



Enhancing SME Performance Through Microfinance: Insights from Rural Nepal

Bharat Singh Thapa¹, Neema Pandey², Durga Datt Pathak³

¹ Assistant Professor, Central Department of Management, Tribhuvan University, Nepal.

² Research Scholar, School of Management, Tribhuvan University, Nepal.

³ Assistant Professor, Shanker Dev Campus, Tribhuvan University, Kathmandu, Nepal.

Article History

Received on - June 23, 2024

Revised on - August 05, 2024

Accepted on - September 12, 2024

Keywords:

Microfinance, SMEs performance, structural equation modeling, Nepal

Online Access



DOI: <https://doi.org/10.58665/njiss.57>

Correspondence

Bharat Singh Thapa,
Assistant Professor, Central Department of
Management, Tribhuvan University, Nepal
Email: bharat.thapa@cdm.tu.edu.np

How to Cite APA Style

Thapa, B. S., Pandey, N., & Pathak, D. D. (2024). Enhancing SME performance through microfinance: Insights from rural Nepal. *Nepalese Journal of Insurance and Social Security*, 7(1), 10-19. <https://doi.org/10.58665/njiss.57>

Abstract

Purpose: The primary objective of this paper is to examine the effect of microfinance services on the performance of small and medium enterprises (SMEs) involved in microfinance programs in the Rupandehi district.

Design/methodology/approach: A survey was conducted among 385 purposively chosen clients of Microfinance Institutions (MFIs) running SMEs using structured questionnaires incorporating demographic information and study variables. Data were analyzed using Structural equation modeling (SEM) through SmartPLS to investigate the effect of tailored microfinance services on selected performance indicators of SMEs.

Findings: The research reveals positive and significant influences of microfinance services (measured by microloans, micro saving services, and skill development training) on the performance (measured by profit, sales growth, and employment creation) of SMEs. The findings emphasize the crucial role of integrated microfinance programs in enhancing SME profitability, employment, and sales growth.

Conclusion: Microfinance services, especially micro-savings and training programs, significantly improve SME performance and sustainability by fostering employment, sales growth, and profitability by promoting skills development, financial stability, and efficient business practices.

Implications: These findings present valuable insights for policymakers, microfinance practitioners, development partners, and SME owners seeking to enhance support mechanisms for the sustainability of small businesses. This paper contributes significantly to academic literature, demonstrating the impact of microfinance services on financial performance and job creation using robust analytical methods to provide comprehensive insights.

JEL Classification: G21, O16, O53, R11, P13

Introduction

Microfinance is all about the provision of small-scale financial services to poor people, namely, unbanked people who do not have any formal access to financial institutions. By offering small loan amounts, these people are supposed to start small business enterprises. Small and medium-sized enterprises (SMEs) contribute significantly to the overall value in developed countries and have the greatest growth potential (Ayyagari, Demirguc-Kunt, & Maksimovic, 2011). Ministry of Finance (2024) mentioned that 673,244 SMEs provide employment opportunities for 3.4 million people in Nepal. Nevertheless, small and medium -sized enterprises in Nepal face significant difficulties in accessing finance due to high interest rates, significant credit requirements, cumbersome processes, lack of information and inadequate institutional capacity (Kharel & Dahal, 2020). MFIs typically offer financial services such as savings, credit, insurance and payment. non-financial services such as business training and social services are an integral part of microfinance programs (Robinson, 2001). Despite claims by banking institutions of SMEs being prime customer targets, SMEs in Nepal have been forwarded the fewest loans of all established businesses (Ahmad, 2019). The term MFI is often used rather loosely to refer to government mortgages and other services provided



by self-identifying providers, Microcredit plays a crucial role in job creation through enterprise development.

Entrepreneurship plays a crucial role in eradicating poverty, fostering national development, and generating employment. It stimulates economic growth by creating new businesses, which in turn generate jobs and reduce unemployment rates. Entrepreneurs drive innovation and efficiency, leading to enhanced productivity and competitiveness within the economy. Additionally, entrepreneurship promotes social development by providing opportunities for marginalized communities, thereby contributing to poverty reduction and inclusive growth (Acs, Szerb, & Autio, 2013). Access to microfinance enables SMEs in Nepal to obtain capital for business initiation and expansion, fostering entrepreneurship and income generation. A study by Bamwesigye (2008) found that 65 % of small and medium-sized enterprises fail to expand and introduce new products and services due to a lack of microcredit. Therefore, MFI is crucial for the success of SMEs in Nepal. For instance, Ghimire et al. (2017) explored the role of microfinance in supporting entrepreneurs in Nepal. They highlight that access to loans from cooperatives significantly impacts business income, contributing to the overall success and sustainability of SMEs.

Another study by Dhakal (2020) found a significant effect of microfinance services such as microloans, savings, and education on the growth of small businesses in emerging economies. Small-scale enterprise is crucial to developing a country's economy and countries. Munyo (2021) argues that microcredit services have a significant negative impact on the growth of SMEs while micro-saving and micro-insurance have a positive effect on SME performance. According to Mbithe's (2013) study in Kenya to find out the effects of microfinance services on the growth of Small and Medium Enterprises. The study reveals microcredit has a positive effect on sales for micro-enterprises, business jobs, and household income, while micro-insurance affects growth negatively.

This paper provides empirical evidence on the effect of microfinance services on the performance of SMEs. Moreover, the results of the paper can prove beneficial for both microfinance organizations and the Nepali government. They will aid them in understanding and enhancing microfinance services. In particular, this study addresses three research questions: first, what is the effect of microloans on SME performance regarding profitability, employment creation, and sales growth? Second, is there any effect of saving services on profitability, employment creation, and sales growth of SMEs? Lastly, does managerial skill training influence microfinance institutions' performance?

After introduction, the paper presents the literature review to build a theoretical and conceptual foundation followed by employed research methodology. The results are presented in fourth section, and in the fifth section, we discuss the results and conclusions.

Literature Review

Microfinance Institutions are established to support small businesses and empower the community, especially owners of small and medium enterprises. Initially, MFI is known for providing loans to micro-enterprises. Microfinance is the establishment of financial services for low-income customers, including consumers and the self-employed, who conventionally lack access to banking and related services (Ledgerwood, 1999). The association between microfinance services and the performance of SMEs assumes that microfinance provides services to small enterprises.

Several empirical studies have examined the association between MFIs and the performance of SMEs. In one such study, Rotich et al. (2015) researched to explore the effect of microfinance services on the performance of MSMEs by using explorative research design. They found that access to saving schemes, managerial training and credit granting periods are statistically significant for the performance of micro-enterprises. Yousfani et al. (2019) show a poor training and low limits of loans correlate to sluggish nurturing of entrepreneurship. In the context of Nepal, Thapa and Chowdhary (2022), and Dhungana (2018) found that women taking microfinance services tend to create new businesses and expand their existing businesses in Nepal. However, Atmadja, Su and Sharma (2016) examine the impact of microfinance on the performance of women-owned microenterprises (WMEs) in Indonesia, finding a negative relationship between financial capital and performance, suggesting that as businesses grow, reliance on microcredit should decrease in favor of savings and retained profits.

Recognizing the critical role of microfinance supporting small enterprises, Aladejebi (2019) examined the effect of microfinance bank services on SME owners in Nigeria, highlighting how access to microloans, savings, insurance, and education enhances SMEs' financial performance. This underscores the crucial role of MFIs in supporting small enterprise success. Similarly, Molche and Ombui (2017) found that services such as loans, savings, training, and technology positively affect SME profitability, sales, and employment, the significant impact of microfinance services on the growth of microenterprises. Furthermore, Chanelle (2013) revealed that MFIs contribute to SME formation through innovative financial products like Value Chain Finance, although their effectiveness is hampered by challenges such as insufficient sustainable financial resources and governance issues. Likewise, Buckley (1997) demonstrated a positive relationship between microfinance credit and SME growth in Kenya, Malawi, and Ghana, emphasizing its impact on profit, income levels, and employment in the informal sector. Contrary to many other findings, Bauchet and Morduch (2013) concluded that SME finance does not necessarily provide more efficient job creation for the demographic benefiting from microcredit in Bangladesh.

The brief literature review highlights the positive impact of MFI services, including micro-credit, micro-insurance, savings, and managerial skills training, on the performance of SMEs. While abundant literature exists on this relationship in developing countries, there is a dearth of research focusing on Nepal's rural setting. Based on this literature, a conceptual framework has been developed by showing the relationship between three microfinance services and three SME performance indicators with hypotheses, as indicated in Figure 1.

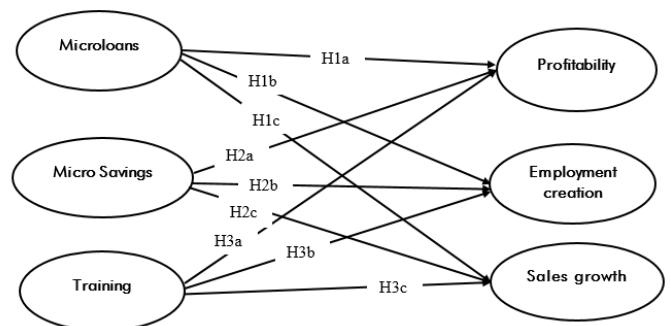


Figure 1: Hypothesised Research Model

The Hypothesis

Hypothesis 1: Microloans and the performance of SMEs

H1a: Microloans positively related to profitability of SMEs.

H1b: Microloans positively related to employment creation of SMEs.

H1c: Microloans positively related to sales growth of SMEs.

Hypothesis 2: Micro savings and the performance of SMEs

H2a: Savings positively related to the profitability of SMEs.

H2b: Savings positively related to employment creation of SMEs.

H2c: Savings positively related to sales growth of SMEs.

Hypothesis 3: Training and the performance of SMEs

H3a: Trainings positively related to profitability of SMEs.

H3b: Trainings positively related to the employment creation of SMEs.

H3c: Trainings positively related to sales growth of SMEs.

Methods

This paper is based on a comprehensive survey among beneficiaries of MFIs running businesses in the Rupandehi district of Nepal. Rupandehi District plays an important role in the provision of microfinance services in Nepal. The first microfinance institution was established here about thirty years ago (Thapa & Chowdhary, 2022). The rationale behind selecting the district is that many MFIs, NGOs, savings and credit cooperatives, and community-based organizations are providing their services. As of mid-June 2023, there were 57 microfinance institutions, with three operating as wholesale microfinance and the remaining 54 as retail microfinance companies (NRB, 2023). Among them, mainly three MFIs, namely, Grameen Bikas Laghubitta Bittiya Sanstha Ltd., Unnati Sahakarya Laghubitta Bittiya Sanstha Ltd., and Jalpa Samudayik Laghubitta Bittiya Sanstha Limited offer services within the study area. According to Gurung (2019), it is estimated that there are more than 462,605 registered businesses in Nepal, with 4.2% of them, or approximately 19,429, located in the Rupandehi district. Among these, 385 SME owners taking loans from MFIs were taken as samples following Cochran (1997) formula.

A structured questionnaire survey was conducted among SME owners who have taken loans and other services from microfinance institutions. The questionnaire was divided into different parts to collect the data. The first part covers demographic and general business information, the second part covers services provided by MFIs, and the third part covers SME performance. As a research instrument, the questionnaire is formed in a five-point Likert scale and adopted from Geoffrey and Emenike (2018). After completing the data collection process, the data collected were coded in Ms Excel and analyzed in SPSS and Smart-PLS. Using Smart-PLS to test the hypotheses, structural equation modeling (SEM) was employed. SEM enables the analysis of complex relationships between variables and the testing of theoretical models.

Results and Analysis

Profile of Respondents

Table 1 shows the demographic characteristics of the respondents who own different enterprises in the Rupandehi district. Respondents' responses are classified by gender, age, and education level.

Table 1: Respondents Profile

Characteristics	Category	Frequencies	Percent
Gender	Male	239	62.1
	Female	146	37.9
Age	Below 20 years	11	2.9
	21-30 years	69	17.9
	31-40 years	108	28.1
	41-50 years	82	21.3
	51-60 years	90	23.4
	Over 60 years	25	6.5
Education Level	SLC/SEE	70	18.2
	Intermediate	133	34.5
	Bachelor level	131	34.0
	Master degree	51	13.2

Note. N=385

Table 1 shows that the results of this investigation depend on the majority of male clients of MFIs being 31-40 years old, which means that owners in this age group are more likely to take services from MFIs. The majority of the clients have earned an intermediate education level (34.5%).

Business Information

Most respondents (70.4%) own sole proprietorship firms. In the case of Experience, 42.9% have 3-5 years of experience, while regarding business types, 29.6% are in services, highlighting its dominance.

Table 2: Business Information

Factors	Demographic variables	Frequencies	Percent
Ownership	Sole Proprietorship	271	70.4
	Partnership	114	29.6
	3-5 years	165	42.9
	Over 6 years	146	37.9
Types of Business	Retail shop	100	26.0
	Service	114	29.6
	Manufacturing	89	23.1
	Others	82	21.3

Descriptive Analysis

The users were asked to respond based on different dimensions of the performance of SMEs and services of microfinance using a 5-point Likert scale where 1=Strongly Disagree, 2=Disagree, 3=Neutral,

4=Agree, and 5= Strongly Agree. To test the normality of data, skewness and kurtosis test were examined. The minimum threshold values for skewness (± 3) and values for kurtosis (± 10) indicate that the data are not severely skewed. Hence, the value of skewness and kurtosis found within the acceptable criteria as a rule of thumb. Moreover, employment creation highly influence the SMEs performance followed by growth rate in sales. However, micro saving and microloan influenced least.

Table 3: Descriptive statistics

Variables	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Microloan	1	5	3.295	1.053	-0.425	-1.002
Micro saving	1	5	3.227	1.088	-0.334	-1.135
Training	1	5	3.266	1.113	-0.343	-1.119
Profitability	1	5	3.321	1.111	-0.388	-1.130
Employment	1	5	3.492	1.095	-0.737	-0.682
Sales growth	1	5	3.419	1.153	-0.582	-1.018

Measurement Model

This model ensures that the chosen indicators accurately reflect the intended constructs. This process supports evaluating the reliability and validity of the measurement instruments employed,

thus enhancing the overall quality of the research findings in term of reliability and validity that considered by measurement model presented in Figure 2.

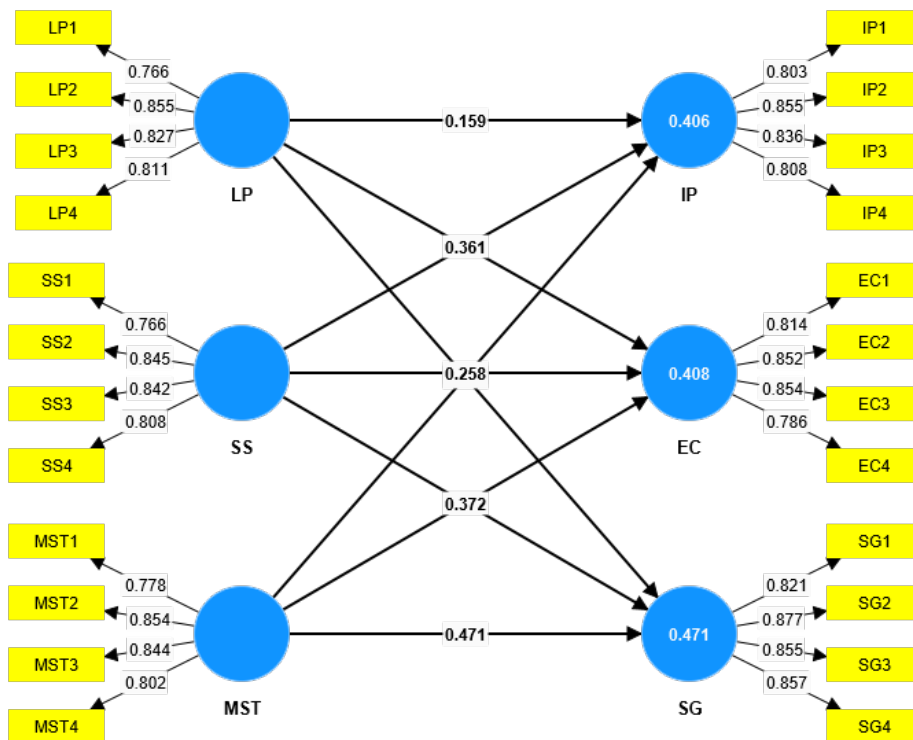


Figure 2: Measurement Model

Based on the measurement model, reliability and convergent validity to test the internal consistency of indicators measuring the

same construct. Likewise, discriminant validity was tested to analyze relationships between latent variables.

Table 4: Construct Reliability and Convergent Validity

Factors and item	VIF	Loading	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	AVE
Microloans			0.832	0.835	0.888	0.665
LP1	1.805	0.766				
LP2	2.273	0.855				
LP3	1.938	0.827				
LP4	1.77	0.811				
Micro Saving			0.832	0.834	0.888	0.666
SS1	1.59	0.766				
SS2	2.07	0.845				
SS3	2.022	0.842				
SS4	1.764	0.808				
Training			0.837	0.839	0.891	0.673
MST1	1.718	0.778				
MST2	2.136	0.854				
ST3	2.036	0.844				
MST4	1.788	0.802				
SME Performance						
Profitability			0.844	0.844	0.896	0.682
IP1	1.845	0.803				
IP2	2.286	0.855				
IP3	2.063	0.836				
IP4	1.779	0.808				
Employment Creation			0.845	0.845	0.896	0.684
EC1	1.955	0.814				
EC2	2.288	0.852				
EC3	2.162	0.854				
EC4	1.696	0.786				
Sales Growth			0.875	0.876	0.914	0.727
SG1	2.004	0.821				
SG2	2.487	0.877				
SG3	2.28	0.855				
SG4	2.213	0.857				

The reliability and validity of the measurement model were determined using composite reliability, AVE, and Cronbach's alpha. Reliability is estimated with Cronbach alpha which helps to identify inter-item correlation among the provided constructs. Cronbach Alpha is one of the foremost fundamental strategies for assessing inner consistency and unwavering quality. The consistency or constancy with which an estimation scale surveys what it is outlined to a degree is alluded to as unwavering quality (Polit & Beck, 1995). The convergent validity has been assessed based on three criteria i.e. outer loading of the items, composite reliability, and Average Variance Extracted (AVE).

The outer loading of all items should be statistically significant and should be at least 0.708; the minimum acceptable value of AVE is 0.50 because an AVE of 0.50 or higher means that the construct explains more than half of the variance of its items and composite reliability should be > 0.7 according to (Hair, Babin, & Krey, 2017).

As Table 4 shows, the AVE of all constructs ranges from 0.665 to 0.727, which is higher than 0.50. This indicates the measuring model has good convergent validity. All factors fulfill the anticipated limit, and the table displays the loading values as more than 0.708. The composite reliability is additionally more than 0.7, which indicates

satisfactory internal consistency of the item for each factor. In sum, the instrument utilized for this research is acceptable. Finally, every item's Variance Inflation Factor (VIF) is under the minimum threshold. According to Diamantopoulos and Siguaw (2006), multicollinearity is not a problem if the VIF value is less than 3.3. Therefore, there is no collinearity issue since all VIF values are less than 3.3.

Table 5: Discriminant Validity- Fornell-Larcker Criterion

Variables	EC	IP	LP	MST	SG	SS
Employment	0.827					
Profitability	0.667	0.826				
Microloans	0.474	0.49	0.815			
Training	0.579	0.519	0.568	0.82		
Sales growth	0.617	0.588	0.492	0.647	0.853	
Micro saving	0.524	0.574	0.549	0.539	0.527	0.816

Note. Diagonal Values are the Square Root of AVE and off Diagonal Values are the Correlation Between Latent Constructs

Table 6: Cross Loading

Factors	EC	IP	LP	MST	SG	SS
EC1	0.814			0.419	0.458	0.456
EC2	0.852			0.402	0.447	0.43
EC3	0.854			0.375	0.503	0.417
EC4	0.786			0.371	0.505	0.43
IP1	0.51	0.803		0.395	0.447	0.468
IP2	0.538	0.855		0.406	0.409	0.464
IP3	0.556	0.836		0.405	0.402	0.487
IP4	0.598	0.808		0.412	0.452	0.476
LP1	0.367		0.371	0.766	0.406	0.453
LP2	0.409		0.379	0.855	0.49	0.444
LP3	0.369		0.394	0.827	0.467	0.457
LP4	0.398		0.448	0.811	0.483	0.439
MST1	0.443		0.416	0.484	0.778	0.477
MST2	0.492		0.433	0.486	0.854	0.41
MST3	0.509		0.413	0.441	0.844	0.44
MST4	0.455		0.441	0.455	0.802	0.445
SG1	0.478		0.472	0.373	0.541	0.392
SG2	0.543		0.487	0.383	0.58	0.459
SG3	0.506		0.527	0.428	0.534	0.459
SG4	0.573		0.518	0.491	0.552	0.484
SS1	0.421		0.482	0.498	0.407	0.766
SS2	0.417		0.471	0.446	0.458	0.845
SS3	0.459		0.48	0.416	0.452	0.842
SS4	0.412		0.441	0.436	0.442	0.808

Discriminant validity assessment has become a commonly accepted requirement for analyzing relationships between latent variables. For variance-based structural equation modeling, such as partial least squares, the Fornell-Larcker criterion and the examination of cross-loadings are the dominant approaches for evaluating discriminant validity (Henseler, Ringle, & Sarstedt, 2015). Discriminant validity means the degree to which the constructs differ from one another empirically. It also measures the degree of differences between the overlapping construct (Hamid, Sami, & Sidek, 2017). The discriminant validity was tested using the Fornell-Larcker, cross-loading, and Heterotrait-Monotrait criteria. Table 5 illustrates the square roots of AVE are higher than the square roots of corresponding correlations which is consistent with the criteria of Fornell-Larcker. It was also noted that the items loaded were higher than their latent variable.

Original Research Article

By looking at the cross-loading, the factor loading indicators on the assigned construct have to be higher than all loading of other constructs with the condition that the cut-off value of factor loading is higher than 0.70 (Hamid, Sami, & Sidek, 2017).

As shown in Table 6, all items with its construct have greater value than other constructs. In this measurement model, the cross-loading result authenticates discriminant validity.

Table 7: Heterotrait Monotrait Ratio (HTMT)

Factors	EC	IP	LP	MST	SG	SS
Employment (EC)						
Profitability (IP)	0.789					
Microloans (LP)	0.564	0.582				
Training (MST)	0.687	0.617	0.68			
Sales growth (SG)	0.716	0.684	0.572	0.756		
Micro saving (SS)	0.625	0.685	0.663	0.648	0.616	

The discriminant authenticity of the estimation demonstrate was laid out since each of the improvements had HTMT beneath 0.9. As Table 7 depicts HTMT value is below one which indicates good discriminant validity. This means constructs are empirically distinct from each other and discriminant validity for this study is met.

Structural Model

The effect of microfinance services on SME performance has been evaluated using SME path analysis, and the results are shown in

Table 8. The value of R^2 is 0.563, which implies that Microloans, savings services, and managerial skill training collectively explain 56.3 percent of the fluctuation in SMEs' performance. Other variables not involved in this research can explain the residual variance.

The path between LP to EC and LP to SG is not supported, indicating a lack of statistical significance. In the same way, the path between LP to IP, SS to EC, SS to IP, SS to SG, MST to EC, MST to SG, and MST to IP is supported, indicating statistical significance.

Table 8: SEM-Path Coefficient (First Order)

Path	Original sample (O)	Sample mean (M)	S. deviation (STDEV)	T statistics (O/STDEV)	P values	Result
LP -> EC	0.121	0.122	0.068	1.784	0.074	Not Supported
LP -> IP	0.159	0.159	0.064	2.485	0.013	Supported
LP -> SG	0.106	0.108	0.061	1.756	0.079	Not Supported
MST -> EC	0.372	0.373	0.065	5.73	0.000	Supported
MST -> IP	0.234	0.236	0.059	3.96	0.000	Supported
MST -> SG	0.471	0.471	0.057	8.308	0.000	Supported
SS -> EC	0.258	0.257	0.067	3.846	0.000	Supported
SS -> IP	0.361	0.361	0.06	6.024	0.000	Supported
SS -> SG	0.215	0.215	0.056	3.815	0.000	Supported

Note(s). Employment (EC), Profitability (IP), Microloans (LP), Training (MST), Sales growth (SG), Micro saving (SS)

This is further analyzed by combining all SME performance indicators into one, and results show a unanimously positive impact of all

three types of microfinance services on SME performance (Table 9). Overall, results revealed a positive influence of microfinance services on SME performance, as most of the hypotheses are supported at the 5 percent level of significance. Surprisingly, training and savings seem more critical than loans among microfinance services.

Table 9: SEM-Path Analysis (Aggregate Outcome Indicator of SME Performance)

Hypothesis	Path co-efficient	Beta Co-efficient	T statistics (O/STDEV)	P values	LL 2.5%	UL 97.5%	Hypothesis
H1	LP -> SMEP	0.149	2.67	0.008	0.043	0.265	Supported
H2	MST -> SMEP	0.415	8.419	0.000	0.316	0.509	Supported
H3	SS -> SMEP	0.32	6.257	0.000	0.215	0.416	Supported

Discussions

Based on the comprehensive analysis and empirical findings presented in this study, we conclude that microfinance services play a crucial role in enhancing the performance of SMEs in Nepal, particularly within the Rupendehi district. The investigation encompassed nine hypotheses, of which seven were validated, indicating that the majority of microfinance services examined have a substantial impact on SME business outcomes. Specifically, microloans, though partially significant, and other microfinance interventions were found to enhance profitability, stimulate employment, and bolster sales growth.

These conclusions align with previous research, reinforcing the positive influence of microfinance on SMEs. Dhakal (2020) and Thapa and Chowdhary (2022) have similarly documented the beneficial effects of microfinance on SME performance, echoing our results within the broader literature. Furthermore, the findings resonate with the work of Semegn and Bishnoi (2021) and Moluche and Ombui (2017), who also highlighted the critical role of microfinance in SME development. Moreover, this study substantiates Evert (2019) assertion that training services provided by MFIs are instrumental in enhancing small businesses' operational efficiency and growth prospects. The evidence gathered underscores a robust correlation between the comprehensive suite of services microfinance institutions offer—including loans, savings, and training—and the improved performance metrics of SMEs.

Conclusion and Implications

The research findings indicated that microloans, micro-savings, and training programs provided by microfinance institutions (MFIs) had a positive impact on the performance of small and medium-sized enterprises (SMEs). Among these services, savings, and training were found to be more effective in enhancing SME performance than credit. Microloans enhance profitability by providing SMEs with essential financial resources to expand operations, invest in new opportunities, and manage cash flow more effectively. Training programs contribute to improved performance by fostering employment creation, sales growth, and overall profitability. They help entrepreneurs and employees develop essential skills, leading to more efficient business practices and better decision-making. Similarly, micro-savings also positively influence SME performance, as evidenced in employment creation, sales growth, and profitability, by enabling businesses to accumulate capital for future investments, manage risks more effectively, and enhance their financial stability. In conclusion, the findings demonstrate that microfinance services, particularly savings and training programs, play a crucial role in boosting the performance and sustainability of SMEs.

It's interesting to note that this study adds unique value to the academic literature in two significant ways. Firstly, it emphasizes that the services provided by microfinance impact not only financial performance, as measured by profitability and sales growth, but also on increasing employment. Secondly, unlike previous research, this paper utilizes robust analytical methods to comprehensively examine the influence of microfinance on the performance of SMEs through Structural Equation Modelling. These insights underscore the standing for policymakers and practitioners to prioritize developing and applying integrated microfinance programs that combine financial services with business development trainings programs.

Limitations and Further Research

This study is limited to the opinions of microfinance members from the Rupandehi district only, which may not represent the views of members from other regions. Additionally, the performance of SMEs is assessed solely through two measures: financial performance is evaluated based on sales growth and profitability, while non-financial performance is measured only by employment creation. Other important performance indicators may not have been considered. Future researchers can expand on this study by conducting longitudinal and comparative analyses, exploring the impact of digital financial services, investigating gender-specific effects, evaluating policy effectiveness, and examining the behavioral and economic implications of microfinance services on SMEs.

Acknowledgments

The authors would like to thank Branch Managers of various MFIs situated in Rupendehi District of Nepal for providing information of clients running SMEs.

Funding

This research received no grant from any funding agency.

Conflict of Interest

The authors declare no conflict of interest.

Authors' Contribution

Conceptualization: Thapa & Pandey	Data Curation: Pandey, Pathak
Methodology: Thapa & Pandey	Writing – Original Draft: Thapa & Pandey
Software: Pandey & Pathak	Writing – Review & Editing: Thapa & Pathak
Validation: Pandey, Pathak	Visualization: Thapa, Pandey, & Pathak
Formal Analysis: Pandey, Pathak	Supervision: Thapa
Investigation: Thapa	

Data availability statement


Data have been used only for this paper.

Ethical statement

This research did not require an ethical approval as it does not involve any human or animal experiment.

Authors ORCID Information

Bharat Singh Thapa  <https://orcid.org/0000-0002-9435-2490>

Neema Pandey  <https://orcid.org/0009-0008-0956-5602>

Durga Datt Pathak  <https://orcid.org/0000-0003-4397-7375>

References

- Acs, Z. J., Szerb, L., & Autio, E. (2013). *Global entrepreneurship and development index 2013*. Cheltenham, UK: Edward Elgar.
- Ahmad, S. (2019). Challenges to SME financing: A case of Nepal. *International Journal of Management and Commerce Innovations*, 7(1), 276-281.
- Aladejebi, O. (2019). The impact of microfinance banks on the growth of small and medium enterprises in Lagos Metropoli. *European Journal of Sustainable Development*, 8(3), 261-274.
DOI: 10.14207/ejsd.2019.v8n3p261
- Asiama, J. P. (2007). Microfinance in Ghana. Retrieved from Economic Web Institute: <https://www.economicwebinstitute.org/essays/microfinanceghana.htm>
- Atmadja, S. A., Su, J.-J., & Sharma, P. (2016). Examining the impact of microfinance on microenterprise performance (implications for women-owned microenterprises in Indonesia). *International Journal of Social Economics*, 43(10), 962-981.
- Ayyagari, M., Demircuc-Kunt, A., & Maksimovic, V. (2011). Firm innovation in emerging markets: The role of finance, governance and competition. *Journal of Financial and Quantitative Analysis*, 46(6), 1545-1580.
DOI: 10.1017/S0022109011000378
- Bamwesigye, j. (2008). Banking the unbankables: Microfinance and poverty reduction in Rwanda. Institute of Social Studies.
- Bauchet, J., & Morduch, J. (2013). Is micro too small? Microcredit vs. SME finance. *World Development*, 43, 288-297.
- Buckley, G. (1997). Microfinance in Africa: Is it either the problem or the solution? *World Development*, 25(7), 1081-1093.
DOI: 10.1016/S0305-750X(97)00022-3
- Chanelle, N. (2013). *A Study on contribution of microfinance institutions in reducing financing constraints for the promotion of small and medium enterprises in Burundi*. KDI School of Public Policy and Management.
- Cochran, W. G. (1997). Estimation of population ratio in post-stratified sampling using varibale transformation. *Open Journal of Statistics*, 5(1), 54-75.
- Dhakal, C. P. (2020). Growth and development of small business through Microfinance activities in Nepal. *Interdisciplinary Journal of Management and Social Science*, 1(1), 26-34.
DOI: 10.3126/ijmss.v1i1.34508
- Dhungana, B. R. (2018). Impact of Micro-Finance on business creation: A case of Nepal. *The Journal of Nepalese Business Studies*, 11(1), 23-34.
- Diamantopoulos, A., & Siguaw, J. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical Illustration. *Brititsh Journal of Management*, 17(4), 263-282.
DOI: 10.1111/j.1467-8551.2006.00500.x
- Evert, T. (2019). *Microfinance services and growth of small enterprises: A case study of Rukungiri Municipality*. Kampala International University, Uganda.
- Geoffrey, A. M., & Emenike, K. O. (2018). Microfinance institutions' support and growth of small and medium enterprises. *Kinerja*, 22(1), 29-44.
DOI: 10.24002/kinerja.v22i1.1568
- Ghimire, S., Rigatti, T., & Sexton, N. (2017). Effect of credit cooperatives in employment generation: Evidence from rural Nepal. *Journal of Development Innovation*, 1(1), 29-44.
DOI: www.karmaquest.org/journal
- Gurung, G. (2019). Final result of national economic census 2018 published. *Japan International Cooperation Agency*. Retrieved from https://www.jica.go.jp/Resource/nepal/english/office/topics/c8h0vm00009r3bs5-att/190701_01.pdf
- Hair, J. F., Babin, B. J., & Krey, N. (2017). Covariance-based structural equation modeling in the journal of advertising: review and recommendation. *Journal of Advertising*, 46(3), 454-454.
DOI: 10.1080/00913367.2017.1329496
- Hamid, M. A., Sami, W., & Sidek, M. M. (2017). Discriminant validity assessment: Use of fornell & larcker criterion versus HTMTT criterion. *Journal of Physics*, 890(1).
DOI: 10.1088/1742-6596/890/1/012163
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
DOI: 10.1007/s11747-014-0403-8
- Kharel, P., & Dahal, K. (2020). Small and medium-sized enterprises in Nepal: Examining constraints on exporting. Tokyo: *Asian Development Bank Institute (ADB)*. Retrieved from <https://www.econstor.eu/handle/10419/238523>
- Ledgerwood, J. (1999). *Microfinance handbook: An institutional and financial perspective* (Vol. 5). Washington D.C. The World Bank.
- Mbithe, M. N. (2013). *The effect of microfinance services on the growth of small and medium enterprises in Machakos Country*. University of Nairobi.
DOI: D61/63103/2010
- Ministry of Finance. (2024). *Economic Survey 2022/23*. Kathmandu: Ministry of Finance, Government of Nepal.
- Moluche, D. C., & Ombui, D. (2017). Effect of microfinance institutions services on the growth of small and medium enterprises in Bomet Country. *International Journal of Management and Commerce Innovations*, 5(2), 342-354.
- Munyao, J. K. (2021). *Microfinance services and growth of small and medium enterprises in Nairobi Central Business District*. Kenyatta University.
- NRB. (2023). *List of Banks and Financial Institutions*. Kathmandu: Nepal Rastra Bank.
- Polit, D. F., & Beck, C. T. (1995). *Nursing research principles and methods*. Lippincott Williams & Wilkins.
- Robinson, M. (2001). *The microfinance revolution: Sustainable finance for the poor*. Washington D C: World Bank Publications.
DOI: 10.1596/0-8213-4524-9

- Robison, M. S. (2001). The microfinance revolution, sustainable finance for the poor. *World Bank Group*, 20(44), 41-45. DOI: [10.1596/0-8213-4524-9](https://doi.org/10.1596/0-8213-4524-9)
- Rotich, I., Lagat, C., & Kogei, J. (2015). Effect of microfinance services on the performance of small and medium enterprises in Kenya. *African Journal of Management*, 9(5), 206-211. DOI: [10.5897/AJBM2014.7519](https://doi.org/10.5897/AJBM2014.7519)
- Semegn, A. A., & Bishnoi, N. K. (2021). Analysis of effect of microfinance on the performance of MSEs in Amhara National Regional State, Ethiopia. *Journal of Entrepreneurship*, 30(1). DOI: [10.1177/0971355720974822](https://doi.org/10.1177/0971355720974822)
- Thapa, B. S., & Chowdhary, S. (2022). Impact of microfinance on the empowerment of women entrepreneurs in Rupandehi District. *Journal of Business and Management*, VI(1), 100-115. DOI: [10.3126/jbm.v6i01.46639](https://doi.org/10.3126/jbm.v6i01.46639)
- Yousfani, K., Aslam, Y., Mahar, Q., & Kazi, H. (2019). The impact of microfinance on growth of women entrepreneurship in Pakistan. *Journal of Entrepreneurship, Business and Economics*, 7(1), 133-152.