



WOMEN'S EMPOWERMENT THROUGH MICROCREDIT IN RURAL BANGLADESH: EVIDENCE FROM LAKSHMIPUR DISTRICT

MD. ZAHIDUL ISLAM¹ 

NISHAT TASNIM² 

MD. SOBUR HOSSAIN³ 

SHAMMI AKTER⁴ 

MD. MEHEDI HASAN⁵ 

JABUN NAHAR⁶ 

MST. SUMAIA AKTER⁷ 

ABSTRACT

This study investigates the impact of microcredit on women's empowerment in rural Bangladesh, specifically within the Lakshmipur District. A quantitative research approach was adopted using the data collected through a structured questionnaire. The survey involved 150 women from the district with a focus on their economic activities, autonomy, and social participation. The findings reveal that most respondents (65%) engage in trading supported primarily by microfinance and NGO loans. The majority (43%) achieved annual earnings exceeding BDT 6000, yet 40% reported challenges with loan repayment. The household decision-making analysis showed that 57% of the participants exercised autonomy over financial choices. The results suggest that 83% of the respondents were married, underscoring their motivation to improve family finances. Moreover, despite cultural challenges, 93% observed positive effects on family life, highlighting the role of microcredit in promoting economic and social empowerment. Recommendations include integrating skill development with microcredit programs and involving male family

¹ Department of Sociology, Faculty of Social Science, University of Dhaka, Bangladesh, ORCID: [0009-0004-4832-6103](https://orcid.org/0009-0004-4832-6103)

² Department of Sociology, Faculty of Social Science, Begum Rokeya University, Rangpur, Bangladesh, ORCID: [0009-0008-5866-7816](https://orcid.org/0009-0008-5866-7816)

³ Department of Sociology, Faculty of Social Science, Begum Rokeya University, Rangpur, Bangladesh, Email: soc1915034brur@gmail.com, ORCID: [0009-0009-3671-7357](https://orcid.org/0009-0009-3671-7357)

⁴ Department of Law, Stanford University, Dhaka, Bangladesh, ORCID: [0009-0005-6937-8399](https://orcid.org/0009-0005-6937-8399)

⁵ Department of Sociology, Faculty of Social Science, University of Dhaka, Bangladesh, ORCID: [0009-0006-6807-9191](https://orcid.org/0009-0006-6807-9191)

⁶ Department of English, Comilla University, Bangladesh, ORCID: [0009-0003-8061-0545](https://orcid.org/0009-0003-8061-0545)

⁷ Department of Sociology, University of Dhaka, Bangladesh, ORCID: [0009-0005-0145-5562](https://orcid.org/0009-0005-0145-5562)

members to create a supportive environment. This study highlights the potential of microcredit while suggesting pathways to achieve more sustainable empowerment for rural women in Bangladesh.

KEYWORDS

Microcredit, Women's Empowerment, Quantitative Research Approach, Challenges, Household Decision, Lakshmipur District

INTRODUCTION

Microcredit is a small loan designed for individuals who lack access to traditional financial services. While the earliest instances of microcredit have faded from the record, modern microfinance institutions (MFIs) have traced their origins to the 1970s in countries such as Bangladesh and Bolivia (Gutiérrez-Nieto and Serrano-Cinca 2019). In Bangladesh, more than 13 million people are involved in microcredit programs, representing more than 10% of the population. Of these participants, 81% were women, and 19% were men (Rahman, 2000). Approximately nine million, or more than 7% of the population, are enrolled in NGDO programs (Datta, 2004). Empowering women in Bangladesh is essential to reducing poverty and promoting human rights (Akter et al., 2015). Women's empowerment is regarded as a crucial achievement in the developmental process, with a strong focus on enhancing women's well-being (Akhter & Cheng, 2019). In the 2013 Gender Gap Index by the World Economic Forum, Bangladesh ranked 75th among 144 countries, climbing over ten places from its previous position of 86th in 2012. Bangladesh is one of the two countries with the greatest improvements (WEF, 2013). Microcredit has fostered financial inclusion and significantly contributed to empowering rural women with limited resources by enabling income generation, encouraging savings, building household assets, and, ultimately, reducing poverty (Islam, 2021).

Microcredit aims to increase women's financial independence by providing them with access to income-generating opportunities. Studies such as Islam et al. (2014) and Amin and Becker (1998) show that microcredit helps women start small businesses, contributes to household income, and achieves improved economic well-being. Pitt et al. (2003) found that microcredit for women had a more significant impact on household expenditure, health, and nutrition compared to loans for men. However, Shohel et al. (2023) argue that despite these benefits, women's control over income often remains limited because of patriarchal norms. The financial independence gained through microcredit has community-level effects. Borthakur and Boruah (2023) noted that women reinvest in their families' health and education, thereby promoting socioeconomic development. However, economic inequality persists, as noted by Rahman et al. (2017), with women from wealthier households benefiting more from better access to resources.

Additionally, microcredit empowers women to exercise greater autonomy within their households. The participation of women in economic decisions, such as budgeting and expenditure, was increased by their access to microcredit, as per Islam et al. (2014). The results of Pitt et al. (2003) and Shohel et al. (2023) were validated by Hasan et al. (2019), who observed that intrahousehold dynamics can impede empowerment, suggesting that current power arrangements frequently restrict actual autonomy. Microcredit has been particularly beneficial in enhancing the decision-making power of women within families, particularly concerning financial concerns (Islam et al., 2014; Hasan et al., 2019). Pitt et al. (2003) and Shohel et al. (2023) reported that the development of enhanced decision-making power is frequently disrupted by male control over financial resources. Rahman et al. (2017) have found that women who have gained extensive education are more likely to express their autonomy, which in turn boosts their decision-making abilities. Women's participation in microcredit programs has been associated with enhanced autonomy and self-assurance. Participants in the microfinance programs of Rahman et al. (2017) and Borthakur and Boruah (2023) reported increased self-esteem and agency in their daily activities. Shohel et al. (2023) caution that this resilience may be fragile, particularly in situations where female relatives oppose women.

Considering these factors, we present the following three research questions (RQs):

RQ 1: How does access to microcredit affect the economic empowerment of rural women in Bangladesh?

RQ 2: What impact does microcredit have on rural women's social empowerment and community participation?

RQ 3: How does access to microcredit influence rural women's empowerment, such as decision-making and self-confidence?

THEORETICAL FRAMEWORK

This research is focused on the role microcredit plays in enhancing the socioeconomic status of women in the rural areas of Bangladesh. The research incorporates Empowerment theory, Structural functionalism, and Feminist theory, and their relevance (synergy) in women's empowerment. All the theories are brought together as two dimensions to ease understanding of the relationships between concepts such as micro-credit access, economic empowerment, social empowerment, and psychological empowerment.

Empowerment Theory

Kabeer's Empowerment Theory (1999) is the main theory that provides insight into how microcredit can provide women with more control in their lives, and enhance their decision-making authority and their social power (Agner, 2017). Empowerment in this sense means increasing the ability of rural women to make choices, control

resources, and affect their economic and social surroundings. Microcredit is regarded as a tool empowering women, enabling them to break social and economic barriers through income and engagement with the community.

Structural Functionalism

One concept that Parsons (1951) postulates is Structural Functionalism which points out the relevant function of microlending institutions such as the Grameen Bank in reinforcing stability in society through women’s engagement in economic developments. It is through microcredit that women are increasingly involved in family support, thus elevating their status within the household, and adding economic value to villages. To this end, such intents help to explain why microcredit schemes, in this case, are regarded as an important resource for social equilibrium and the development of the communities.

Feminist Theory

According to Hooks (1984), Feminist Theory gives a perspective on this information familiarizing one with how these microcredit schemes oppose gender and patriarchy. Microcredit allows women to access financial resources thereby helping in the reduction of gender inequalities and enhancing fairness and social justice. Radical Feminism believes that microfinance is vital in elevating the status of women in society, raising their stakes and allowing them whatever freedom of choice that exists – including decision-making at home and within the larger society.

The Conceptual Model integrates the theories mentioned above to visually depict how access to microcredit leads to various forms of empowerment for rural women in Bangladesh. The Conceptual Model is a synthesis of the explained theories through a representation of how access to microfinance enhances the growth of the different types of empowerments among rural women in Bangladesh.

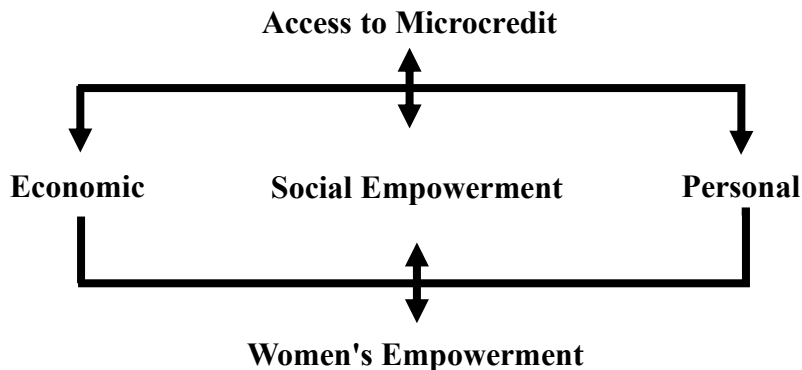


Figure 1: Conceptual Research Model Developed by Authors

METHODOLOGY

Research Design

This study uses a quantitative survey methodology to objectively assess the influence of microcredit on women's empowerment across several dimensions. A quantitative technique was used because of its capacity for numerical analysis, which is crucial for objective assessment of variations in empowerment levels. The survey-based approach facilitated replicability by allowing the same questionnaire to be delivered to many groups in comparable settings, thereby augmenting the dependability of the results. Moreover, the quantitative technique facilitates generalizability, indicating that the findings may be extrapolated to a wider population outside the sample (Rana et al., 2021).

Sources of Data

The sample included 150 rural women from Rakhalia Bazar, four No. The Sonapur Union in Lakshmipur District was chosen by random selection to guarantee representativeness. Simple random sampling is a prevalent technique in surveys and quantitative research methodologies, particularly in investigations involving a substantial number of participants (Rahi, 2017). A sample size of 150 was considered adequate to provide the statistical power necessary to identify significant variations or trends in empowerment. Random sampling was used to diminish selection bias and ensure that the sample sufficiently reflected a larger population of rural women using microcredit services. The response rate was 100%, indicating a substantial degree of involvement and dependability of the data gathered.

Statistical Techniques

The survey was conducted in person from June to July 2023 using a standardized questionnaire delivered by skilled data collectors. A survey is a systematic approach to collecting information directly from individuals to obtain data (Nardi, 2018). In-person surveys were selected to enhance answer accuracy and enable data collectors to elucidate any questions that participants may find ambiguous. The survey was administered in Bangla to guarantee that the participants understood the questions, which was essential for eliciting accurate and significant replies. During the analysis phase, the responses were translated to guarantee consistency and efficient data analysis. Trained data collectors were used to maintain uniformity in survey administration and to reduce interviewer bias.

Research Tools

The survey was administered in Bangla and then translated into English throughout the data processing phase to guarantee precise interpretation. Surveying Bangla allowed individuals to reply easily in their home language, thus improving the validity of their replies. Translation into English throughout the analysis was essential

for consistency and to enable the use of statistical software, which mostly functions in English.

The structured questionnaire comprised closed-ended questions, such as multiple-choice and Likert-scale items organized into economic, social, and personal empowerment categories. Closed-ended questions were used to ascertain uniformity and enhance the analysis. The use of multiple-choice and Likert-scale questions allowed us to appraise the intensity of the participants' experiences and views.

Analysis of the Study

Various precautions were taken throughout the study to guarantee data reliability. Reliability was achieved using a pre-tested structured questionnaire, which maintained consistency in the replies. The use of skilled data collectors ensured consistency in the survey administration, mitigating the potential for interviewer bias. Validity was improved based on the survey questions regarding known operational definitions derived from the theoretical framework. The translation procedure was prudently and delicately carried out to uphold the optimal authenticity of the participants' statements from Bangla to English. The data were carefully examined for missing values and discrepancies to ensure the accuracy and appropriateness of the final dataset for analysis.

The data were analyzed for absent replies and refined using SPSS software. The substantiation for absent data guaranteed the integrity of the dataset, which is essential for precise analysis. The data cleansing process decreases discrepancies, thereby enhancing the quality of the analysis. The SPSS program was utilized because of its high statistical proficiency and appropriateness for handling extensive datasets.

Descriptive statistics were used to encapsulate the responses, underscoring alterations in income, community engagement, and decision-making autonomy. They were selected for their ability to offer a clear and succinct overview of the data, thus facilitating the identification of trends and patterns in women's empowerment attributable to microcredit access.

Ethical Considerations

Ethical issues included informed consent, confidentiality, and the participants' freedom to withdraw. Informed consent guaranteed that participants were fully cognisant of the study's objective and involvement, thus fostering transparency. Confidentiality was maintained to safeguard participants' privacy, essential in sensitive subjects such as empowerment. The participants' latitude to withdraw promised voluntary engagement and maintain ethical norms. Neutral terminology was used to preclude prejudice, guaranteeing that the participants' replies remained uninfluenced by the phrasing of the questions. Data collectors consistently followed

standardized protocols to reduce variations in data collection and significantly augment the reliability and consistency of the results.

RESULTS AND FINDINGS

This study aimed to evaluate the influence that microcredit has on the empowerment of women in rural Bangladesh, with particular attention to economic, social, and personal empowerment. The results are presented by the three research objectives and using the conceptual models of Empowerment Theory, Structural Functionalism, and Feminist Theory.

The demographic data in the following table serves as a foundation for analyzing how microcredit influences various dimensions of empowerment among women in the region.

Table 1: Demographic Distribution of Women Participating in Microcredit Programs (n = 150)

Demographic Factor	Category	Frequency (f)	Percentage % = p (150)
Age Groups	18-25	22	15
	26-30	40	27
	31-35	60	40
	36-40	18	12
	41-45	09	06
Educational Attainment	Illiterate	18	12
	Elementary	56	37
	Secondary	36	24
	Higher Secondary	25	17
	Graduation	15	10
Family Structure	Nuclear	115	76.6
	Extended	35	23.4
Family Size	3-5 members	71	47
	6-8 members	45	30
	8+ members	34	23
Economic Condition	Poor	17	11
	Median	60	40
	Decent	70	47

Demographic Factor	Category	Frequency (f)	Percentage % = p (150)
Occupational Distribution	Agriculture	50	33.3
	Day Labourers	35	23.3
	Commercial	30	20
	Services	20	13.3
	Others	15	10
	Self-employment	70	47
Loan Utilization	Family Development	41	27
	Children's Education	21	14
	Health Services	10	07
	Others	08	05
	Family Development	41	27

Table 1 indicates the tendencies in microcredit schemes among women. Nearly all the respondents (between the ages of 31 and 35) have primary schooling only, which calls for educational programs. The small compact family structure is predominant at 76.6%, which indicates a cultural change. Most borrowings were for self-employment and family improvement, which speaks volumes regarding the contribution of microcredit to economic empowerment while exposing the difficulties experienced in rural women's activities.

Economic Empowerment

Access to Microcredit and Economic Activities

Table 2: Distribution of Occupations and Sources of Funding among Respondents (n = 150)

Occupation	Percentage % = p (150)	Frequency (f)	Source of Funding	Additional Role
Trading	65	98	Microfinance, NGO Loans	Housewife
Agriculture	20	30	Family Resources	Housewife
Handicrafts	10	15	Self-financed, Community Support	Housewife
Services	05	07	Government Schemes	Housewife

Table 2 shows the economic engagements of rural women. Out of this, 65% are involved in various businesses with the help of microloans from NGOs, 20% in farming which is solely dependent on their households, 10% in crafts which are out-of-pocket expenses, and 5% offer services due to government programs. Microcredit strategies appear to be a key factor in women's active engagement, by ensuring that they manage to combine business and household chores with the need to be self-sufficient financially.

Income and Decision-making Power

Table 3: Distribution of Annual Income Brackets among Respondents (n = 150)

Income Bracket (BDT)	% = p (150)	Frequency (f)
6000 and above	43%	64
4000 - 6000	30%	45
2000 - 4000	20%	30
1000 - 2000	07%	11

Table 3 indicates that 43% of the participants earn an income of BDT 6000 or above, while 30% earn an income that ranges between BDT 4000 and 6000, 20% earn BDT 2000 and 4000 and the remaining 7% earn BDT 1000 and 2000. These findings can be viewed as optimistic regarding the financial situation and could be a result of a healthy economy or better availability of resources.

Table 4: Distribution of Microcredit Loan Decision-Making Autonomy among Respondents (n = 150)

Decision-Making on Microcredit Loans	% = p (150)	Frequency (f)
Autonomous Decisions by Women	57%	86 f
Decisions involving Husband, Family Members, or Neighbours	43%	64 f

Table 4 exhibits decision-making authority about microcredit loans. For instance, while 57% of women claimed to have made their own decisions, 43% still solicited the assistance of husbands, kin, or neighbors underscoring the role of society. This shows that microcredit empowers women's autonomy in most cases, but it is clear that a majority of them still are torn between cultural practices and societal expectations in financial decision-making.

Table 3 demonstrates that microcredit has enhanced the incomes of participants, thus increasing economic independence and household decision-making (Table 4). Such results are consistent with Empowerment Theory which stresses the

importance of women’s ability to engage in economic activities which in turn affords them some power over making economic decisions.

Table 5: Distribution of Loan Repayment Challenges among Respondents (n = 150)

Loan Repayment Status	% = p (150)	Frequency (f)
Facing Challenges in Loan Repayment	40%	60
Not Facing Challenges in Loan Repayment	60%	90

Table 5 illustrates the challenges faced by the respondents in repaying their microcredit loans. It can be noticed from Table 5 that 40% of women experience difficulties in repaying the microcredit loans indicating challenges in achieving financial stability. Overall benefits notwithstanding, socio-cultural factors such as patriarchy and how men control resources constrain women’s efforts in increasing their economic power. The motivation behind this is that such issues can be resolved by specific measures such as changing the terms of loans or by offering advisory services on finance and management to empower women sustainably.

Social Empowerment and Community Participation

Community Engagement

Table 6: Distribution of Respondents' Marital Status and Engagement in Microcredit Programs (n = 150)

Marital Status	% = p (150)	Frequency (f)
Married Women	83%	125
Divorced Women	10%	15
Widowed Women	07%	10

Table 6 illustrates that out of the women respondents, a majority 83% are married women who are active users of microcredit services to improve family income. Also married, divorced, and widowed women take a share of 10% and 7% respectively, indicating diversity. Microcredit promotes women’s economic and social development providing financial means to disadvantaged categories of people and encouraging active participation of the recipients in the community.

Social empowerment is observed through increased community participation among microcredit beneficiaries. As highlighted in Table 6, 83% of married women were actively engaged in microcredit programs motivated by a desire to improve their families' financial situations. Participation was not limited to married women, as divorced and widowed women also engaged in these programs, showcasing the inclusive nature of microcredit initiatives.

Personal Empowerment

Household Decision-Making

The degree of decision-making power in households can be seen as a form of personal empowerment. According to the information presented in Table 3 (section 5.1), it is observed that 57% of the women made independent loan decisions and 43% were under the influence of family. The Structural Functionalism Paradigm posits that even in a family context where power relations remain, women are still empowered to help enhance microcredit stability at the household level.

Self-Confidence and Role Expansion

Table 7: Impact of Microcredit on Family Life among Respondents (n = 150)

Impact of Microcredit on Family Life	% = p (150)	Frequency (f)
Positive Impact	93%	140
No Positive Impact	07%	10

Microcredit Programme and its influence on family life and 93% of them stated that it has very positive effects due to enhanced financial stability through small enterprises and agriculture, which empowered women. Only 7%, on the other hand, said no benefits pointing to exorbitant interest rates or small loans. The results illustrate the efficacy of microcredit and the importance of improvement in the loan's conditions (Table 7).

DISCUSSION

This research sought to investigate how microcredit affects women's empowerment in rural Bangladesh, in terms of economic, social, and personal aspects. It was established that microcredit programs were instrumental in enhancing women's economic involvement, societal engagement, and access to microcredit and income-generating activities and the decision-making processes. Furthermore, 57% of the respondents indicated that they were permitted to use the loans as they deemed fit, which suggests that their power to make decisions within the households had improved (Rahman et al., 2017). Nonetheless, 43% of them were still subject to familial constraints, demonstrating the unfading stronghold of male dominance.

The results are consistent with Kabeer's Empowerment Theory (1999) which contends that women have to be in control of economic resources to make any strategic life choices. Women's access to microcredit in this study was found to enable them to up their financial input, thus empowering them in household decision-making and community participation. Also, within structural functionalism, when looking at the empirical case, they can explain how such changes help maintain stability within the household since women play prominent roles in earning and contributing to the family.

Nevertheless, the impact of patriarchal ideology as underscored by Shohel et al. (2023) has a fair share in the control of women's access to finance, implying that having access to resources is not a guarantee of complete empowerment. In their study, Goetz and Sengupta (1996) noted that very few women managed to keep their loans entirely to themselves, which is in agreement with the current study whereby 43 % of the women were reported to have their husbands or relatives help them make decisions on loans. This is in line with the propositions made by Feminist Theory (Hooks, 1984) which claims that true empowerment is not achievable unless the existing gender hierarchies are confronted.

These findings present two important implications. Firstly, they highlight the need to combine microcredit programs with training projects designed to impart financial and business skills to women (Rahman et al., 2017). This finding furthers the argument made by Rahman et al. (2017) who stressed the importance of educational assistance in the delivery of microfinance for effective empowerment. It was noted that more educated women were able to dominate economic decisions more strongly pointing out the necessity of additional education to improve empowerment results.

Secondly, these results indicate that although micro-finance programs have progressed in addressing economic empowerment, their social and individual consequences are limited by cultural values. More comprehensive strategies, which combine for instance, sensitization, education about the community, and involving men in the process, can create a more conducive atmosphere for the empowerment of women (Hasan et al., 2019). This is corroborated by Amin et al. (1998), who reveal that women enrolled in group-oriented microcredit schemes have increased their social capital and their presence in the community, which in turn, aids in the change of gender relations and empowerment of women.

Notwithstanding the promising outcomes, some limitations hinder the understanding of the results. First, the research was cross-sectional hence the possibility of establishing the cause-and-effect relationship between the microcredit and empowerment outcomes is impaired. Longitudinal analysis could be used to study the dynamics of empowerment. On the other hand, 40% of the women indicated that they experienced problems with loan aversion, meaning that microcredit might also exacerbate financial constraints in the absence of appropriate help, as Shohel et al. (2023) raised concerns regarding the mission drift of MFIs who are more focused on profits rather than true empowerment.

Future research may seek to identify ways to mitigate the effects of patriarchal gender norms as barriers, possibly by engaging male family members in microcredit projects for the enhancement of support while minimizing opposition to women. In line with this study's recommendations, Shohel et al. (2023) have posited that

allowing men to take part in the process of empowerment may antagonize patriarchal inclinations. Besides, it is also imperative to study the effectiveness of specific microcredit systems such as the one that employs machine learning algorithms to forecast the impacts of empowerment (Polin et al., 2024). In congruence with that, such strategies may also ensure that the design of microcredit schemes meets the preferences of the particular beneficiaries, thus increasing the chances of success.

This study makes a scholarly contribution to the debate over micro-credit, by providing empirical evidence of the effectiveness of microfinance on women empowerment in the rural context of Bangladesh in terms of economic, social, and personal dimensions. Results are consistent with Islam et al. (2014) who proved that microcredit enhances women's engagement in income activities. Likewise, similar to the present study's economic independence and decision-making power findings, Hasan et al. (2019) showed that micro-credit services provided by Grameen Bank and BRAC enhanced decision-making power within a household. Affirming previous research (Islam et al., 2014), which asserts that microcredit promotes women's independence, these results also illustrate the pressure from the existing domination of culture and society. Employing a theoretical framework incorporating Empowerment Theory, Structural Functionalism, and Feminist Theory, the study explains access to microcredit and its relation to gender and society efficaciously.

The findings of the study are in line with the relevant literature, which proposes a theory of Empowerment, Structural Functionalism, and Feminism to a great extent (Kabeer, 1999; Parsons, 1951; Hooks, 1984). The Empowerment Theory was manifested in the increased decision-making and economic autonomy of the participants, with 57% of the women indicating that they used the loan for purposes they decided on, while 65% of them were engaged in income-generating activities aided by microfinance loans. The Microcredit Structural Functionalism Theory proclaimed the place of microcredit towards the stabilization of the home as more women became breadwinners and played more active roles in supporting the households. Almost all of the participants, that is, 93 percent of them reported that microlending improved their family life as they were able to be breadwinners and better the family's overall situation. Socio Economic Feminism focused on the constraints imposed on the women in their quest for real empowerment because of the existing oppressive systems, enhancing the argument for empowerment being integrative. For example, 43 percent of the respondents stated that they involved their spouses or other family members in deciding about borrowing, which shows availing of financial resources to women is still, in a way, managed by social structures.

CONCLUSION

The primary objective of the research was to understand how microfinance affects women in the rural areas of Bangladesh, considering the economic, sociocultural, and

psychological aspects of it. Results show that there were favorable outcomes for women's engagement in economic activities, women's participation in the community, and women's power in decision-making, all of which are still surrounded by patriarchal authority systems. Women have been able to earn and generate their income as a result of microcredit, which has made them more financially independent and self-reliable. Nevertheless, while some forms of empowerment seem possible thanks to microcredit, socio-cultural patterns remain entrenched and prevent women from accessing financial resources and making financial decisions. Thus, although microfinance as an approach can be viewed as an initial form of empowerment, it is not sufficient and even more so not appropriate to speak of empowerment in this narrow financial manner.

RECOMMENDATIONS FOR FUTURE RESEARCH

Subsequent studies need to seek solutions to socio-cultural constraints that impede the full potential of women's empowerment by microfinance. For instance, longitudinal studies could shed light on the process of evolution of empowerment and what leads to its sustenance over time. In addition, there is room for research on the impact of microcredit on other skills including community education and other development strategies. Furthermore, there is an opportunity to look into gender-sensitive microcredit approaches, possibly employing predictive analytics like machine learning, to better cater the interventions to women across different poverty lines. Engaging men, especially family members of the program participants in such enhancing schemes may work as a vehicle to reduce resentment and aid in the process of women empowerment.

REFERENCES

- Ackerly, B. A. (1995). Testing the tools of development: Credit programs, loan involvement, and women's empowerment. *IDS Bulletin*, 26(3), 56–68.
- Agner, J. (2017). Understanding and applying empowerment theory to promote occupational justice. *Journal of Occupational Science*, 24(3), 280–289.
- Agner, J. (2017). Understanding and applying empowerment theory to promote occupational justice. *Journal of Occupational Science*, 24(3), 280–289.
- Akhter, J., & Cheng, K. (2019). Sustainable Empowerment Initiatives among Rural Women through Microcredit Borrowings in Bangladesh. *Sustainability*, 12(6), 2275. <https://doi.org/10.3390/su12062275>
- Akter, A., Hossain, M. I., Reaz, A. M. K. M., Shahabuddin, M., Chowdhury, M. T. I., & Akter, F. (2020). The role of micro-credit on empowerment of women in Bangladesh. *International Journal of Advanced Science and Technology*, 29(2), 3568–3589.

- Amin, R., & Becker, S. (1998). NGO-promoted microcredit programs and women's empowerment in rural Bangladesh: Quantitative and qualitative evidence. *The Journal of Developing Areas*, 32(2), 221–236.
- Borthakur, A., & Boruah, P. (2023). Microfinance as a tool of socio-economic empowerment of rural women. *International Journal for Research in Applied Science and Engineering Technology*, 11(2), 1–5. <https://doi.org/10.22214/ijraset.2023.1>
- Datta, D. (2004). Microcredit in rural Bangladesh: Is it reaching the poorest? *Journal of Microfinance/ESR Review*, 6(1), 5–20.
- Goetz, A. M., & Sengupta, R. (1996). Who takes the credit? Gender, power, and control over loan use in rural credit programs in Bangladesh. *World Development*, 24(1), 45–63.
- Gutiérrez-Nieto, B., & Serrano-Cinca, C. (2019). 20 years of research in microfinance: An information management approach. *International Journal of Information Management*, 47, 183–197. <https://doi.org/10.1016/j.ijinfomgt.2018.12.001>
- Hasan, N., Shetu, S. H., Chakraborty, B., & Khan, A. G. (2019). Impact of microcredit programs on women empowerment in Bangladesh: A comparative study of Grameen Bank and BRAC. *Global Journal of Management and Business Research*, 19(10), 1–13. <https://doi.org/10.34257/GJMBRGVOL19IS10>
- Hooks, B. (1984). *Feminist theory: From margin to center*. Pluto Press.
- Islam, M. S. (2021). Role of Islamic microfinance in women's empowerment: Evidence from rural development scheme of Islami Bank Bangladesh Limited. *ISRA International Journal of Islamic Finance*, 13(1), 26–45. <https://doi.org/10.1108/IJIF-03-2020-0102>
- Islam, M., Ahmed, M. F., & Alam, M. (2014). The role of microcredit program on women empowerment: Empirical evidence from rural Bangladesh. *Global Journal of Management and Business Research*, 4(4), 80–89.
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435–464.
- Nardi, P. M. (2018). *Doing survey research: A guide to quantitative methods*. Routledge.
- Parsons, T. (1951). *The social system*. The Free Press.

- Pitt, M. M., Khandker, S. R., & Cartwright, J. (2003). Does micro-credit empower women? Evidence from Bangladesh. *The World Bank*. <https://doi.org/10.1596/1813-9450-2998>
- Polin, J. A., Sarker, M. F. H., Dolon, M. D. K., Hasan, N., Rahman, M. M., & Vasha, Z. N. (2024). Predicting the effects of microcredit on women's empowerment in rural Bangladesh: Using machine learning algorithms. *Bulletin of Electrical Engineering and Informatics*, 13(4), 2699–2706.
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues, and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5. doi: 10.4172/2162-6359.1000403.
- Rahman, M. M., Khanam, R., & Nghiem, S. (2017). The effects of microfinance on women's empowerment: New evidence from Bangladesh. *International Journal of Social Economics*, 44(12), 1745–1757. <https://doi.org/10.1108/IJSE-03-2016-0089>
- Rana, J., Gutierrez, P. L., & Oldroyd, J. C. (2021). Quantitative methods. In A. Farazmand (Ed.), *Global encyclopedia of public administration, public policy, and governance*. Springer. https://doi.org/10.1007/978-3-319-31816-5_460-1
- Shohel, T. A., Niner, S., & Gunawardana, S. J. (2023). 'Even though I get a loan, my husband controls it': Rhetoric versus the reality of empowering Bangladeshi women through microfinance programs. *The European Journal of Development Research*, 35(4), 794.