

## **Women's Financial Empowerment through Microfinance in Nepal: Evidence from Regression Analysis**

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### **Abstract**

Women's financial empowerment is an important dimension of inclusive growth, but the empirical evidence on the determinants of women's financial empowerment in the context of the developing world remains scarce. The present study attempts to examine the determinants of women's financial empowerment in the context of the women beneficiaries of microfinance services in Nepal. The primary data were collected from 400 women beneficiaries of some microfinance organizations in Nepal through the structured questionnaire method. The study applied various statistical tools, i.e., descriptive statistics, correlation analysis, and regression analysis, to examine the relationship between women's financial empowerment and various socio-economic variables. The findings of the study suggest that decision-making power is the most important factor in women's financial empowerment, followed by asset ownership, as these two variables are highly correlated with women's financial empowerment at 0.352 and 0.319, respectively. On the other hand, family support, income, and education are the other important determinants of women's financial empowerment, as these variables are highly correlated with women's financial empowerment at 0.231, 0.176, and 0.084, respectively. The study also found that the regression analysis explains 61.2 percent of the variation in women's financial empowerment, as the R<sup>2</sup> value is 0.612 in the present study. In line with the broader literature on financial inclusion, the study proposes that the addition of non-financial services such as financial literacy and advisory services can potentially improve empowerment outcomes. The results are useful for microfinance institutions, cooperatives, and development agencies aiming at promoting women's financial empowerment in developing countries.

*Keywords: Women's Financial Empowerment, Microfinance, Decision-Making Power, Asset Ownership, Financial Inclusion, Nepal*

### **Introduction**

Women empowerment in terms of financial empowerment has become a dominant theme in much of the current development finance and inclusive growth literature. Women in developing countries are systematically denied access to financial resources and are excluded in the decision-making process in the economy. Women are also denied access to productive assets. This has created inequality in society, affecting the welfare of individuals and the economy as a whole. Women empowerment as a social need for sustainable development (Loomba, 2020; Khulood, 2019).

However, with the course of time, financial systems based on microfinance and cooperative-based financial systems have come to be regarded as significant tools in the alleviation of financial exclusion faced by women. The financial services offered by microfinance institutions include loans, savings, and

insurance services to low-income groups, who are normally excluded from accessing banking services (Otero 1999; Ledgerwood 1999). On the other hand, financial systems based on cooperative models focus on collective participation, as well as building togetherness on the ground through closely linked socio-economic goals such as financial literacy, training, and advisory services (Ojha, 2018; ILO, 2016). The underlying assumption on which both financial models were based was that with greater access to financial services, women would be able to engage more in income-generating activities, thereby becoming more empowered.

Yet, the issue of women empowerment continues to be a tick box exercise, particularly in rural and developing countries. Yet, the gender inequality and disparity are evident in the economic, social, and political dimensions of Nepal. While significant strides have been made in terms of constitutional reforms, gender quotas, and development programs in place, women still lag behind men in terms of opportunities and access to education, economic resources, and positions of power and decision-making (Mahat, 2003; ICIMOD, 2014), particularly rural and disadvantaged women. The patriarchal values and low literacy levels, coupled with the lack of economic resources and asset ownership, make women more vulnerable and dependent in the economy (Tiwari et al., 2009). In light of this, Nepal's microfinance sector has emerged as one of the key sectors for attaining national objectives of poverty reduction and financial inclusion. Given that microfinance institutions have been expanding their outreach to individuals of low income levels, many microfinance institutions target women as key beneficiaries through their approach of using group lending, mandatory savings, and regular meetings for fostering financial discipline and social solidarity (Regmi 2000; Khandker 2016). Empirical research from Nepal has shown that women's participation in microfinance programs has been correlated with positive outcomes for household income, savings, and asset management (Shrestha, 2018; Gurung & Rana, 2025).

Microfinance does not guarantee changes in the lives of the poor. Despite the fact that access to credit can raise one's income and consumption, various studies show that financial services alone may not solve structural gender inequalities. Women frequently lack the financial literacy and expertise to run a business, as well as the ability to consult with someone. These two factors impede their ability to use a loan and control finances (Subedi & Karki, 2022; Gurung, 2021). Furthermore, patriarchal family structures often affect woman's mobility. Thus, women often divert loans or men control finances (Khan & Noreen 2012; Regmi 2011).

Recent studies are increasingly emphasizing the importance of combining access to finance with corresponding levels of financial literacy, training, and advisory services. Cooperative-based financial models have been recognized as an effective tool for delivering non-financial interventions. According to empirical evidence, cooperative financial literacy programs are recognized as effective in improving women's financial literacy, confidence, and savings, as well as influencing their decision-making

autonomy (Kaiser & Lusardi, 2024; Negi & Jaiswal, 2024). Advisory services are also recognized as effective in improving women's enterprises, risk management, and long-term financial goals for strengthening their economic resilience and empowerment (Ojha, 2018; Sharma & Shahi, 2022).

From a financial perspective, women empowerment as a construct encompasses several dimensions such as financial inclusion, savings, asset ownership, income generation, and financial independence. These are not just important constructs from a social perspective, but they are also important from an economic perspective. Women who are financially independent are more likely to invest in productivity-enhancing activities, in education, health, and sustainable development, thus contributing to economic development at the household as well as the community level (Sell & Minot, 2018; Ali et al., 2022). Therefore, women financial empowerment can be seen as a development objective in its own right as well as a catalyst for economic development.

Though the body of literature on microfinance and women's empowerment is rising, we also face some gaps in the existing literature. One of the gaps in the existing literature on microfinance and women's empowerment is that, despite the rising body of empirical literature, most of the existing empirical literature focuses on the income or savings channel rather than the empowerment channel. Poverty reduction initiatives, including those of microfinance programs, are largely analyzed in isolation from the broader relations that involve financial literacy and training programs, as well as advisory methods, as mediator variables. The third gap relates to the disconnect that exists between the empirical microfinance literature and the systematic evidence that comes from the cooperative finance literature in the context of developing economies such as Nepal (Lamichhane, 2021; Khursheed et al., 2021).

This study aims to address these gaps by using microfinance institutions in Nepal as an empirical base, along with the application of knowledge bases in cooperative financial literacy, cooperative training, and advisory research. This study, through a finance transformative analytical method, aims to examine the mediating factors through which microfinance services empower women financially, such as education, income, family support, decision-making power, and asset ownership. This study contributes to the theory and empirical content by using the field of cooperative finance and US cooperative societies.

This study can be seen to have made at least three major contributions. Firstly, the study offers robust evidence on the factors that affect the financial empowerment of women in the context of the Nepal microfinance sector. Secondly, the study situates the evidence within the context of the larger cooperative finance system with special emphasis on the role of non-financial interventions in the empowerment of women. Finally, the study offers relevant insights to financial institutions and cooperatives as well as development organizations on how to promote the financial empowerment of women in developing economies sustainably and inclusively.

It is with this background that the present study aims to contribute to this line of literature by examining the factors that shape women's financial empowerment among the microfinance client population in Nepal. More specifically, the study examines the relationship between key socio-economic and agency factors such as human capital (education levels), economic capital (income levels, support from family members, etc.), and financial management and asset ownership in relation to financial empowerment.

## **Literature Review**

Women empowerment is generally defined as a holistic construct that has four broad aspects economic, social, psychological and political. From the perspective of economics, empowering entails giving women access to material resources and financial decision-making, economic independence, and control over productive assets (Zimmerman 2000; Sell & Minot 2018). Financial empowerment allows women to allocate resources efficiently, manage risks, and prepare for a sustainable future—considerations which are important to household wellbeing and sustainable development overall (Loomba, 2020).

Microfinance and cooperative finance have employment as an important social inclusion tool in the context of "Empowerment." Microfinance is "the provision of financial services, such as specialized loans, savings accounts, and insurance products, to low-income clients who are not served by traditional financial systems." (Otero, 1999; Ledgerwood, 1999) On the other hand, cooperative finance emphasizes the importance of collective ownership and governance, and the integration of financial services with education and skills and advisory support. (ILO 2016; Ojha 2018) Despite their common purpose of addressing and relieving financial exclusion, there are significant variations in the form of microfinance and cooperative finance in terms of their institutional and delivery structures.

There is a significant amount of empirical evidence that suggests that there is a positive correlation between microfinance and women's empowerment. From the analysis of the findings of different studies carried out in Nepal, it is confirmed that the advantage of using microfinance services lies in women's ability to earn an income, their saving habits, and their involvement in decision-making (Shrestha, 2018; Paudel & Thapa, 2019). Microfinance loans are used by women members of the community to start businesses such as agriculture, cattle farming, and small businesses such as tailoring and shops (Koirala, 2020; Acharya, 2019).

Multiple studies show microfinance participation is correlated with increased women's social and psychological empowerment. Participating in group lending programs and meeting regularly has demonstrated to bolster self-confidence, communication ability, and community engagement (Bajracharya & Manandhar, 2020; Bhattarai, 2020). The same trend holds true in other areas as well, where women participating microfinance programs are also more likely to assume leadership positions within cooperatives and local organizations (Luitel & Maharjan, 2021; Paudel, 2018).

Nevertheless, the effect of microfinance on the empowerment of individuals is not the same. Various studies indicate that ethnic and gender discriminatory values regarding the structure of families still influence women who borrow loans with the objective of paying them back, while at the same time keeping their level of access to resources at a low level (Subedi & Karki, 2022; Gurung, 2021). In some cases, men even decide on the usage of the loans, hence limiting the level of independence of women (Khan & Noreen, 2012; Regmi, 2011).

As indicated in the last literature, non-financial interventions have been recognized as playing an important role in supporting the empowerment potential of financial services. Indeed, financial literacy programs have been recognized as playing an important role in increasing women's knowledge on matters such as budgeting, saving, borrowing, and investment decisions on the most effective use of financial resources [24. Kaiser & Lusardi]. In this regard, cooperative-based studies have indicated that women who have been educated on financial matters are able to save more than their non-educated counterparts and are more confident in effectively planning both long and short-term plans.

Enterprise development, financial planning, and risks are also areas where training and advisory support can make further contributions towards improving the economic outcomes of women. The implementation of cooperative strategies improves business performance, income stability, and the accumulation of assets by women, as revealed by the systematic reviews conducted by Ojha (2018) and Raut (2018). Advisory support also helps to solve the problems of improper usage of loans and the pressure of paying them back, which improves the financial discipline of women (Khursheed et al., 2021).

Evidence from developing countries endorses these observations, they argue. Studies conducted in Nepal and elsewhere show that empowered outcomes are more visible for women who are given financial services and training as opposed to credit only (Dhungana, 2017; Regmi, 2018). These outcomes signal the need for an indispensable blend of financial and non-financial services for empowerment.

Cooperative financial institutions hold a proprietary and formidable position in the spectrum of financial inclusion. Cooperatives deliver access to finance, as well as complementary services such as education, training, and advisory services, thus creating an enabling environment for women empowerment (ILO, 2016; Ojha, 2018). Cooperatives create a sense of collective learning, which is crucial in maintaining empowerment (Cronery Rwekaza & Mhihi, 2016; Ferguson & Kepe, 2011).

Moreover, as per the systematic findings, cooperative-based financial literacy programs can significantly improve women's financial inclusion, savings, and asset ownership (Negi & Jaiswal, 2024; Knorr et al., 2020). In addition, cooperative participation can improve women's participation in other social and political empowerment variables such as decision-making at the micro-level and leadership positions (Sharma & Shahi, 2022; Rena, 2017). The findings showed that microfinance and cooperative

finance remove different types of structural barriers to women’s empowerment, with microfinance removing economic barriers and cooperative finance removing structural barriers.

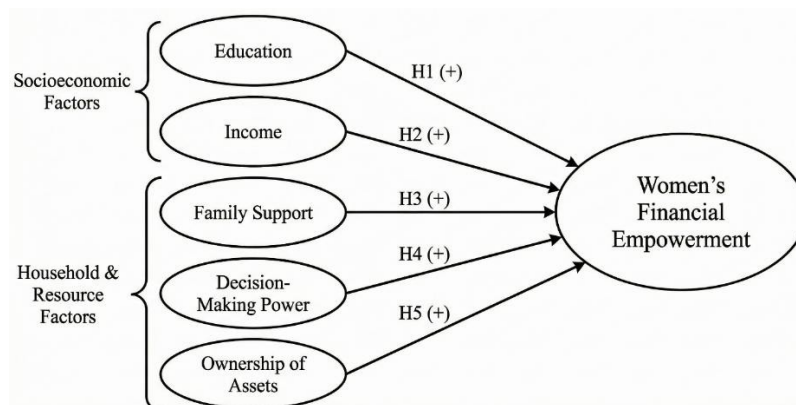
Despite the overwhelming literature being developed on microfinance and women empowerment, there are certain gaps that remain. Firstly, the literature has focused on micro studies of various economic factors such as income or savings, rather than the holistic concept of empowerment. Secondly, there has been a lack of empirical studies on microfinance, which has failed to take into consideration the mediating role of financial literacy and guidance. Finally, there has been a lack of empirical integration of microfinance studies with the systematic evidence developed in cooperative finance literature, especially in Nepal.

The objective of this study is to bridge the gaps by integrating the empirical studies on microfinance institutions being carried out in Nepal with the results of the systematic research on cooperative financial literacy, guidance, and advisory methods. This study has been carried out using a frame of reference that includes education, income, family support, decision-making power, and ownership of assets, which are used to understand the factors for women empowerment in developing economies.

### Conceptual Framework

The conceptual framework is an attempt to conceptualize the relationship between the selected socio-economic and agency factors and women financial empowerment among nepalese microfinance clients. In accordance with the theory of empowerment and financial inclusion literature, women financial empowerment is a multidimensional concept that is influenced by women’s education, income, family support, decision-making power, and asset ownership. Education is important in that it increases knowledge and facilitates the effective use of financial systems. Mica09: Income earned from microfinance activities increases women’s economic independence. Family support increases women’s interest in financial fields and their ability to access resources. Having decision-making power increases women’s agency in financial matters, and asset ownership increases women’s long-term economic security and awareness of inequalities and empowerment.

**Figure 1 presents the conceptual framework of the study.**



*Source: Above created conceptual framework was designed by author by taking inspiration from Khursheed et al., 2021, Negi & Jaiswal, 2024*

Based on the conceptual framework and prior studies, the following hypotheses are formulated:

*H1: Education is positively associated with women's financial empowerment.*

*H2: Income is positively associated with women's financial empowerment.*

*H3: Family support is positively associated with women's financial empowerment.*

*H4: Decision-making power is positively associated with women's financial empowerment.*

*H5: Asset ownership is positively associated with women's financial empowerment.*

## **Methodology**

Utilizing empirical evidence from research on cooperative finance to enrich analytical discussion, this paper adopts a quantitative, cross-sectional research design. It draws upon primary data collected from women beneficiaries of microfinance institutions in Nepal for the empirical analysis, whilst consolidating and corroborating detail findings on cooperative financial literacy, training and advisory services contextualizing a conceptual underpinning. Such a design is appropriate for examining the interplay among access to financial services, socio-economic determinants and women's financial empowerment in a context of emerging economy (Dhungana, 2017; Lamichhane, 2021).

This is a quantitative method that helps in the objective measurement of variables of empowerment, which can then be analyzed using econometric methods. The study of microfinance and empowerment is mostly done by using the cross-sectional method, as it is possible to obtain the results of the outcomes of the microfinance at a particular point of time (Shrestha, 2018; Gurung & Rana, 2025).

The study is majorly based on the primary data collected by surveying the women clients of the selected microfinance institutions of Nepal. The data was collected by using a structured questionnaire that aimed at evaluating the demographic characteristics, financial participation, and empowerment outcomes of the women. The questions were asked based on the various indicators of empowerment that are commonly used in the field of microfinance, as discussed by Khan & Noreen, 2012; Sell & Minot, 2018.

The secondary data, i.e., published empirical studies, institutional reports, systematic reviews of microfinance, cooperative finance, women empowerment, etc., were also included in the study in order to provide a robust contextual understanding of the study, as discussed by Lamichhane, 2021; Khursheed et al., 2021.

The participants in the survey were microfinance clients in Nepal. The female clients of four kinds of municipal banks were selected for the study, namely, Fuli Municipal Credit Cooperative, Hui County Cooperative Bank and Huitong Town Bank of Hemp (Matrix), and Transformative Finance Service

Financial Plc. These banks serve many female clients in rural areas and have gained respect from the government for promoting rural issues and encouraging participation in thrift programs.

A purposive sampling method was used for selecting 400 female respondents for the survey from different branches of these banks in rural and semi-urban areas. The participants were classified as “active microfinance beneficiaries,” referring to those female clients who had interacted with MFI initiatives for a minimum period of one year. The selected sample size of 400 was considered appropriate for the statistical regression analysis. This is because the same sample size has been used in prior empirical studies on Nepal and other developing countries for investigating microfinance and women empowerment, which results in reliable estimates with a satisfactory level of statistical power (Dhungana, 2017; Ali et al., 2012). Additionally, a sample size greater than 300 is considered appropriate for conducting multivariate statistical analysis, such as multiple regression analysis.

The sample is quite broad in terms of age group, educational qualifications, and professions and would thus provide a comprehensive understanding of the perceptions of the recipients of self-help groups and microfinance at different stages of their empowerment process. Before administering the main study, the questionnaire was pilot-tested with 30 respondents who were not part of the main sample. A few minor changes were made based on the feedback received to improve the questions in terms of clarity and structure.

We also trained the survey enumerators on survey protocol and ethics, and response bias reduction strategies. The survey questionnaire consisted of closed-end and Likert scale questions with the purpose of measuring income earned from work, power of decision-making, support provided to family members during hard times, and family assets.

The allegations that were based on data were ethical issues that were upheld in the entire process of collecting the data. The participants were educated on the purpose of the study, and they were given the option to participate in the study wherever possible. All the interviews were conducted after prior consent. To ensure privacy and protect the data, all the statements were kept confidential and anonymous.

The dependent variable that was used in this study was women’s financial empowerment. The variable was measured as a composite index that represents women’s participation in financial decisions, control of income, and control of assets. These three aspects represent the essential aspects of financial empowerment that are normally used as variables in studies on financial empowerment. The variable was measured using various items on a five-point Likert scale that ranged from 1, strongly disagree, to 5, strongly agree. The values representing each item were averaged to represent a composite empowerment value. The reliability of the scale was determined using Cronbach’s alpha.

The level of formal education attained by women respondents. Education improves financial knowledge, enhances the quality of decision-making, and makes financial services more efficiently utilized (Dhungana, 2017; Negi & Jaiswal, 2024). Income: The income that women respondents earn through income-generating activities with support from microfinance services. The income increases women's economic independence and power in their respective households (Shrestha, 2018; Gurung & Rana, 2025). Family support is the extent to which women's households support women's participation in financial activities/microfinance services. The supportive family environment empowers women to access economic resources by minimizing resistance emanating from patriarchal societies (Khan & Noreen, 2012; Regmi, 2011). Decision-making power is women's ability to possess power in terms of having the power to make economic decisions. It is a relevant variable that has been widely used in measuring women's empowerment (Sell & Minot, 2018; Ali et al., 2022). Asset ownership by women on their respective productive and non-productive assets such as land, cattle, business equipment, etc., through control or joint ownership. The ownership of assets by women enhances long-term financial security and empowerment (Lindgreen, 2014; Khulood, 2019).

In addition, the use of descriptive and inferential statistical data analysis techniques to analyze the data collected was appropriate as it is the commonly used approach by empirical microfinance research. Demographic Characteristics and Key Variables The descriptive statistics were used to analyze the demographic characteristics and key variables of the respondents. The technique helped to obtain an overview of the socio-economic profiles of the respondents.

In addition, inferential data analysis techniques such as the exploration of correlation to understand the relationships between independent variables and women's financial empowerment were used. To understand the relative impact of independent variables such as education, income, family support, decision-making power, and asset ownership on women's financial empowerment, a multiple regression analysis technique was used. In addition, ANOVA (Analysis of Variance) technique was used to find out if the regression model as a whole is statistically significant.

This technique has been used by many empirical research studies on women's empowerment and financial inclusion (Ali et al., 2022; Dhungana, 2017).

To find out the relative impact of independent variables such as education, income, family support, decision-making power, and asset ownership on women's financial empowerment, the following regression model was specified.

#### Regression Model

The multiple linear regression model is specified as follows:

$$WFE_i = \beta_0 + \beta_1 EDU_i + \beta_2 INC_i + \beta_3 FS_i + \beta_4 DP_i + \beta_5 AO_i + \varepsilon_i$$

Where:

WFE = Women's Financial Empowerment

EDU = Education level of women

INC = Income generated through microfinance-supported activities

FS = Family support toward women's economic participation

DP = Decision-making power of women

AO = Ownership of assets

$\beta_0$  = Intercept term

$\beta_1$ – $\beta_5$  = Regression coefficients measuring the marginal effect of each independent variable

$\epsilon_i$  = Error term capturing unobserved factors

The internal consistency of the constructs related to empowerment was checked using Cronbach's alpha test, and the reliability score was found to be satisfactory. Additional tests were carried out to validate the underlying assumptions of the regression analysis. The tests related to the Variance Inflation Factor (VIF) and tolerance values were calculated to assess the underlying assumption of no multicollinearity between the independent variables, which was found to be within the acceptable limit. Residual analysis also revealed that the underlying assumptions of normality, linearity, and homoscedasticity were met.

## Results

### Demographic Characteristics of Respondents

Table 1 presents the demographic profile of the 400 women respondents drawn from four microfinance institutions in Nepal.

**Table 1**

*Demographic Profile of Respondents (n = 400)*

Variable	Category	Frequency	Percentage (%)
Age	Below 30 years	96	24.0
	30–45 years	212	53.0
	Above 45 years	92	23.0
Marital Status	Married	312	78.0
	Unmarried/Widowed	88	22.0
Education	No formal education	98	24.5

	Primary to Secondary	232	58.0
	Higher education	70	17.5
<b>Main Occupation</b>	Agriculture/Livestock	186	46.5
	Small business	154	38.5
	Wage employment	60	15.0

*Source: Author Analysis by SPSS*

The results indicate that most of the respondents are between 30–45 years old, i.e., 53%, as they are actively participating in the economy. The majority of the respondents were married, i.e., up to 80%, which shows that the participation is highly household-based. The majority of the women, i.e., over fifty percent, have received education ranging from primary to secondary education, while a significant percent, i.e., 24.5%, of the women are not educated, hence the need for the microfinance services to be supplemented with informal education on finance.

### **Descriptive Statistics of Key Variables**

Descriptive statistics were computed to assess the central tendency and dispersion of the study variables.

**Table 2**

*Descriptive Statistics of Study Variables*

<b>Variable</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>Education</b>	2.41	0.86
<b>Income</b>	3.12	0.94
<b>Family Support</b>	3.48	0.81
<b>Decision-Making Power</b>	3.67	0.78
<b>Asset Ownership</b>	3.26	0.89
<b>Women’s Financial Empowerment</b>	3.54	0.73

*Source: Author Analysis by SPSS*

Financial empowerment of women, as indicated by the mean score of 3.54 out of five, suggests that the participants in microfinance objectively have a positive perception of empowerment. It suggests that where the power is more, i.e., the highest mean score of the variable (Decision\_Making\_power) is 3.67 out of five, which implies that the women are more involved in the management of the finances of the

household. Income and asset ownership have higher SDs with greater variations in the economic outcomes of the respondents.

### Correlation Analysis

Pearson correlation analysis was conducted to examine relationships between independent variables and women’s financial empowerment.

**Table 3**

**Correlation Matrix**

<b>Variable</b>	<b>Education</b>	<b>Income</b>	<b>Family Support</b>	<b>Decision Power</b>	<b>Asset Ownership</b>	<b>Empowerment</b>
<b>Education</b>	1					
<b>Income</b>	0.312**	1				
<b>Family Support</b>	0.284**	0.346**	1			
<b>Decision Power</b>	0.351**	0.412**	0.458**	1		
<b>Asset Ownership</b>	0.298**	0.467**	0.392**	0.516**	1	
<b>Empowerment</b>	0.336**	0.489**	0.521**	0.682	0.657	1

p < 0.01

*Source: Author Analysis by SPSS*

The findings indicate that all independent variables are positively correlated with women’s financial empowerment. The highest values were found when measuring the correlation between women’s empowerment and their power to make decisions (r = 0.682), as well as women’s empowerment and their ownership of assets (r = 0.657), suggesting that women’s power to control their assets is linked with their level of empowerment. There are no serious problems with multicollinearity in the set of independent variables, as VIF values were found to be appropriate.

### Multiple Regression Analysis

Multiple regression analysis was employed to identify the determinants of women’s financial empowerment.

**Table 4***Regression Results: Determinants of Women's Financial Empowerment*

<b>Variable</b>	<b><math>\beta</math> Coefficient</b>	<b>t-value</b>	<b>p-value</b>
<b>Education</b>	0.084	2.11	0.035
<b>Income</b>	0.176	3.94	0.000
<b>Family Support</b>	0.231	4.88	0.000
<b>Decision-Making Power</b>	0.352	7.46	0.000
<b>Asset Ownership</b>	0.319	6.91	0.000
<b>R<sup>2</sup></b>	0.612		
<b>Adjusted R<sup>2</sup></b>	0.603		
<b>F-statistic</b>	61.28		0.000

*Source: Author Analysis with SPSS*

The findings indicate that all the independent variables have a positive and significant relationship with women's financial empowerment. The findings indicate that the independent variables with the strongest relationship with women's financial empowerment are decision-making power,  $r = 0.682$ , and asset ownership,  $r = 0.657$ , which indicate that women's agency in terms of their control over their assets positively correlates with the level of empowerment enjoyed by them. There was no serious issue of multicollinearity between the independent variables as the values of the Variance Inflation Factor (VIF) and tolerance were appropriate. The values of the independent variables explained 61.2 percent of the variance in women's financial empowerment. The findings indicate that having decision-making power,  $\beta = 0.352$ , and asset ownership,  $\beta = 0.319$ , are the strongest predictors of attendance as they are statistically significant at 1 percent, while having support from the family and earning income have strong positive relationships with women's financial empowerment, whereas having educational attainment has a modest statistically significant relationship with women's financial empowerment.

**Analysis of Variance (ANOVA)**

ANOVA was conducted to assess overall model significance.

**Table 5**

**ANOVA Results**

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	78.46	5	15.69	124.30	0.000
<b>Residual</b>	49.74	394	0.13		
<b>Total</b>	128.20	399			

*Source: Author Analysis by SPSS*

As indicated by the ANOVA table, the regression model is statistically significant, as indicated by  $F = 124.30$  and  $p < 0.001$ , implying that independent variables significantly describe some of the dependent variable women's financial empowerment variance.

**Discussion**

This has led to an exploration of factors related to women's financial empowerment in microfinance and subsequent conceptual integration with cooperative financial literacy/training/advisory literature. The results of the study indicate that for women beneficiaries of microfinance programs, agency and resource-related factors are positively related to women's financial empowerment levels. In particular, decision-making power and asset ownership were found to be the best indicators of women's financial empowerment.

Women beneficiaries of microfinance programs have a moderately positive women's financial empowerment level. This finding is consistent with existing literature and other empirical studies from Nepal, which indicate that women's income, savings, and involvement in household financial decisions increase significantly for women beneficiaries of microfinance programs (Shrestha, 2018; Gurung & Rana, 2025; Jain, 2020). In particular, with regard to finance, these trends indicate an increase in women's access to more productive capital.

However, it also shows that empowerment is not limited to income. Though income from activities facilitated through microfinance has a statistically significant relationship with women's empowerment, it is much less than agency-related variables. This shows that women's empowerment through access to finance does not automatically translate into actual empowerment unless women have access and control over financial resources and also participate in decision-making at home (Regmi, 2011; Khan & Noreen, 2012).

One of the important findings of this research is related to the relatively more significant role of decision-making power than income, education, and employment variables in explaining women's financial empowerment. The results of the regression analysis show that decision-making power has

the highest standardized coefficient. This shows that women's participation in decision-making at home is more important for their empowerment. This finding supports the empowerment theory, which emphasizes the role of agency and control as critical elements of empowering processes (Zimmerman, 2000).

Studies conducted in Nepal and similar contexts have also identified decision-making power as one of the significant outcomes of microfinance intervention (Sell & Minot, 2018; Ali et al., 2022). The group-based lending approaches and interactions with microfinance institutions may also contribute to this outcome because they create at least three significant changes in women's lives: increased confidence, negotiation power, and awareness of their rights. Nevertheless, patriarchal values are common in some households, and as such, this outcome may not be fully realized by women, thereby emphasizing the need to explore more strategies to address this issue.

Ownership of assets is the second significant factor that is essential in promoting women's economic freedom. The study found that women's ownership or joint control of assets is positively associated with women's empowerment. The findings resonate with other studies that highlighted the importance of asset-based empowerment as a tool to reduce vulnerability and promote women's power in households (Lindgreen, 2014; Khulood, 2019).

From an economic point of view, the ownership of assets helps women improve their ability to utilize economic services, obtain future credits, and absorb shocks. However, the constraints that rural women in Nepal face in the accumulation of assets are many, ranging from legal, cultural, and institutional issues.

The study has discovered that the support of the family has a major influence on the women's financial empowerment. The violent environment of the families restricts women from participating in income-generating activities and denies them the opportunity of controlling their resources financially. This is in line with the previous studies that have focused on the intra-hh as the cause of differences in the level of empowerment between women (Khan & Noreen, 2012; Regmi, 2011).

On the other hand, family support was a factor that could reduce the positive effects of microfinance participation, and this is because, without it, it could lead to loan diversion, repayment pressure, or loss of autonomy. This has shown that empowerment interventions are not only focused on the woman as an individual.

In conclusion, the income that they are able to generate from the microfinance activities significantly and positively contributes towards the empowerment of women, thus strengthening the argument for microfinance as a tool for poverty alleviation and income generation. This is because the coefficient is relatively low, thus implying that income on its own does not lead to empowerment. This has shown

that prior studies are right in stating that income gain is not enough without the inclusion of control and decision-making authority in order for empowerment to take place (Loomba, 2020; Khulood, 2019).

Education also has a positive impact on empowerment, but the impact is less compared to the impact of the other variables. This may be attributed to the low level of formal education achieved by women in Nepal, as well as the information gained through the informal learning process through microfinance programs.

Systematic review findings suggest that financial knowledge and competence may be improved through cooperative financial literacy and training programs, thus compensating for the lack of formal education (Lamichhane, 2021; Negi & Jaiswal, 2024).

The study adds strength to the building of financial empowerment alone, aside from microfinance, as it makes a small contribution to the reconciliation of the findings through the integration of the insights gained from the effectiveness of microfinance programs through the body of knowledge on non-financial interventions in the field of cooperative finance. There is cumulative evidence that confirms the effectiveness of collective financial literacy, training, and counseling programs in improving women's empowerment (Ojha 2018; Sharma & Shahi 2022).

The results of this study, with respect to the significant impact of decision-making power and asset ownership (along with income), support that agency and control over resources is an important factor in financial empowerment. These results are consistent with the broader cooperative finance literature in that education and learning may also support financial empowerment outcomes. These factors may be important in enhancing women's financial literacy and their ability to contribute to economic decisions and ensure the effective use of financial services in financial empowerment.

The purpose of this research is to examine the factors that determine women's financial empowerment in the context of microfinance in Nepal. This study conceptually links the factors with women's cooperative financial literacy, training, and advisory. This study uses quantitative methods such as descriptive statistics, correlation analysis, multiple regression analysis, and ANOVA to provide robust empirical evidence on the impact of microfinance on women's financial empowerment in both economic and agency-related dimensions.

## **Conclusion**

The results indicate significant and substantial improvements in the level of financial empowerment of female microfinance institution beneficiaries. However, this empowerment cannot be explained by income." The most significant predictors are decision-making power and, to a lesser extent, asset ownership, which illustrate the importance of women's agency and control over economic resources as the more significant predictors. Furthermore, family support is also significant, which highlights the role of the family in the context of women's financial independence. While income and education are

found to positively affect the empowerment dimensions, the relatively low importance of these variables suggests that the role of financial mechanisms cannot be effective in the absence of the enabling social and institutional context.

The global and national level perspectives of the subsequent research work reveal the potential implications of the research work on the field of microfinance and cooperate finance literature, based on the need to have a holistic approach in empowerment that includes access to funds and non-financial support mechanisms such as financial literacy and training. This is an attempt at an improvement in the impact of microfinance on empowerment. This is based on a multidimensional view of women's financial empowerment that is not based on access to financial services but on the ability to use such access in conjunction with timely institutional and social arrangements.

The findings have a few possible implications for policy. First, there is a need to ensure that microfinance institutions not only provide financial services but also include financial literacy, business training, and advisory services to enhance women's economic power. There is also a need to ensure that policies include legal and institutional reforms to enhance women's economic power by ensuring their right to property ownership and control, especially policies that focus on ensuring that women have power to make decisions regarding property ownership. Finally, there is a need to raise awareness within households and communities to change patriarchal attitudes that are against investing in women's economic independence.

This study contributes to the literature on finance and development by offering evidence on the multidimensional concept of women's financial empowerment with its economic and agency components. However, the study is not without limitations. The limitation of the cross-sectional design does not allow causal analysis and the possibility of self-reported bias. Future studies can consider the longitudinal design and the institutional model on the role of digital financial services in women empowerment in developing economies using the longitudinal design.

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