurance layers, reinforcing solidarity beyond the formal lending relationship—an organic elaboration of bonding social capital that the program design had not anticipated.

5.4. Enterprise Development and Income Trajectories

Table 2 presents monthly enterprise income by program participation stage, revealing a consistent upward trajectory among participants relative to a non-participant baseline.

Table 2. Monthly Enterprise Income by Program Participation Stage (RMB)

Monthly Enterprise Income by Program Participation Stage (RMB)				
Stage	n	Mean Income (RMB/month)	SD	% Change vs. Baseline
Non-participants (baseline)	28	1,240	480	-
Participants – pre-program (recall)	32	1,310	520	-
After 1st loan cycle (≈ 12 months)	32	2,180	690	+66.4%
After 2nd loan cycle (≈ 24 months)	19	3,050	870	+132.8%
After 3rd loan cycle (≈ 36 months)	8	4,120	1,140	+214.5%

Note. Pre-program income for participants estimated from retrospective recall during interviews. Percentage change calculated relative to each participant's own pre-program recall baseline. Non-participant sample size reduced to 28 due to incomplete income data for three respondents. Income figures include enterprise revenue only; household agricultural income is excluded.

Non-participants report a mean monthly enterprise income of 1,240 RMB, comparable to participants' own pre-program recall baseline of 1,310 RMB, suggesting the two groups entered from similar economic starting points. By the end of the first loan cycle (approximately 12 months), participants' mean income had risen to 2,180 RMB (an increase of 66.4% from baseline). Among the 19 women who completed a second cycle, mean income reached 3,050 RMB (an increase of 132.8%). The eight women who completed three or more cycles reported a mean of 4,120 RMB per month (an increase of 214.5%), with the highest individual income reported at 6,800 RMB, achieved by a food processing entrepreneur who transitioned from informal neighborhood sales to supplying a regional supermarket chain. These figures should be interpreted with the caveat that longer-participating women are likely positively selected based on entrepreneurial capacity; nonetheless, the magnitude of the income trajectory is substantively significant.

Enterprise types cluster into three categories: food processing (14 of 32, 43.8%), handicraft and arts production (9 of 32, 28.1%), and agricultural retail (6 of 32, 18.8%). Three borrowers had established WeChat storefronts reaching urban consumers, a development facilitated informally by younger loan officers who organized digital literacy sessions outside formal program hours. A representative case is a 52-year-old embroiderer with primary school education whose monthly income grew from approximately 800 RMB at program entry to 4,200 RMB after three years, progressing from local weekend market sales to a standing monthly order from a Shanghai gift retailer.

5.5. Empowerment Outcomes: Multi-Dimensional Comparison

Table 3 presents mean scores on six empowerment dimensions for participants and non-participants, along with effect size estimates (Cohen's d). All between-group differences are statistically significant at $p < 0.001$.

Table 3. Empowerment Outcomes Across Six Dimensions: Participants vs. Non-Participants

Empowerment Outcomes: Participants vs. Non-Participants (Lukou Village)			
Empowerment Dimension	Participants Mean (SD)	Non-Participants Mean (SD)	Cohen's d (Effect Size)
Financial autonomy (1–5)	3.82 (0.74)	2.41 (0.89)	1.76 (large)
Household expenditure decisions (1–5)	3.64 (0.81)	2.18 (0.94)	1.67 (large)
Children's education investment decisions (1–5)	3.91 (0.68)	2.54 (1.02)	1.54 (large)
Community meeting attendance (days/year)	4.6 (2.1)	1.3 (1.4)	1.91 (large)
Self-efficacy score (1–10)	7.14 (1.32)	4.87 (1.61)	1.57 (large)
Social network size (named contacts)	18.3 (5.4)	11.2 (4.8)	1.39 (large)
% reporting spousal support for enterprise	71.9%	39.3%	-

Note. All Likert-scale items are self-reported. Cohen's d is calculated as (Mparticipants − Mnonparticipants) / SD_pooled. Effect size benchmarks: small = 0.2, medium = 0.5, large = 0.8 [18]. All between-group differences are significant at $p < .001$ (independent-samples t-test).

Effect sizes are uniformly large ($d = 1.39$ to 1.91) across all dimensions, indicating that the participant–non-participant gap is not marginal but represents a substantively meaningful difference in women's lived empowerment experiences. The largest effect is observed for civic participation ($d = 1.91$): participants attend an average of 4.6 village meetings per year compared to 1.3 for non-participants. This finding is corroborated by the village committee chairman, who noted that microfinance graduates had become markedly more active in village assemblies, with two subsequently standing for election to the village women's federation committee.

Self-efficacy scores (participants: $M = 7.14/10$, non-participants: $M = 4.87/10$; $d = 1.57$) and social network size (18.3 vs. 11.2 named contacts; $d = 1.39$) further indicate that program participation is associated with enhanced psychological agency and expanded relational resources—dimensions of empowerment that go well beyond the financial outcomes typically foregrounded in program evaluations.

5.6. Structural Constraints

The program's heavy dependence on government subsidy raises sustainability concerns: continuity is subject to shifts in local government priorities, and loan officers expressed concern that subsidy reliance was inhibiting the development of autonomous group governance. Land registration policies, which concentrate formal collateral assets in male household members' names, continue to limit women's independent access to follow-on formal finance after completing the program cycle. While 71.9% of participants reported spousal support for their enterprise (compared to 39.3% of non-participants), a meaningful minority continue to navigate household-level resistance.

6. Comparative Analysis

6.1. Empowerment Instruments: Digital Vs. Relational

The Bangladesh and Lukou Village cases highlight markedly different primary empowerment instruments. Polli Phone emphasizes digital technology: mobile banking restores direct financial control, market databases reduce information asymmetries, and digital peer networks extend social capital geographically. The Lukou program relies on relational and institutional mechanisms: solidarity group dynamics, iterative collective meetings, and program credentialing embedded in face-to-face social interaction. Importantly, the data indicate these approaches are complementary rather than substitutable. Bangladeshi participants who most effectively used digital tools were also embedded in strong peer support networks; Lukou participants with better market information—whether through mobile phones or loan officer networks—showed greater enterprise income growth.

6.2. Operational Mechanisms: Social Capital Pathways

Both programs mobilize social capital, but through distinct pathways. Bangladesh combines bonding social capital from solidarity group liability with digitally mediated bridging capital. Lukou Village combines group bonding capital with institutional bridging capital from government program connections and completion credentialing. A key operational difference lies in group formation: Bangladesh groups form organically from pre-existing social networks, ensuring high initial trust; Lukou groups are partly administratively constituted, reducing initial cohesion but enabling inclusion of more isolated women. The large effect sizes observed across all empowerment dimensions in Table 3—despite this administrative formation process—suggest that skilled loan officer facilitation and extended time in the program are sufficient to overcome initial cohesion deficits.

6.3. Socio-Environmental Contexts

Bangladesh's NGO-driven microfinance sector offers organizational autonomy but creates donor funding dependence, while China's statist framework provides stable funding but introduces bureaucratic pressures on program design. Cultural baseline differences are also significant: Bangladeshi purdah norms historically constrained women's physical mobility more stringently than norms in rural Jiangsu. However, Bangladeshi programs developed programmatic adaptations, such as home-based meetings, female loan officers, and mobile service delivery, which the Lukou program has not replicated. As Lukou seeks to extend its reach to more isolated women, these adaptations offer instructive models.

7. Discussion and Policy Implications

The empirical findings yield three theoretical contributions. First, they support an integrative framework combining social capital theory with intersectional feminism: social capital theory illuminates how solidarity groups generate collective resources, while intersectional analysis explains why these resources are distributed unequally among women differing in educational level and household position—a pattern visible in the participant educational attainment data in Table 1, where women with only primary education show lower digital tool usage and smaller enterprise income gains. Second, the large effect sizes documented in Table 3 across multiple empowerment dimensions—financial autonomy, household decision-making, self-efficacy, civic participation—empirically substantiate the theoretical claim that meaningful empowerment requires change across all three components of resources, agency, and achievements, not merely credit access [9]. Third, the income trajectory data in Table 2, showing progressive income gains across loan cycles with a 214.5% increase by the third cycle, provide quantitative grounding for qualitative claims about enterprise capacity building over time.

Policy implications are threefold. Program design should be context-sensitive, investing in institutional analysis before replication across cultural settings. Digital and relational approaches should be treated as complements: the greatest empowerment benefits appear where both are present. Finally, monitoring systems should move beyond repayment rates to measure empowerment across multiple dimensions—an agenda supported by the multi-dimensional outcome data presented in Table 3.

8. Conclusion

This paper has examined women's economic empowerment through microfinance in rural Bangladesh and Lukou Village, China, combining qualitative field data with original descriptive statistics to produce a multi-layered comparative analysis. The Lukou Village data, drawn from direct field participation, interviews with 32 participants and 28 non-participants, and tabulated across multiple empowerment dimensions, demonstrate that community-embedded solidarity lending generates substantial and consistent empowerment benefits relative to a non-participating comparison group. Large effect sizes across financial autonomy, household decision-making authority, self-efficacy, social network size, and civic participation (Cohen's d = 1.39–1.91) establish that these benefits extend well beyond income gains to encompass the full breadth of the resources-agency-achievements framework.

The cross-cultural comparison reveals that while digital tools in Bangladesh and relational group mechanisms in Lukou Village represent different primary empowerment pathways, they are mutually reinforcing rather than competing strategies. Context-sensitive program design, attentive to institutional legacies, cultural norms, and within-population heterogeneity, is the key condition for translating credit access into transformative empowerment. Future research should pursue longitudinal panel data to track empowerment trajectories over time, address the causality challenges inherent in cross-sectional comparisons, and expand the cross-cultural sample to enable more systematic generalizations.

References

1. T. Büthe, "Banker to the Poor: Micro-Lending and the Battle Against World Poverty," Am. Polit. Sci. Rev., vol. 94, no. 3, pp. 741-745, Sep. 2000.
2. B. Armendáriz and J. Morduch, *The economics of microfinance*, *2nd ed.*, MIT Press, 2010.
3. A. M. Goetz and R. Sen Gupta, "Who takes the credit? Gender, power and control over loan use in rural credit programmes in Bangladesh," *World Development*, vol. 24, no. 1, pp. 45–63, 1996.
4. R. D. Putnam, R. Leonardi and R. Y. Nanetti, *Making democracy work: Civic traditions in modern Italy*, 1993.
5. M. Ghatak, "Group lending, local information and peer selection," *Journal of Development Economics*, vol. 60, no. 1, pp. 27–50, 1999.
6. J. E. Stiglitz, "Peer monitoring and credit markets," *The World Bank Economic Review*, vol. 4, no. 3, pp. 351–366, 1990.
7. P. Sanyal, "From credit to collective action: The role of microfinance in promoting women's social capital and normative influence," *American Sociological Review*, vol. 74, no. 4, pp. 529–550, 2009.
8. J. L. Fernando, *Microfinance: Perils and prospects*, Routledge, 2004.
9. N. Kabeer, "Resources, agency, achievements: Reflections on the measurement of women's empowerment," *Development and Change*, vol. 30, no. 3, pp. 435–464, 1999.
10. L. Mayoux, "Tackling the down side: Social capital, women's empowerment and micro-finance in Cameroon," *Development and Change*, vol. 32, no. 3, pp. 435–464, 2001.
11. K. Crenshaw, "Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics," *University of Chicago Legal Forum*, vol. 1989, no. 1, pp. 139–167, 1989.
12. A. Demirgüç-Kunt, L. Klapper, D. Singer, S. Ansar, and J. Hess, *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*, World Bank Publications, 2018.
13. J. C. Aker, R. Boumnijel, A. McClelland, and N. Tierney, "Payment mechanisms and antipoverty programs: Evidence from a mobile money cash transfer experiment in Niger," *Economic Development and Cultural Change*, vol. 65, no. 1, pp. 1–37, 2016.
14. L. Klapper and D. Singer, "The role of informal financial services in Africa," *Journal of African Economies*, vol. 24, suppl. 1, pp. i12–i31, 2015.

15. K. S. Tsai, "Imperfect substitutes: The local political economy of informal finance and microfinance in rural China and India," *World Development,* vol. 32, no. 9, pp. 1487–1507, 2004.
16. J. W. Creswell and V. L. P. Clark, *Designing and conducting mixed methods research, 4th ed.*, Sage Publications, 2023.
17. V. Braun and V. Clarke, "Using thematic analysis in psychology," *Qualitative Research in Psychology*, vol. 3, no. 2, pp. 77–101, 2006.
18. J. Cohen, *Statistical power analysis for the behavioral sciences, 2nd ed.*, Lawrence Erlbaum Associates, 1988.