ROLE OF MICROFINANCE IN WOMEN'S EMPOWERMENT & POVERTY REDUCTION IN NEPAL

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ABSTRACT

This paper explores the vital role of microfinance in providing financial assistance to low-income and marginalized individuals who lack access to traditional banking services. It traces the origins of microfinance to Muhammad Yunus and his pioneering work in Bangladesh. The study emphasizes the significance of women's empowerment in achieving gender equality and addresses issues like inadequate knowledge and misuse of microfinance services, which can hinder poverty reduction efforts. Research questions aim to investigate the links between micro-credits, micro-savings, loan size, women's empowerment, and poverty reduction. The study's objectives include examining the role of Microfinance Institutions (MFIs) in reducing poverty and empowering women, proposing hypotheses suggesting positive relationships between these variables. The research offers valuable insights for MFIs, policymakers, and scholars but acknowledges limitations such as sample size, time constraints, and generalizability. It employs a deductive approach and a survey strategy, combining qualitative and quantitative techniques, with the goal of enhancing the understanding and utilization of MFI services for poverty alleviation and women's empowerment in Nepal.

Key Words: *Microfinance, Women's Empowerment, Poverty, Living standard.*

CHAPTER 1: INTRODUCTION

Microfinance encompasses financial services tailored for low-income individuals, those residing in impoverished regions, and those lacking access to conventional banking (Kagan, 2022). Such services include micro-savings, small loans, and money transfers. Microfinance serves as a vital avenue for empowering disadvantaged groups, enabling them to secure loans and engage in income-generating activities or launch their own businesses, thereby combatting poverty (ADB, 2020). This approach is seen as instrumental in promoting gender equality and alleviating poverty.

Muhammad Yunus, often referred to as the "father of microfinance," introduced the concept of micro-credit in 1976. Yunus, a Bangladeshi economist, provided small loans to impoverished individuals in his hometown, without requiring collateral or security payments. His pioneering work led to the formation of Grameen Bank in 1983, specifically designed to serve the needs of the poor. Borrowers formed "solidarity groups," jointly seeking loans with other members acting as co-guarantors, fostering a network of financial support (Saxena, 2022). This innovative approach has played a significant role in extending financial inclusion to marginalized communities.

1.1 Background of Study

a. Poverty

Nepal's 17.4% poverty rate presents economic concerns (UNDP, MPI, 2021). It ranks 81st out of 121 countries on the Global Hunger Index (GHI) with 19.1, signifying mild hunger (GHI, 2022). Nepalese poverty is caused by limited commercial opportunities, political and economic instability, and substantial reliance on agriculture. This widespread poverty increases crime, inequality, and health inequities. Nepal has yet to completely harvest and export its enormous natural resources.

b. Women’s Empowerment

Women's empowerment entails greater influence in life-altering decisions, equal rights, work and education opportunities, and control over personal lives. Nepal's government initiatives aim to empower women, but gender balance remains a challenge. To address this, the government promotes microfinance programs and women's unions, fostering financial independence. Financial autonomy empowers women, enabling them to advocate for social

and political change as they collaborate with others who share their experiences of oppression (Daelli, 2018).

1.2 Problem Statement

Microfinance has a vital role in poverty reduction and women's empowerment, as evidenced by research in Vietnam (Sang et al., 2018) and Pakistan (Mahmood et al., 2014). In Nepal, however, there is a challenge in effectively utilizing microfinance services, with funds often diverted to daily expenses instead of income-generating investments. The size of microfinance loans has a significant impact on women's empowerment and poverty alleviation (Mahmood et al., 2014). It is crucial for individuals to learn how to determine the most suitable loan size to maximize its potential for economic improvement.

1.3 Research Questions

The following questions related to the research and attempt to solve the identified issues:

- Is there a significant relationship between micro-credits and women's empowerment & Poverty Reduction?
- Is there a significant relationship between micro-savings and women's empowerment & Poverty Reduction?
- Is there a significant relationship between loan size and women's empowerment & Poverty Reduction?

1.4 Research Objectives

The research is being conducted with the following precise objectives:

1. To find out the relationship between micro-credits and women's empowerment & Poverty Reduction.
2. To study the relationship between micro-savings and poverty reduction & Poverty Reduction.
3. To determine the relationship between loan size and women empowerment & Poverty Reduction.

1.5 Research Hypotheses

Hypothesis 1:

$H0_1$: There is no relationship between micro-credits and women empowerment & Poverty Reduction.

$H1_1$: There is a positive relationship between micro-credits and women empowerment & Poverty Reduction.

Hypothesis 2:

$H0_2$: There no relationship between micro-savings and women empowerment & Poverty Reduction.

$H1_2$: There is a positive relationship between micro-savings women empowerment & Poverty Reduction.

Hypothesis 3:

$H0_3$: There is no relationship between loan size and women empowerment & Poverty Reduction.

$H1_3$: There is a positive relationship between loan size and women empowerment & Poverty Reduction.

1.6 Significance of the Study

Nepalese don't know how to use microfinance; therefore, they waste the loan money on everyday expenses instead of investing or creating money and can't repay it. Poor women and the weak cannot leave. This study may aid diverse learners and reviewers. This study may help financial institutions improve their products. After analyzing this report, MFI politicians may design good loan and repayment rules. NRB, commercial banks, and other financial institutions may examine and adopt poverty-reduction and women-empowerment initiatives. This study investigates ways to empower women and end poverty, which may help MFIs and relevant experts with future debates and research.

1.7 Scope of the Study

This academic study article evaluates how MFIs use micro-credits, micro-savings, and other financial services to reduce poverty and increase women's economic independence. The sector that uses MFI loans is investigated in this study. This study examines loan repayment patterns and default causes. The research uses qualitative and quantitative methods and a representative sample of Nepalese MFI consumers and employees. The results of this scholarly research may help MFI users, employees, and policymakers.

1.8 Limitations to the Study

Several limitations should be noted in this study. Firstly, the sample size of 354 respondents is relatively small, potentially limiting the generalizability of the results. Additionally, due to the educational nature of the research, it was conducted within a specific timeframe, introducing time constraints. Furthermore, the diverse structures and offerings of microfinance institutions (MFIs) to other MFIs could vary, hindering the ability to draw consistent conclusions across all cases. Lastly, the study's applicability may not be universal, as it might not fully encompass all target populations.

CHAPTER 2: LITERATURE REVIEW

All research requires prior knowledge and expertise. Prior investigations form the basis for the current inquiry; thus, they must be acknowledged. This chapter uses books, scholarly journals, articles, research papers, prior theses, workshop sessions, pertinent websites, and national and international microfinance institution and programs studies. The literature largely discusses microfinance's history, its role in improving financial circumstances and empowering women, and its ties to poverty reduction.

2.1 Literature Review of Base Papers

The two most relevant reviews of the literature of previous studies for my topic are:

In a study titled "Evaluating the Role of Microfinance Institutions in Improving the Livelihood of Urban Poor" by **(Singh et al. 2022)**, published in the Journal of Economic and Administrative Sciences, the researchers explored how MFIs contribute to enhancing the lives of urban poor populations. The article summarizes the existing literature on microfinance's role in poverty reduction, with a specific focus on urban poverty. The authors discuss how MFIs facilitate entrepreneurship and job opportunities for impoverished urban residents. They also acknowledge potential drawbacks, such as the burden of quick debt repayment, which can lead to financial difficulties for borrowers.

In the research article titled "Can microfinance-backed entrepreneurship be a holistic tool for women?" by **(Khan et al. 2021)**, based in India's Kashmir Valley, the study highlights the significance of microfinance in fostering women's independence through entrepreneurship. The research employs diverse methods, including surveys and focus group discussions, to gather insights from women entrepreneurs in the region. The article underscores the importance of addressing cultural and societal barriers to empower women to fully realize their entrepreneurial potential.

2.2 Literature Review Table

2.2.1 "Evaluating the role of microfinance institutions in enhancing the livelihood of urban poor"

Author Name/Year	Nazia Hasan, Anjani K. Singh, Manoj K. Agarwal and Bijay P. Kuswaha/ 2022
Features	1. The paper sheds light on the efficiency of microfinance

	on poverty reduction and the improvement of living standards. 2. The author has formulated assumptions regarding the potential of microfinance to enhance social well-being, promote women's empowerment, and stimulate home-based business.
Benefits	1. The factors influencing individuals' attraction to MFIs. 2. The engagement and economic accessibility of those experiencing poverty.
Limitations	1. This study is based on the idea that only poor people use MFIs. 2. There isn't much talk about paying back loans. 3. The sample and data for this study came from people who didn't know enough about the banking sector.
Advantages	Helps people learn about microfinance institutions and use them to get out of poverty and live better. This is especially important for people who don't have good access to or relationships with big financial organizations.
Method of Research	Descriptive Research
Model Used	Mix of quantitative and qualitative

Table 1: Literature Review of "Evaluating the role of microfinance institutions in enhancing the livelihood of urban poor"

2.2.2 "Can microfinance-backed entrepreneurship be a holistic empowerment tool for women? Empirical evidence from Kashmir Valley, India"

Author Name/Year	Mohd Abass Bhat, Mohi-Ud-Din Sangmi and Shagufta Tariq Khan /2021
Features	1. Emphasizes on the idea and talk of how microfinance can help women who want to start their own businesses. 2. Talk about how microfinance helps women business

	owners gain economic, social, political, and psychological power. 3. Has made connections between women's rights and what it means to be a woman in society.
Benefits	Benefits of this study are: 1. Helps women start their own businesses by giving them small loans. 2. Women could have their own source of money.
Limitations	1. Geographical limitation. 2. While gathering the first-hand data, found some differences. 3. Because the study was only done on Kashmir, the data can't be used in other places.
Advantages	Microfinance-backed entrepreneurship has been found to have a significant role in empowering women by encouraging their financial independence and facilitating the establishment of their identity within society.
Method of Research	Descriptive Research
Model Used	Mix of quantitative and qualitative

Table 2:Literature Review of "Can microfinance-backed entrepreneurship be a holistic empowerment tool for women? Empirical evidence from Kashmir Valley, India"

2.3 Research Theory

Here are some relevant theories that will support my research work.

Public Goods Theory of Financial Inclusion

The theory advocating for treating formal financial services as a public good, accessible to all without restrictions, posits that unrestricted access can benefit society as a whole. However, it may not effectively tackle the underlying causes of financial exclusion and could strain public resources if subsidies are needed. Moreover, the assumption of free or low-cost services may not be sustainable over time (Ozili, 2020). Nevertheless, this theory suggests that poverty reduction can be achieved by ensuring universal access to financial services when treated as public goods.

Social Capital Theory

This paradigm emphasizes social networks, trust, and norms for collective well-being. It suggests that social relationships and community participation improve microfinance programs. Borrowers can get information, help, and resources from organizations or cooperatives, and trust and collaboration lower loan risks. Reciprocity and mutual obligation foster collaboration and social assistance, reducing poverty. Social capital in microfinance programs improves social cohesiveness, collaborative decision-making, and borrower empowerment, boosting financial services' impact. (Machalek & W. Martin, 2015)

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

"Research methodology" involves the systematic planning and execution of research, including selecting appropriate methods and tools to ensure accurate and reliable results.

3.2 Research Philosophy

Research philosophy is a set of assumptions and concepts that influence knowledge creation. Instead, of providing a solution, it advances knowledge in a field (Saunders et al., 2009).

- **Positivism:** This approach emphasizes scientific methods, objectivity, quantitative analysis, deductive reasoning, and broad applicability for objective assessment of social events (Saunders et al., 2009).

- **Interpretivism:** Interpretivism values understanding individuals' unique experiences and perspectives in social processes, emphasizing context, comprehension, and personal opinion in research (Saunders et al., 2009).

"This research has used Positivism."

3.3 Research Approach

Research approach is an idea and set of stages for how to do the study as a whole. There are two ways to do study, which we'll explain below:

- **Inductive approach:** To generate and evaluate hypotheses, inductive research typically begins by observing a problem or circumstance.
- **Deductive approach:** When a set of theories already exists, we test our research hypothesis against it to draw conclusions.

"Deductive approach has been used in this study."

3.4 Research Strategy

The research approach outlines how the study will be conducted, involving methods like surveys, case studies, experiments, interviews, or literature reviews.

"This research is based on a survey with a questionnaire."

3.5 Methodology

1. **Qualitative Research:** Qualitative research analyses and interprets non-numerical data, often text or verbal, to discover how people make sense of their social experiences (Mcleod, 2008).
2. **Quantitative Research:** Numerical data collection and analysis underpin quantitative research. It aims to characterize, forecast, or control relevant aspects (Mcleod, 2008).
3. **Mixed Research:** The mixed way of study is a blend of both qualitative and quantitative methods.

   "This method employed in this research is quantitative research."

3.6 Time Horizon

Setting research deadlines is essential (Saunders et al., 2009). Longitudinal studies span extended periods, while cross-sectional studies gather data at specific points in time.

"This study adopts a cross-sectional time horizon."

3.7 Data

- **Primary Data:** Novel data from surveys, interviews, tests, and observations, obtained from new and original sources, aid in decision-making and addressing specific study questions.
- **Secondary Data:** These data were initially collected for different purposes by entities such as government bodies, study groups, or businesses, before being repurposed for the current use.

"This research has used both set of data."

3.8 Instrumentation

"Instrumentation" in research refers to the tools and methods used to collect and analyze data, assessing their accuracy and reliability for measuring key research factors.

"**The instrumentation used in this research is an online survey questionnaire."**

3.8.1 Types of Questionnaires

1. **Paper Questionnaire:** This method distributes printed paper questionnaires to a specific target audience, who are expected to respond using the physical questionnaire.
2. **Online Questionnaire:** In this case, inquiries are generated using online platforms like Google Docs or survey tools. The questions are electronically distributed to the target audience, who respond online.

3.8.2 Types of Questions

1. **Open-ended questions:** People don't answer these kinds of questions with a simple "yes" or "no." Instead, they give their own views and points of view.
2. **Close-ended questions:** Questions include three to four answer choices, and respondents must select one of them.
3. **Likert scale:** This is a 5 or 7-point rating scale ranging from one extreme attitude to another, often used for measuring satisfaction.

(Mcleod, 2022)

"The questionnaire used for this study has a mix of all three types of questions."

3.9 Sources of Data Collection

Data for this study are collected from both primary sources (interviews, surveys, experiments, observations) and secondary sources (books, journals, reports, internet), offering a comprehensive perspective.

3.10 Sampling and its types

3.10.1 Probability Sampling

Anyone in the group has a chance of being picked with this sampling method (McCombes, 2019). There are four main types of probability sampling:

1. **Simple Random Sampling:** In this sampling method, everyone in the audience has an equal chance of being chosen, requiring a selection frame that includes the entire community (McCombes, 2019).
2. **Systematic Sampling:** Systematic sampling is easier than simple random sampling; individuals are selected at regular intervals based on assigned numbers (McCombes, 2019).
3. **Stratified Sampling:** Stratified sampling groups the population into categories, ensuring fair representation of each subgroup for more precise results (McCombes, 2019).
4. **Cluster Sampling:** Cluster sampling divides the population into smaller groups with similar characteristics, but instead of selecting samples from each subgroup, entire subgroups are randomly chosen (McCombes, 2019).

3.10.2 Non-Probability Sampling

Individuals are chosen for a non-probability sampling depending on factors that are not random, so not every individual will be chosen (McCombes, 2019). It also comes in four main kinds:

1. **Convenience Sampling:** A convenience sample consists of respondents who are around the researcher's reach (McCombes, 2019).

2. **Voluntary Response Sampling:** Voluntary response sampling relies on individuals signing up on their own accord, similar to convenience sampling, where ease of participation is a key factor (McCombes, 2019).
3. **Quota Sampling:** Quota sampling, a non-random method, continues until a specific number of units from each group are selected.
4. **Purposive Sampling:** Judgment sampling, also known as purposive sampling, involves the researcher using their knowledge to select a group that aligns best with their study objectives (McCombes, 2019).
5. **Snowball Sampling:** Snowball sampling recruits study participants through referrals from individuals who are already part of the study (McCombes, 2019).

"The data for this study was collected from 354 respondents using convenience sampling."

3.11 Research Model

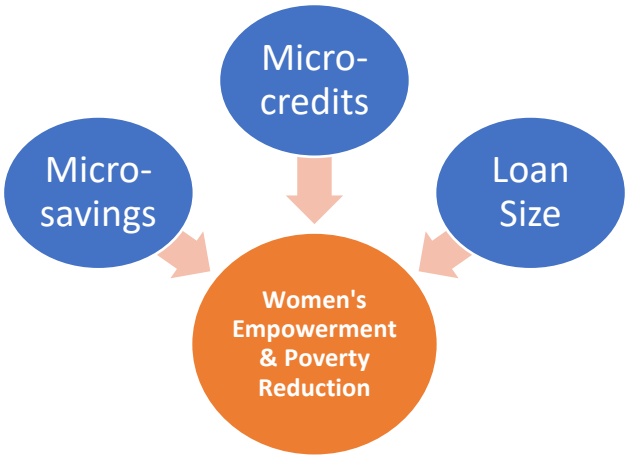

Figure 1:Research Model

Independent Variables

Dependent Variable

3.12 Data Processing

- **Data editing:** Editing data involves reviewing survey forms to correct errors, fill missing information, rectify wrong categories, and address data gaps.

- **Data Coding:** Data collected from respondents must be converted into numbers before entering it into SPSS software.

3.13 Data Analysis

It is the method of describing, showing, summarizing, and judging data with the help of statistical and/or logical tools in a planned way.

- **Reliability:** Reliability is how often the same results come out of a measurement or test when it is used in similar situations (Nelson,1997).
- **Validity:** The degree to which the findings accurately reflect the variables of interest (Vincent,1999).

3.14 Ethical Considerations

"Ethical considerations" guide research to avoid harm and unethical actions (Bhasin, 2020). Properly citing secondary sources is crucial.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

This chapter employs statistical approaches to analyze numerical data and generate research questions in quantitative research. Inferential statistics, hypothesis testing, descriptive statistics, and data preparation are covered. Accurate data analysis and presentation are crucial for making conclusions and adding to knowledge. The study examines how microfinance empowers and reduces women's poverty in Nepal, utilizing micro-credits, micro-savings, and loan amount as independent variables. An online Likert scale survey was completed by 354 respondents and analyzed using "SPSS Version 29".

4.2 Respondents Feedback

From June to July 2023, an online survey with closed-ended questions was done to get at least 350 data samples from about 500 people. The survey was made to be as efficient as possible and was sent out through Google Docs. There were 354 valid responses that could be examined.

Questionnaire	No. of Questionnaire (All Online)
Sent	450
Collected	354

Table 3:Respondents Summary

4.3 Reliability Test

In quantitative investigations, reliability testing evaluates data-gathering instruments' consistency and stability. The dependability or consistency of measurement instrument results is considered. Survey questionnaire question reliability was assessed using Cronbach's alpha coefficient, 0–1. A number closer to 1 implies a strong correlation between questionnaire independent and dependent variables, usually reliable when Cronbach's alpha is above 0.7.

Reliability Statistics	
Cronbach's Alpha	N of Items
.947	24

Table 4: Reliability Statistics

The table above shows that Cronbach's alpha is 0.947 which shows there is a strong correlation between variables in the questionnaire as a whole.

Table 6:Item-Total Statistics

Variables of Study	No. of Items	Cronbach's Alpha
Micro-Credits (I/V)	7	.919
Micro-Savings (I/V)	5	.880
Loan Size (I/V)	7	.928
Women's Empowerment & Poverty Reduction (D/V)	5	.928
All Variables	24	.947

Table 5:Reliability Statistics of all Variables

All variables, both dependent and independent, exhibit Cronbach's Alpha coefficients exceeding 0.7 and approaching 1, indicating questionnaire questions' relevance to the study.

4.4 Descriptive Analysis

This section shows demographic responses, including age, education, occupation, and marital status, presented through tables and diagrams.

4.4.1 Frequency Distribution

- **Age**

Class Interval	Frequency	Percent
18-24 years old	143	40.4
25-34 years old	145	40.96
35-44 years old	34	9.6
45-54 years old	26	7.34
55 years old and above	6	1.7
Total	354	100.0

Table 6: Age Frequency

The table above shows 354 persons. The table shows that 40.4% of the sample, or 143 persons, are 18–24. 145 persons (40.96% of the sample) are 25–34 years old. Moving on, 9.6% of the sample, 34 persons, are 35–44. After that, 26 persons (7.34% of the sample) are 45–54. Finally, 1.7% of the sample is 55 or older, with 6 persons.

- **Education**

Education	Frequency	Percentage
Bachelor's degree or higher	189	53.4
Higher secondary education	84	23.7
Secondary education	38	10.7
Primary education	30	8.5
No formal education	13	3.7
Total	354	100.0

Table 7:Education Frequency

The table above shows 354 persons. 189 responders (53.4%) have a bachelor's degree or above. Next, 23.7% of the sample had higher secondary education, 84 persons. Thirteen persons (3.7%) indicated no formal education. Secondary education is represented by 38 persons, 10.7% of the sample, while primary education is 30 people, 8.5% of the population.

- **Occupation**

Occupation	Frequency	Percentage
Employed (full-time)	82	23.2
Employed (part-time)	82	23.2
Self-employed	65	18.4
Student	55	15.5
Unemployed	70	19.8
Total	354	100.0

Table 8:Occupation Frequency

A descriptive examination of a sample population's occupational distribution is shown in the table. The data is sorted by occupation type with frequencies and percentages. Out

of 354 people, 82 (23.2%) reported full-time employment and 82 (23.2%) part-time employment. Additionally, 65 (18.4%) were self-employed and 55 (15.5%) were students. Finally, 70 (19.8%) were unemployed. The sample's occupational composition is shown in this table, demonstrating the variety of the population.

- **Marital Status**

Marital Status	Frequency	Percentage
Single	207	58.5
Married	117	33.1
Widowed	12	3.4
Divorced	10	2.8
Prefer not to say	8	2.3
Total	354	100.0

Table 9:Marital Status Frequency

The table shows a descriptive study of a sample population's marital status. The data is categorized by marital status with frequencies and percentages. Out of 354 participants, 117 (33.1%) were married. The most people with "Single" marital status were 207 (58.5%). 8 (2.3%) decided not to identify their marital status, and 10 (2.8%) and 12 (3.4%) "Divorced" and "Widowed" individuals, respectively. This table shows the sample's marital status distribution, illustrating the population's diversity.

4.4.2 Descriptive Statistics of Variables

This section calculates the mean and standard deviation for both dependent and independent variables, which were measured using a five-point Likert scale, providing insights into central tendencies and data variability.

Descriptive Statistics			
Variables	Mean	Std. Deviation	N
Women Empowerment & Poverty Reduction	3.5089	.93499	354
Micro-Credits	3.5044	.99986	354
Micro-Savings	3.6034	.92199	354
Loan Size	2.4633	1.03855	354

Table 10:Descriptive Statistics of Variables

All variables' mean and standard deviation are shown in the table. The mean for women's empowerment & poverty reduction is 3.5089, indicating considerable agreement. Micro-savings and micro-credits have mean values of 3.6034 and 3.5044, showing moderate agreement, while loan size has a mean of 2.4633, indicating lower agreement. Standard deviations indicate statistical variability around the mean; the dependent variable's is 0.93499. This shows that while some participants strongly agreed, others agreed less, demonstrating variability across all independent variables.

4.5 Correlation Analysis

Using a coefficient that ranges from -1 to +1, correlation analysis evaluates the strength and direction of relationship between two variables. Low or zero numbers show a nonlinear or weak connection, while high values close to 1 indicate a strong positive connection between them.

Correlations

		Women Empowerment & Poverty Reduction	Micro-Credits	Micro-Savings	Loan Size
Pearson Correlation	Women Empowerment & Poverty Reduction (D/V)	1.000	.781	.788	.282
	Micro-Credits (I/V)	.781	1.000	.793	.297
	Micro-Savings (I/V)	.788	.793	1.000	.292
	Loan Size (I/V)	.282	.297	.292	1.000
Sig. (1-tailed)	Women Empowerment & Poverty Reduction (D/V)	.	.000	.000	.000
	Micro-Credits (I/V)	.000	.	.000	.000
	Micro-Savings (I/V)	.000	.000	.	.000
	Loan Size (I/V)	.000	.000	.000	.

Table 11:Pearson's Correlation Analysis

The table shows Karl Pearson's correlation coefficients and one-tailed significance levels for independent factors' effects on the dependent variable. A considerable positive connection (0.781, 78.1%) exists between micro-credit and women's empowerment & poverty reduction. Micro-savings had an even bigger positive correlation (0.788, 78.8%) than micro-credit, implying a greater effect on the dependent variable. The correlation with loan size is 0.282 (28.2%), showing a less positive association. All one-tailed significance test values are 0.000, rejecting the null hypothesis and favouring the alternative hypothesis, supporting the study's directional hypotheses based on prior literature and theory.

4.6 Normality Test

A statistical normality test determines if a dataset is normally distributed. It evaluates the normalcy assumption, which many statistical analyses require. This survey collected normally distributed data.

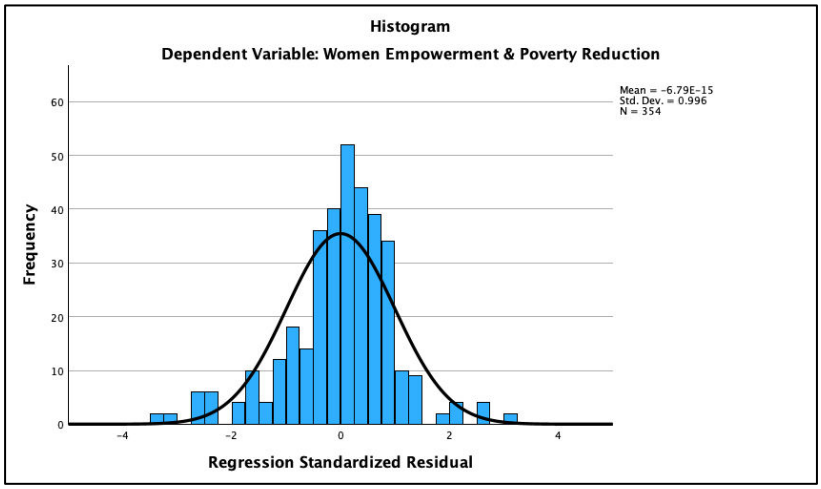

Figure 2:Regression Standardized Residual

The researcher assumed from the above graphic representation that the data are often symmetrically distributed around the mean. It indicates that the histogram's left and right halves are approximately mirrored. The linear line residual plot also clarified the same point.

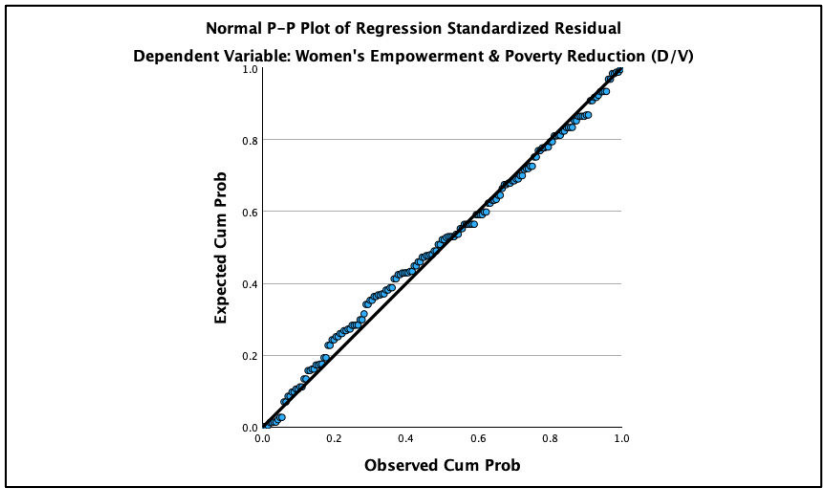

Figure 3:Linear Line Residual Plot

From the above Normal P-P Plot of Regression Standardized Residual, it is shown that the points of probability plot are closely plotted around the straight line which shows the normal distribution.

4.7 Multiple Regression Analysis

Women's empowerment and poverty reduction are examined using multiple regression analysis with three independent variables: micro-credits, micro-savings, and loan size. The significance of these independent factors on the dependent variable is assessed using ANOVA, Coefficient table, and model summary table .

4.7.1 Model Summary Table

A model summary table simplifies statistical model indicator effectiveness, goodness-of-fit, and significance evaluation. It includes statistics like R, R-squared, Adjusted R Square, and estimate standard error to assess model quality and indicator relevance. The best model fit is a higher R value or near to 1.

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.860	.739	.737	.47939
a. Predictors: (Constant), Loan Size, Micro-Savings, Micro-Credits				
b. Dependent Variable: Women Empowerment & Poverty Reduction				

Table 11: Model Summary Table

The representation reveals a strong positive correlation (R = 0.860 or 86%) between study variables. The adjusted R-squared value (0.737) shows that micro-credits, micro-savings, and loan size explain 73.7% of the variance in the dependent variable (women's empowerment & poverty reduction), suggesting the model explains a lot of the variability.

4.7.2 ANOVA

An ANOVA (Analysis of Variance) test is a statistical study that compares the means of two or more groups to see if there is a statistically significant difference between them (Simkus, 2022).

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	228.160	3	76.053	330.936	<.001[b]
	Residual	80.434	350	.230		
	Total	308.595	353			
a. Dependent Variable: Women Empowerment & Poverty Reduction						
b. Predictors: (Constant), Loan Size, Micro-Savings, Micro-Credits						

Table 12:ANOVA Table

In the table, the F-value is 330.936, and the P-value is < 0.001. The high F-value suggests significant differences between groups, while the low P-value (< 0.05) indicates a significant interaction among the variables, supporting the rejection of the null hypothesis and acceptance of the alternative hypothesis.

4.7.3 Coefficients Table

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.329	.126		2.608	.010
	Micro-Credits	.405	.048	.414	8.375	.000
	Micro-Savings	.468	.051	.452	9.156	.000
	Loan Size	.021	.024	.027	.870	.038

a. Dependent Variable: Women Empowerment & Poverty Reduction

Table 13:Coefficients Table

The coefficient table estimates the impact of independent variables on the dependent variable in a multiple regression analysis.

$$Y = a+b_1X_1+b_2X_2+b_3X_3$$

Where,

Y = Dependent Variable (Women Empowerment & Poverty Reduction)

a = Constant Value

X_1 = Independent Variable (Micro-Credits)

X_2 = Independent Variable (Micro-Savings)

X_3 = Independent Variable (Loan Size)

b_1, b_2, b_3 = B-Value (Coefficient or Slope)

Women Empowerment & Poverty Reduction = 0.329+0.405*(micro-credits)+0.468*(micro-savings)+0.021*(loan size)

Based on the derived equation above, it can be concluded that one unit of micro-credits increases women's empowerment & poverty reduction by 0.405 units, a positive effect. Another beneficial effect of micro-savings is a 0.468 unit increase in women's empowerment & poverty reduction. Loan size has a lower beneficial effect, increasing women's empowerment and poverty reduction by 0.021 units. In conclusion, micro-credits, micro-savings, and loan size positively affect women's empowerment and poverty reduction.

4.8 Hypothesis Testing and Results

The coefficient table P-value determines hypothesis testing and its result. Unless set by supervisor, the significance level is 0.05 or 5%. A significance level (P-Value) of 0.05 or below indicates rejection of the null hypothesis and strong evidence for the alternative hypothesis. This table shows the study's hypothesis testing results:

Developed Hypothesis	Sig. (P-Value)	Impact	Status of Developed Hypothesis
H1: There is a positive relationship between micro-credits and women	.000	Positive	Supported

empowerment & poverty reduction.			
H2: There is a positive relationship between micro-savings and poverty reduction & poverty reduction.	.000	Positive	Supported
H3: There is a relationship between loan size and women empowerment & poverty reduction.	.038	Positive	Supported

Table 14: Hypothesis Testing Results

The above correlation and regression analyses show a significant relationship between dependent variable (women empowerment & poverty reduction) and independent variables (micro-credits, micro-savings, and loan size). The preceding table illustrates that independent variables positively affect dependent variables; hence we accept the directional alternative hypothesis.

5. CONCLUSION, SUMMARY AND RECOMMENDATIONS

5.1 Summary of Findings

Three alternative hypotheses (H1) were tested to determine the association between women's empowerment & poverty reduction and micro-credits, micro-savings, and loan size. Hypotheses were tested using reliability, correlation, ANOVA, normalcy, significance, and hypothesis tests. Above 0.7 reliability coefficients showed good reliability. The study found a significant positive correlation (P <.001) between the dependent and independent variables, and regression analysis also confirmed positive correlations between the two variables.

5.2 Discussion of Findings

In this section, the findings in Chapter 4 will be discussed and addressed in association with the research questions that have been set in Chapter 1.

Question 1: Is there a significant relationship between micro-credits and women's empowerment & Poverty Reduction?

Using strong correlation and regression analyses, the study examined how micro-credit empowers women and reduces poverty. Micro-credit provision positively correlated with women's empowerment and poverty reduction (Pearson correlation coefficient = 0.781).

The low p-value (< 0.05) supported the alternative hypothesis and rejected the null hypothesis. This shows the importance of micro-credit programs in addressing several societal concerns at once and advocates for more access and investment. The study shows that micro-credits can empower women and reduce poverty.

Question 2: Is there a significant relationship between micro-savings and women's empowerment & Poverty Reduction?

The second research question examined the relationship between micro-savings and women's empowerment & poverty reduction. Regression and correlation showed a strong and statistically significant positive link (Pearson correlation coefficient = 0.788) between micro-savings and women's empowerment and poverty reduction. The null hypothesis was rejected due to a low p-value (< 0.05), encouraging the alternative hypothesis. This emphasizes micro-savings' vital role in fighting poverty & empowering women, asking individuals and organizations to prioritize and promote them for social and economic change.

Question 3: Is there a significant relationship between loan size and women's empowerment & Poverty Reduction?

The third research question analyzed loan size with women's empowerment & poverty reduction. The Pearson correlation coefficient = 0.282 demonstrated a significant relationship between loan size and women's empowerment and poverty alleviation. The low p-value (0.038) supported rejecting the null hypothesis and supporting the alternative hypothesis, showing that loan size reduces poverty and empowers women. Finally, greater loans can help empower women and reduce poverty.

5.3 Implications of Study

This study shows that people in Nepal don't fully understand or use microfinance. It also shows that loans are often used for daily costs instead of activities that bring in money. This study can be helpful for microfinance institutions, policymakers, and regulatory bodies like Nepal Rastra Bank because it might provide them with information, they can use to improve their services and make policies that work. The results add to discussions about

reducing poverty and giving women more power. They are also a valuable resource for scholars doing similar study.

5.4 Conclusion

This research aimed to establish a correlation between micro-credits, micro-savings, and loan size (independent variables) and women's empowerment & poverty reduction (dependent variable). The findings highlight the importance of these factors in advancing women's empowerment and poverty reduction. Microfinance institutions and regulatory authorities should consider these factors to enhance societal well-being by reducing poverty and empowering women. The paper also outlines limitations, implications, and recommendations for future research.

5.5 Recommendations

Based on the research report, the following recommendations and suggestions are drawn:

1. Individuals should prioritize micro-savings for financial planning and empowerment.
2. MFIs should customize micro-credit to women's needs and alleviate poverty.
3. A flexible loan size strategy is recommended to accommodate various economic development and stability levels.
4. To maximize microfinance benefits, encourage financial literacy and business training.
5. Enhanced microfinance programs through dependable monitoring and assessment mechanisms.

5.6 Future Research Recommendations

Future research opportunities in this field include expanding the study beyond Kathmandu Valley for more generalized results, increasing sample size for enhanced reliability, incorporating qualitative data alongside quantitative findings, and exploring additional independent variables to broaden the research scope.

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