

The Role of Microcredit Advanced by the Bank of Khyber in Poverty Alleviation In Two Selected Union Councils of District Mardan

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Abstract

This study explores the role of microcredit provided by the Bank of Khyber in reducing poverty in two union councils Shergarh and Hathianof Tehsil TakhtBhai, District Mardan. A total of 70 borrowers were selected from 200 microcredit recipients through purposive sampling. The research used a questionnaire to collect data on income, savings, education, health, and expenditure before and after receiving the loan. The paired sample t-test was applied to analyze the impact. The results showed a significant increase in income, savings, education spending, and health expenses after receiving microcredit. These findings suggest that microcredit has a positive effect on improving the living standards of the poor. Based on the results, this study recommends expanding microcredit access, increasing loan amounts, and monitoring the use of funds for income-generating activities.

Keywords: Microcredit, Poverty Alleviation, Financial Inclusion, Socio-Economic Development, Income Generation, Rural Development, Microfinance, Pakistan

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INTRODUCTION

Poverty remains one of the most persistent and multidimensional challenges confronting the global economy, despite notable advancements in economic growth, globalization, and technological progress. The unequal distribution of wealth continues to intensify socio-economic disparities, resulting in a substantial proportion of the global population being deprived of basic human necessities. In developing economies, nearly 30% of individuals still live in severe poverty, lacking access to essential services such as clean drinking water, adequate housing, healthcare, education, and stable employment opportunities (D. Zheng et al., 2024). Furthermore, global estimates indicate that approximately one in every five people experiences extreme poverty, while nearly 40% survive on less than two dollars per day, reflecting deep-rooted structural inequalities and economic vulnerabilities (He et al., 2024). These conditions not only hinder individual well-being but also impede national economic development and social progress.

The incidence of poverty is disproportionately concentrated in regions such as South Asia, Sub-Saharan Africa, and parts of East Asia, where rapid population growth, limited industrialization, weak governance structures, and restricted access to financial resources exacerbate economic hardships. In these regions, poverty is not merely an income-based phenomenon but a multidimensional issue encompassing social exclusion, lack of opportunities, and vulnerability to economic shocks. Despite sustained efforts by governments, international development agencies, and non-governmental organizations, the pace of poverty reduction remains slow and insufficient to meet global targets such as the United Nations Sustainable Development Goals (SDGs), particularly SDG 1, which emphasizes the eradication of poverty in all its forms (Kelly-Fair et al., 2022). This situation highlights the need for innovative, inclusive, and sustainable financial mechanisms that can effectively address the underlying causes of poverty.

In response to these challenges, microcredit has emerged as a significant financial innovation aimed at promoting financial inclusion and poverty alleviation. Microcredit refers to the provision of small loans to low-income individuals who are typically excluded from formal financial systems due to a lack of collateral, credit history, or stable income (Musharavati et al., 2023). The fundamental objective of microcredit is to empower marginalized populations by enabling them to engage in income-generating activities, such as small-scale entrepreneurship and self-employment. By facilitating access to capital, microcredit programs are expected to enhance household income, create employment opportunities, and improve overall living standards (Musharavati et al., 2023). Additionally, microfinance initiatives are often associated with broader socio-economic benefits, including women's empowerment, increased financial literacy, and community development.

However, despite its widespread adoption and theoretical appeal, the effectiveness of microcredit in reducing poverty remains a subject of debate within academic and policy discourse. While numerous studies report positive outcomes in terms of income enhancement and improved living standards, others highlight limitations such as high interest rates, over-indebtedness, and limited long-term sustainability of micro-enterprises (Selomane et al., 2019). These mixed findings suggest that the impact of microcredit is highly context-dependent and influenced by institutional quality, program design, and socio-economic conditions. Therefore, there is a pressing need for empirical, context-specific investigations to assess the actual effectiveness of microcredit programs, particularly in developing countries where financial exclusion remains prevalent.

Against this backdrop, the present study examines the role of microcredit provided by the Bank of Khyber (BoK) in alleviating poverty within selected union councils of District Mardan, Pakistan. The Microfinance Unit of BoK aims to strengthen the economic base of low-income populations by enhancing access to financial services, promoting entrepreneurship, and developing cost-efficient financial solutions tailored to underserved communities. This study seeks to evaluate whether microcredit interventions have contributed to income generation, improved living standards, and enhanced economic stability among beneficiaries. By empirically testing the relationship between microcredit and poverty alleviation, the study aims to provide evidence-based insights for policymakers, financial institutions, and development practitioners seeking to design more effective and sustainable poverty reduction strategies (He et al., 2024).

The primary objective of this study is to examine the effectiveness of microcredit initiatives implemented by the Microfinance Unit of the Bank of Khyber in strengthening the economic base of low-income populations by enhancing their access to financial services and promoting cost-efficient, next-generation financial solutions (Islam et al., 2024). In line with this objective, the study seeks to address the key research question of whether access to microcredit significantly contributes to poverty alleviation by improving income levels, living standards, and economic stability among beneficiaries. To empirically investigate this relationship, the study is guided by the null hypothesis (H_0), which posits that microcredit has no significant effect on poverty alleviation.

This study makes several significant contributions to the existing body of knowledge on microfinance and poverty alleviation. First, it offers a theoretical contribution by extending the literature on microcredit effectiveness through empirical evidence from a developing country context, thereby enriching ongoing academic debates regarding its role in poverty reduction. Second, it provides a contextual contribution by focusing specifically on District Mardan, Pakistan, an area that has received limited scholarly attention, thus generating localized insights into the socio-economic impact of microcredit. Third, the study presents a methodological contribution by applying a structured empirical approach to examine the relationship between microcredit and poverty alleviation, which can serve as a reference framework for future research. Fourth, it delivers a policy contribution by offering practical implications for policymakers and financial institutions to design more effective, inclusive, and sustainable microfinance programs aimed at reducing poverty. Finally, the study contributes at the institutional level by evaluating the performance of the Bank of Khyber's microfinance initiatives, thereby providing evidence-based recommendations that can enhance program efficiency.

LITERATURE REVIEW

Conceptualizing Poverty

Poverty is a multidimensional phenomenon that extends beyond mere income deprivation to include lack of access to basic human needs, social exclusion, and limited opportunities for economic participation. Traditionally, poverty has been measured using income-based thresholds, such as the international poverty line of \$2.15 per day; however, contemporary perspectives emphasize its multidimensional nature, incorporating indicators such as education, health, living standards, and access to essential services (Muliati & Handoyo, 2019). According to Sen's Capability Approach, poverty should be understood as a deprivation of basic capabilities that restrict individuals' ability to lead meaningful and productive lives (Gunarsih et al., 2018). This perspective highlights that poverty is not only a financial condition but also a structural issue influenced by institutional, social, and economic

constraints. In developing countries, including Pakistan, poverty is often characterized by limited access to financial resources, unemployment, and vulnerability to economic shocks, making it difficult for individuals to escape the cycle of deprivation.

Microcredit: Definition and Theoretical Foundation

Microcredit, a key component of microfinance, refers to the provision of small loans to low-income individuals who lack access to formal banking systems due to insufficient collateral or credit history (AL-Maamari et al., 2025). The concept gained global recognition through the work of Muhammad Yunus and the Grameen Bank model, which demonstrated that providing financial services to the poor could stimulate entrepreneurship and economic self-sufficiency. From a theoretical perspective, microcredit is grounded in the principles of Financial Inclusion Theory, which posits that access to financial services is essential for economic participation and poverty reduction. Additionally, it aligns with the Sustainable Livelihoods Framework, which emphasizes enhancing individuals' access to financial capital as a means of improving livelihood outcomes. By enabling individuals to invest in small businesses and income-generating activities, microcredit aims to break the cycle of poverty and promote sustainable economic development (Akhter & Cheng, 2020).

Microcredit and Poverty Alleviation

A substantial body of empirical literature has examined the relationship between microcredit and poverty alleviation, with mixed but generally positive findings. Several studies suggest that access to microcredit significantly improves household income, consumption levels, and asset accumulation. For instance, (Muliati & Handoyo, 2019) found that microfinance programs in Bangladesh contributed to increased income and reduced poverty among rural households. Similarly, Phan et al. (2023) reported that microcredit participation led to higher levels of employment and economic activity, particularly among women. In the context of developing countries, microcredit has also been associated with improvements in education, health outcomes, and overall living standards (AL-Maamari et al., 2025).

However, other studies present a more critical perspective, arguing that the impact of microcredit on poverty alleviation may be limited or context-dependent. (Al-Shami et al., 2021) in a randomized evaluation study, found modest effects of microcredit on business creation but limited impact on broader welfare indicators. Likewise, some scholars highlight issues such as high interest rates, over-indebtedness, and the inability of micro-enterprises to generate sustainable income, which may undermine the effectiveness of microcredit programs (Kandie & Islam, 2022). These divergent findings suggest that while microcredit has the potential to alleviate poverty, its effectiveness depends on factors such as program design, institutional support, borrower characteristics, and local economic conditions.

Microcredit in Pakistan

In Pakistan, microfinance has emerged as an important tool for addressing financial exclusion and poverty. Institutions such as the Bank of Khyber, Khushhali Bank, and Akhuwat Foundation have played a significant role in providing financial services to underserved populations. Empirical studies in the Pakistani context indicate that microcredit has contributed to increased income, employment generation, and improved living standards among borrowers (Jamil et al., 2024). Furthermore, microfinance initiatives have been found to enhance women's empowerment and financial independence, particularly in rural areas. However, challenges such as limited outreach, high operational costs, and regional disparities continue to hinder the effectiveness of microcredit programs. Therefore, localized studies are essential to assess the impact of microcredit interventions in specific regions, such as District Mardan.

Hypothesis Development

Based on the theoretical foundations and empirical evidence discussed above, microcredit is expected to play a significant role in poverty alleviation by enhancing access to financial resources, promoting entrepreneurship, and improving income levels. The Financial Inclusion Theory suggests that access to credit enables individuals to invest in productive activities, thereby increasing their earning capacity and reducing poverty. Similarly, the Sustainable Livelihoods Framework emphasizes the importance of financial capital in improving livelihood outcomes and reducing vulnerability. Empirical studies generally support the positive relationship between microcredit and poverty reduction, although the extent of its impact may vary across contexts (Phan et al., 2023). Given these arguments, it is reasonable to expect that microcredit provided by the Bank of Khyber will contribute to poverty alleviation in District Mardan. Therefore, the study proposes the following hypothesis:

H_1 : Microcredit has a significant positive effect on poverty alleviation.

H_0 : Microcredit has no significant effect on poverty alleviation.

Research Methodology

Study Area

The present study was conducted in Tehsil Takht Bhai, located in District Mardan, Khyber Pakhtunkhwa, Pakistan. The tehsil comprises a total of 33 union councils, representing a diverse socio-economic landscape characterized by varying levels of income, employment opportunities, and access to financial services. For the purpose of this study, two union councils, Shergarh and Hathian, were purposively selected due to the relatively higher concentration of individuals who had received microcredit from the Bank of Khyber (BoK). The selection of these areas was intended to ensure the availability of relevant respondents and to facilitate an in-depth assessment of the impact of microcredit on poverty alleviation.

Sampling Technique and Sample Size

The study employed a purposive sampling technique to select respondents who had directly benefited from microcredit provided by the Bank of Khyber. The target population consisted of 200 loan recipients across the selected union councils. From this population, a sample of 70 respondents (35% of the total population) was drawn to ensure adequate representation while maintaining feasibility of data collection. The sample was proportionally distributed between the two union councils, with 38 respondents selected from Shergarh (out of 108 beneficiaries) and 32 respondents from Hathian (out of 90 beneficiaries). This proportional allocation approach ensured that each union council was fairly represented in accordance with its share of the total beneficiary population.

Data Collection Method

Primary data for the study were collected through a structured questionnaire designed to capture key socio-economic indicators of the respondents. The questionnaire included items related to income, savings, employment status, expenditure patterns, health conditions, educational access, and housing quality, both before and after receiving microcredit. To enhance the reliability and validity of the responses, data collection was conducted independently without the presence or influence of Bank of Khyber staff, thereby minimizing response bias and encouraging honest and unbiased feedback from participants. The instrument was designed to provide a comprehensive understanding of the extent to which microcredit interventions have influenced the living standards of beneficiaries.

Data Analysis Techniques

The collected data were systematically analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics, including frequencies, percentages, and mean values,



were employed to summarize the demographic and socio-economic characteristics of the respondents. Furthermore, inferential statistical analysis was conducted using a paired sample t-test to compare the pre- and post-microcredit conditions of the respondents. This technique enabled the study to assess whether there were statistically significant differences in key variables such as income, savings, and living standards following access to microcredit, thereby providing empirical evidence regarding the effectiveness of microcredit in poverty alleviation.

Results

Socio-Economic Characteristics

Table 4.1 above provides a clear overview of the social and economic background of the people who received microcredit. Most of them were between 31 and 45 years old, showing that middle-aged adults are the main users of these loans. In terms of education, a large number had at least completed matric, mainly from Hathian, while many illiterate individuals were from Shergarh. Most respondents were married and lived in joint families, which is common in rural areas. The gender ratio in households was nearly equal, with a slight male majority. Age-wise, the majority of household members were in the 21–40 age group, which is the main working-age population. Farming and livestock rearing were the most common occupations, while others worked in daily labor, small businesses, or skilled trades like tailoring. The most common loan amount was Rs. 30,000, used mainly for farming needs such as buying seeds, livestock, or equipment. Some also used the loans to start small businesses or invest in income-generating tools. People in Hathian mostly found the loan process easy, while those in Shergarh faced more difficulties. Overall, the loans helped people improve their farming activities, start small businesses, and support their families financially.

Table 4.1: Socio-Economic Characteristics of Respondents

Variable	Category/Range	Number of Respondents (n)	Percentage (%)	Remarks
Age Group	15–30 years	12	20.00%	Younger adults
	31–45 years	32	53.33%	Most active loan users
	Above 46 years	16	26.67%	Older individuals
Education Level	Illiterate	17	28.33%	Mostly from Shergarh
	Primary	12	20.00%	Basic schooling
	Middle	8	13.33%	Secondary level
	Matric and above	23	38.33%	Majority from Hathian
Marital Status	Married	54	90.00%	Majority with family responsibilities
	Single	5	8.33%	Few unmarried respondents
	Widowed	1	1.67%	No divorced respondents reported
Family Type	Joint Family	32	53.33%	Most common in rural areas
	Extended Family	14	23.33%	Moderate

Gender Composition	Nuclear Family	14	23.33%	occurrence
	Male	289	50.17%	Equal to extended Slightly more males
	Female	287	49.83%	Close gender balance
Age Structure	0-20 years	126	21.88%	Younger dependents
	21-40 years	251	43.58%	Dominant working- age group
	41-60 years	143	24.83%	Middle-aged adults
	Above 60 years	56	9.72%	Elderly population
Main Occupation	Farming	20	33.33%	Main income source
	Livestock Rearing	18	30.00%	Secondary source
	Labour (Daily Wage)	6	10.00%	Irregular income
	Shopkeeping / Supplier	6	10.00%	Business activity
	Others (e.g., tailoring)	10	16.67%	Skilled trades
Loan Amount Borrowed	Rs. 15,000	14	23.33%	Small loan
	Rs. 30,000	32	53.33%	Most common loan size
	Rs. 50,000	14	23.33%	Larger loan
Loan Process Ease	Easy Process	41	68.33%	Mostly in Hathian
	Difficult Process	19	31.67%	Mostly in Shergarh
Loan Utilization	Agriculture (seeds, inputs)	24	40.00%	Main purpose
	Livestock Purchase	18	30.00%	High use
	Business / Shop Setup	6	10.00%	Small enterprise investments
	Farm Tools / Equipment	4	6.67%	Productivity improvement
	Land Leveling	4	6.67%	Agricultural improvement



Other (tailoring, 4 carpentry)	6.67%	Income diversification
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4.2 Paired Sample t-Test Analysis

Table 4.2 presents the results of the paired sample t-test, demonstrating a significant improvement in all selected socio-economic variables after the provision of microcredit. The findings indicate that monthly income increased substantially from PKR 12,000 to PKR 20,500, reflecting a positive change of PKR 8,500, with a high t-value of 18.73 and a p-value of 0.000, confirming statistical significance; this suggests that microcredit enabled respondents to engage in productive income-generating activities and enhance their earning capacity. Similarly, monthly savings rose markedly from PKR 500 to PKR 3,000, showing an increase of PKR 2,500, supported by a t-value of 14.43 and a p-value of 0.000, indicating improved financial stability and saving behavior among beneficiaries. Furthermore, education spending increased from PKR 700 to PKR 1,800, with a difference of PKR 1,100 (t = 10.52, p = 0.000), implying that improved income levels allowed households to invest more in human capital development. In the same vein, health expenditure showed a significant rise from PKR 900 to PKR 2,200, with an increase of PKR 1,300 (t = 11.64, p = 0.000), reflecting enhanced access to healthcare services and improved overall well-being. The consistently high t-values and p-values below the threshold of 0.05 across all variables confirm that the observed changes are statistically significant, thereby providing strong empirical evidence that microcredit has a positive and meaningful impact on improving income, savings, and overall living standards, ultimately contributing to poverty alleviation among the respondents.

Table 4.2: Results of Paired t-test for Socio-Economic Variables

Variable	Before Loan (PKR)	After Loan (PKR)	Difference (PKR)	t-value	p-value	Result
Monthly Income	12,000	20,500	+8,500	18.73	0.000	Significant Increase
Monthly Savings	500	3,000	+2,500	14.43	0.000	Significant Increase
Education Spending	700	1,800	+1,100	10.52	0.000	Significant Increase
Health Expenditure	900	2,200	+1,300	11.64	0.000	Significant Increase

5. Discussion

The primary objective of this study was to examine the impact of microcredit on poverty alleviation in selected union councils of District Mardan, with a particular focus on key socio-economic indicators such as income, savings, education expenditure, and health expenditure. The findings of the study provide strong empirical evidence that microcredit has a significant and positive effect on improving the economic and social conditions of low-income households. The results obtained from the paired sample t-test revealed statistically significant improvements across all variables, thereby supporting the alternative hypothesis that microcredit contributes to poverty reduction. The substantial increase in monthly income

observed in this study indicates that access to microcredit enables beneficiaries to invest in income-generating activities such as small businesses, livestock management, and trade. This finding is consistent with prior studies, which suggest that microcredit enhances entrepreneurial capacity and income levels among low-income populations (AL-Maamari et al., 2025). The increase in income not only improves household consumption but also reduces financial vulnerability, thereby contributing to overall economic stability. This supports the theoretical assumptions of Financial Inclusion Theory, which emphasizes that access to financial services is essential for economic participation and poverty reduction. Similarly, the significant improvement in savings behavior among respondents reflects enhanced financial discipline and economic security. Increased savings serve as a buffer against unexpected financial shocks and indicate a transition from subsistence-level living to a more stable economic condition. This finding aligns with the Sustainable Livelihoods Framework, which highlights the importance of financial capital in strengthening household resilience and reducing vulnerability (Muliati & Handoyo, 2019). The ability to save also suggests that microcredit not only increases income but also promotes better financial management practices among borrowers. The study also found notable increases in education and health expenditures, which are critical indicators of improved living standards and human development. The rise in education spending suggests that households are prioritizing investments in human capital, which can have long-term benefits in terms of improved employment opportunities and intergenerational poverty reduction. Likewise, increased health expenditure reflects improved access to healthcare services and a greater capacity to address medical needs, leading to better overall well-being. These findings are consistent with previous research indicating that microcredit contributes to improvements in social indicators such as education and health (L. Zheng et al., 2022). Overall, the findings of this study confirm that microcredit is an effective tool for poverty alleviation, as it not only enhances income but also improves broader socio-economic conditions. However, it is important to recognize that the effectiveness of microcredit may vary depending on contextual factors such as the design of financial programs, borrower characteristics, and institutional support. Therefore, while microcredit has demonstrated significant positive impacts in the study area, its long-term sustainability and scalability require careful consideration.

5.1 Implications of the Study

The findings of this study carry several important implications for policymakers, financial institutions, and development practitioners. From a policy perspective, the results highlight the need for governments to promote and support microfinance initiatives as a viable strategy for poverty alleviation. Policymakers should focus on creating an enabling regulatory environment that facilitates access to affordable credit for low-income populations, particularly in rural and underserved areas. Additionally, integrating microfinance programs with broader poverty reduction policies can enhance their effectiveness and sustainability. From an institutional perspective, the study provides valuable insights for financial institutions such as the Bank of Khyber. The positive impact of microcredit on socio-economic indicators suggests that expanding microfinance outreach can significantly contribute to financial inclusion and economic development. However, institutions should also focus on improving the design and delivery of microcredit programs by ensuring lower interest rates, flexible repayment terms, and adequate borrower support services. Providing financial literacy training and business development support can further enhance the effectiveness of microcredit interventions. From a theoretical perspective, the study contributes to the existing literature by providing empirical support for Financial Inclusion Theory and the Sustainable

Livelihoods Framework. The findings reinforce the argument that access to financial resources plays a critical role in improving economic outcomes and reducing poverty. This study also adds to the ongoing academic debate by demonstrating that microcredit can have a meaningful impact when implemented effectively in specific socio-economic contexts. From a practical perspective, the study highlights the importance of targeting the right beneficiaries and ensuring the productive use of loans. Microcredit programs should be designed to support income-generating activities rather than consumption-based borrowing, as this can maximize their impact on poverty reduction. Additionally, monitoring and evaluation mechanisms should be strengthened to assess the long-term outcomes of microfinance initiatives. Finally, from a social perspective, the study underscores the broader developmental impact of microcredit, particularly in improving education and health outcomes. By enhancing access to financial resources, microcredit can contribute to social empowerment, improved quality of life, and sustainable community development. Therefore, microfinance should be viewed not only as a financial tool but also as a comprehensive development strategy aimed at improving overall human well-being.

5.2 Limitations

Despite its contributions, this study is subject to several limitations that should be considered when interpreting the findings. First, the study employed a cross-sectional research design, which limits the ability to establish causal relationships between microcredit and poverty alleviation over time. A longitudinal approach would provide a more comprehensive understanding of the long-term impact of microcredit interventions. Second, the study was conducted in only two union councils (Shams' et al., 2025) within District Mardan, which may limit the generalizability of the findings to other regions with different socio-economic conditions. The localized nature of the sample restricts the broader applicability of the results. Third, the use of purposive sampling, while appropriate for selecting relevant respondents, may introduce selection bias and limit the representativeness of the sample. Future studies may benefit from employing probability sampling techniques to enhance external validity. Fourth, the study relied on self-reported data collected through questionnaires, which may be subject to response bias, recall errors, or social desirability bias. Respondents may have overestimated or underestimated their pre- and post-loan conditions. Fifth, the study focused primarily on quantitative measures of socio-economic improvement and did not incorporate qualitative insights that could provide a deeper understanding of borrowers' experiences, challenges, and perceptions regarding microcredit.

5.3 Future Directions

Based on the limitations and findings of this study, several directions for future research are proposed. First, future studies should adopt longitudinal research designs to examine the long-term sustainability of microcredit impacts on poverty alleviation. This would allow researchers to assess whether the observed improvements are maintained over time. Second, expanding the geographical scope of the study to include multiple districts or provinces would enhance the generalizability of the findings and provide a more comprehensive understanding of the effectiveness of microcredit across different socio-economic contexts. Third, future research should incorporate additional variables such as financial literacy, entrepreneurial skills, institutional support, and interest rates to better understand the factors influencing the success of microcredit programs. The inclusion of mediating and moderating variables could provide deeper insights into the mechanisms through which microcredit affects poverty. Fourth, adopting a mixed-methods approach that combines quantitative analysis with qualitative techniques such as interviews and case studies would enrich the findings and

provide a more holistic understanding of the impact of microcredit on beneficiaries' lives. Fifth, future studies may also explore comparative analyses between different microfinance institutions to evaluate their relative effectiveness and identify best practices in microcredit delivery. Finally, researchers should investigate the potential challenges associated with microcredit, such as over-indebtedness and high interest rates, to develop strategies that ensure the sustainability and inclusiveness of microfinance programs.

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