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A Quantitative Analysis of Microfinance Credit Facilities for MSMEs and their Impact on Liquidating Poverty in Delhi-NCR Region: With Special Reference to AU Small Finance Bank

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Abstract

One important financial tool for earning revenue is microfinance. This study aims to ascertain how microfinance contributes to the eradication of poverty. For this purpose, 100 respondents from AU Small Finance Bank in the Delhi-NCR area of India—60 men and 40 women—were surveyed using a random sampling technique in order to collect primary data. Two different statistical techniques were used to analyze the data. The variance in the variables (livelihood, business development, income, and employment) before and after respondents' involvement in microfinance was analyzed using ANOVA, and the relationship between the dependent variable (microfinance) and independent variables (livelihood, business development, income, and employment) was ascertained using a linear regression test. The results show a strong correlation between the dependent and independent variables as well as the positive impact of microfinance institutions on reducing poverty.

Keywords: Microfinance, Revenue**,** Economic Growth, Livelihood and Business Development

1. Introduction:

In a nation like India, where 60% of the population is dependent on agriculture and 70% of the population resides in rural regions, microfinance can play a significant role in providing financial services to the underprivileged. World Bank figures confirm this. Microfinance is considered an efficient strategy for socioeconomic growth in underdeveloped nations such as India. It is expected to have a major impact on development and the fight against poverty.

Microfinance is not a brand-new concept. Its origins can be traced to the 19th century, when moneylenders filled the same function as modern professional financial organizations. Over the past 20 years, a variety of development strategies have been created by policymakers, non-governmental organizations, international development organizations, and others with the intention of lowering poverty in developing countries. Among these initiatives that have gained popularity since the early 1990s are microfinance programs, which provide financial services to the working poor in the form of savings and credit opportunities (Johnson and Rogaly, 1997).

The microfinance movement in India is said to have been sparked by the Self-Help Group (SHG) - Bank Linkage Programme (SBLP), which NABARD introduced as a trial project in 1992. This program has become the most popular

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microfinance scheme in India as a result of its tremendous success. Microfinance in India lacks a unified regulatory framework. Microloans are provided by commercial banks, rural regional banks, SHGs, cooperative societies, and institutions (MFIs) that take on a range of shapes, including non-profit organizations and non-bank financial institutions (NBFIs). NABARD is in charge of SHGs; the Reserve Bank of India (RBI) is in charge of cooperatives; the Registrar of Cooperative Societies (RCS) is in charge of cooperatives; and so on.

2. Concept of Microfinance

Microfinance enables the poor and excluded segment of society that lacks access to conventional banking to accumulate assets, diversify their livelihood options, raise their income, and lessen their susceptibility to economic stress. In the past, it has been observed that the supply of financial products and services to impoverished people by microfinance institutions (MFIs) is feasible and sustainable, as MFIs are able to cover their complete costs through adequate interest spreads and by functioning efficiently and effectively.

Microfinance is not a panacea capable of lifting all of its clients out of poverty. However, numerous impact studies have shown that microfinance is in fact beneficial to disadvantaged households (Littlefield and Rosenberg, 2004). The Asian Development Bank (2000) describes microfinance as the provision of a vast array of services, including savings, deposits, loans, payment services, money transfers, and insurance, to low-income households and their micro-businesses. This concept of microfinance is not limited to those living below the poverty line; it also encompasses low-income households. The taskforce on Supportive Policy and Regulatory Framework for Microfinance, formed by NABARD, defined microfinance as "the provision of thrift, saving, credit and financial services and products of very small amount to the poor in rural, semi-urban and urban areas to enable them to increase their income level and improve their s**tandard of living." (Sen, 2008)**.

Microfinance is characterised as a tool for development that grants or offers financial services and goods such as very modest loans, savings, micro-leasing, micro-insurance, and money transfers to help the extremely or extremely poor expand or establish their enterprises (Robinson, 1998). In addition to financial intermediation, some MFIs offer social intermediation services, including the formation of groups, the building of self-confidence, and the training of group members in financial literacy and management (Ledgerwood, 1999). Microfinance (MF) service providers include non-governmental organisations (NGOs), savings and loan cooperatives, credit unions, government banks, commercial banks, and non-banking financial institutions. Traders, seamstresses, street vendors, small farmers, hairdressers, rickshaw drivers, artists, blacksmiths, etc. are the target group of MFIs (Ledgerwood, 1999).

Microcredit is a subset of microfinance, a large range of services. Microcredit is the providing of credit to low-income clientele. Microcredit and microfinance are two distinct concepts. Micro credit is a small amount of money granted as a loan by a bank or other legally authorised entity, whereas micro-finance encompasses a variety of services for the poor, including loans, savings, insurance, transfer services, and micro credit loans, among others.

3. Review of Literature

The study by **Kumar Vipin et al. (2015)** found that SHGs and MFIs are crucial to the provision of microfinance services, which promotes the development of low-income and underprivileged individuals in India. While creating the road map for the next stage of the SHG programme, it is important to take into account the slow graduation rate of SHG members, poor group functioning, dropout of members from groups, etc. that have also been documented by various study findings in different parts of the country.

According to Nikita's (2014) study, the number of SHGs with savings linked to banks began to fall for the first time in the years 2012–2013 following the debut of SHGs BLP. The report also reveals that SHG's loan outstanding increased, which contributed to a rise in NPAs. Finally, it is discovered that commercial banks hold a significant portion of the MFI loan granted agency-by-agency. He recommended that actions be taken to periodically improve the results of initiatives implemented under microfinance.

According to a 2012 study by Mahanta et al., providing microcredit to the poor is not the end of the problem but the start of a new era. It has the potential to work wonders in the fight against poverty if managed correctly. But it needs to be combined with initiatives that boost capacity. Government cannot shirk its duty to promote the social and economic advancement of the underprivileged. The fund is being used to purchase and consume non-productive assets in the absence of any specific abilities with microcredit clients.

Therefore, it is crucial to offer programmes that help people develop their talents, such as those in handicrafts, weaving, carpentry, poultry, goat rearing, masonry, beekeeping, vegetable growing, and many other agricultural and non-agricultural fields. The government must take the initiative in this situation. Microcredit must be prioritised for those with certain unique skills. Additionally, these clients should be given technical and professional assistance post-loan to ensure the success of their microenterprises Microcredit can significantly contribute to the reduction of poverty if the government and MFIs work cooperatively.

A study on emergency situations and the impact of microfinance on the Indian scenario was undertaken in **2011 by Maruthi Ram Prasad, Sunitha, and Laxmi Sunitha.** The microfinance industry in India has entered the takeoff stage following the pioneering efforts of the government, banks, NGOs, etc. To strengthen the formation of Micro-Finance Institutions (MFIs) and maximise their contribution to the sector's growth and the reduction of poverty, an effort might be made to create a cadre of new generation microcredit leaders. Each Indian state should think about establishing a multi-party working committee to meet with leaders in the microfinance industry and discuss how to improve the policy climate and dispel misconceptions. We must expand on an effective model while one state leads the way. We shall gradually but inevitably change India by fostering the entrepreneurial talent of the underprivileged in ways we can only begin to imagine.

In order to determine the effect of microfinance on small and medium-sized businesses in Nigeria, **Idowu Friday Christopher (2010**) undertook a study. Assessing the effect of microfinance on Small and Medium Enterprises (SMEs) in Nigeria is the main goal of this study. The 100 SMEs that made up the sample size for the study were chosen using a simple random selection procedure. A structured questionnaire was created to make it easier to gather pertinent data for analysis. Data presentations and analysis have strategically used descriptive statistics, which uses straightforward percentage graphs and illustrations. The study's conclusions show that many SMEs benefited from MFI loans even if only a small percentage of them were able to obtain the necessary funding. It's interesting to note that the majority of SMEs credit MFI loans with helping them increase their market share, achieve market leadership through product innovation, and boost their overall competitiveness. It is advised that the government endeavour to provide adequate infrastructure amenities, such as electricity, a good road network, and training institutions, in addition to tax incentives and financial supports, to encourage SMEs in Nigeria.

In order to determine the relationship between microfinance programmes and women's empowerment, **(Chowdhury, 2011)** used data from a panel data survey and a fixed effects model to estimate individual effects such as asset building, decision making, labour supply, and family planning as well as household effects such as children's educational attainment and household expenditures of participating in non-credit programmes for women. In comparison to the non-credit programme, the results show a substantial relationship from the standpoint of the individual and household effects. By integrating the impoverished in economic activities, microfinance is a financial tool to improve their socioeconomic well-being. In the beginning, the primary goal of microcredit was to lower the degree of poverty in the nation. At the moment, microfinance is utilised to boost self-employment, the growth of the natural resource and agricultural industries, the empowerment of women, etc. **Imai, Katsushi S., et al (2012)** Experience has shown that microfinance may assist the poor in increasing their income, creating useful groups, and reducing their vulnerability to outside shocks. It can also be a great tool for self-strengthening, enabling the underprivileged, especially women, to become financial drivers of advancement. Positively, because it increases the remuneration and usage of low-income family units, the role of microfinance in reducing destitution cannot be disputed.

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Microfinance services aim to bridge this gap because it is a key barrier to the growth of micro-businesses, the alleviation of poverty, and economic empowerment in underdeveloped areas. MFIs primarily engage in a variety of financial operations to foster an economy that promotes the alleviation of poverty.

4. Research Statement

The goal of the study is to help the poor people escape the agony of poverty by enhancing socioeconomic factors. It examines the rising rate of poverty in emerging nations and its effects on the positive growth of the Gross National Product. Given this context, the following research topic was chosen to analyse the problem.

What are the effects of microfinance institutions on raising the low-income population and improve their level of living in Delhi-NCR Region?

5. Objective of the study

This study's aims to compare the socioeconomic characteristics (i.e., income, employment, and livelihood) of the respondent before and after microfinance involvement by AU small finance bank in the Delhi-NCR region. In addition, investigate the connection between microfinance and poverty reduction (i.e., livelihood, company development/income, and employment).

6. Hypotheses of the study

H1: There is a significant positive relationship in socioeconomic factors (i.e. livelihood, business development, income, and employment) before and after the involvement of microfinance.

H2: There is a strong positive correlation between the magnitude of microfinance loans and sustainable economic growth to alleviate poverty.

7. Research Methodology

A questionnaire based on a five-point Likert Scale (from strongly disagree to agree) was used to collect primary data during the field survey. The variance before and after microfinance intervention is estimated using a straight forward independent t-test. The size of the loan is the dependent variable, and the growth of the business, income, and stable employment are the independent variables in the regression equation used to analyse the impact of these factors on poverty reduction.

7.1. Sampling Design

Non- probability convenience sampling method was adopted for selection of respondents and sample size were 100. Out of 100 respondent, 60 male and 40 female respondent were chosen for the study.

7.2. Tools and techniques used for Data Analysis

Two distinct statistical methods were applied to the data analysis. ANOVA was used to analyse the variance in variables (i.e. livelihood, business development, income, and employment) before and after microfinance involvement in the business activities of respondents, and linear regression test was used to determine the relationship between the dependent variable (i.e. microfinance) and independent variable (i.e. livelihood, business development, income, and employment). SPSS was used in analysis of survey data.

8. Result and Discussion

The primary purpose of microfinance organisations is to assist low-income households in launching a business and investing in an existing trade, occupation, enterprise, etc. Therefore, MFIs provide low-income individuals with small loans as a means of beginning and sustaining a business. Tables 1 to 7 illustrate the demographic information of active borrowers and the contribution of the selected microfinance institution (AU Small Finance Bank), as well as their participation in economic sectors.

Table 1: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25 Yrs	40	35.7	40.0	40.0
	26-35 Yrs	20	17.9	20.0	60.0
	36-45 Yrs	40	35.7	40.0	100.0
	Total	100	89.3	100.0	
Missing	System	12	10.7		
Total		112	100.0		

Figure 1: Age of Respondents

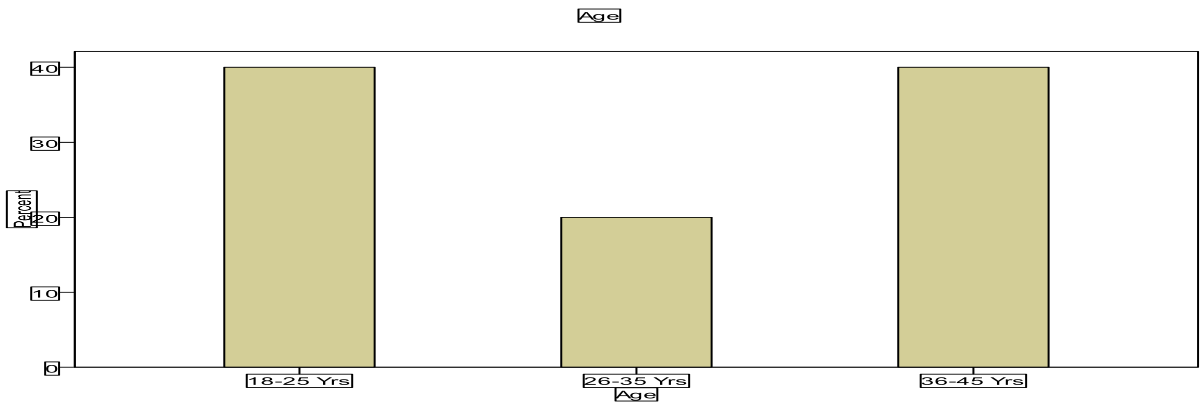

Table 2: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	60	53.6	60.0	60.0
	Female	40	35.7	40.0	100.0
	Total	100	89.3	100.0	
Missing	System	12	10.7		
Total		112	100.0		

Figure 2: Gender

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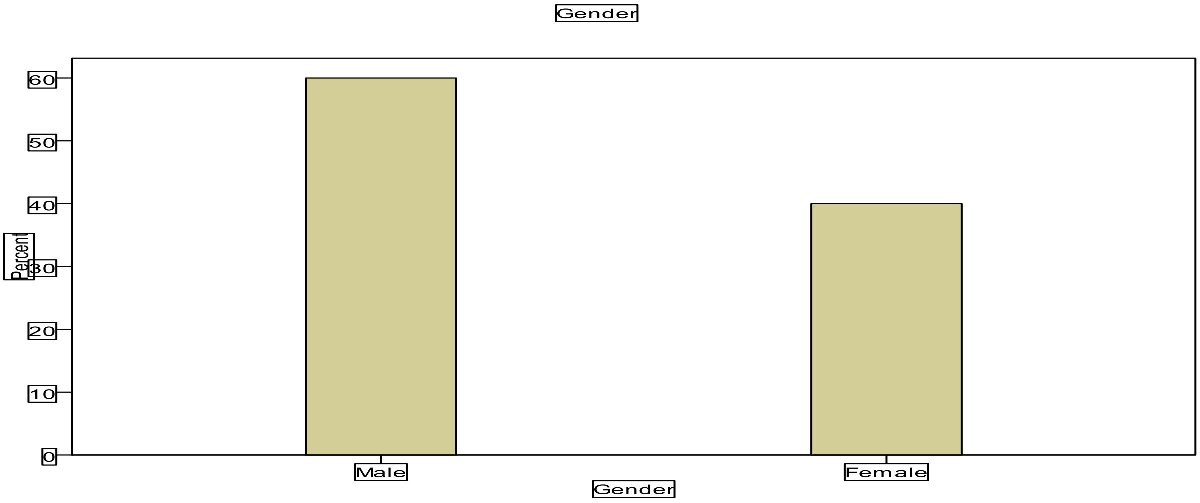

Table 3: Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary Education	40	35.7	40.0	40.0
	Senior Secondary Education	40	35.7	40.0	80.0
	Bachelors Degree	20	17.9	20.0	100.0
	Total	100	89.3	100.0	
Missing	System	12	10.7		
Total		112	100.0		

Figure 3: Education Level

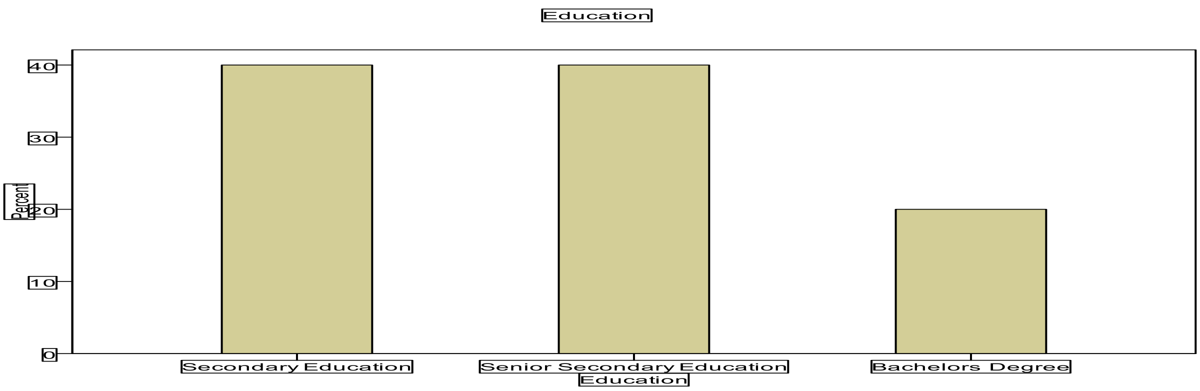

Table 4: Family Members

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4-5 Members	70	62.5	70.0	70.0

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	>5 Members	30	26.8	30.0	100.0
	Total	100	89.3	100.0	
Missing	System	12	10.7		
Total		112	100.0		

Figure 4: Family Members

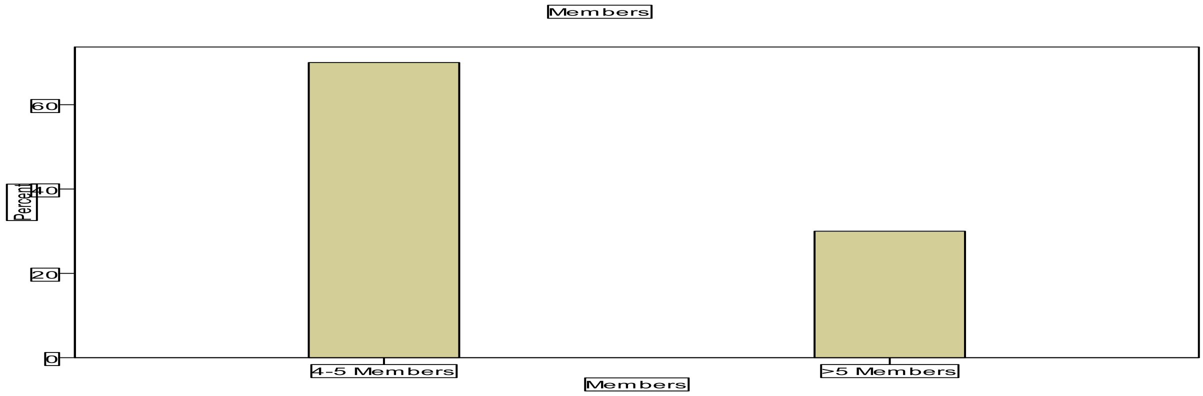
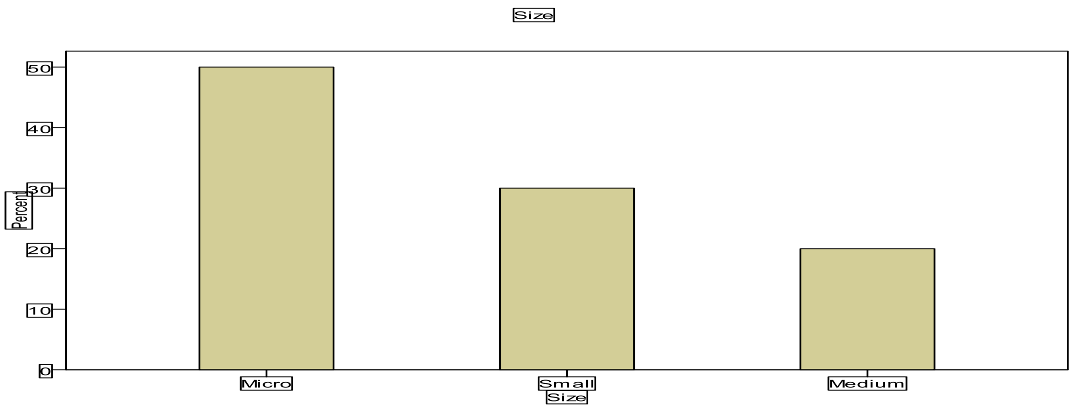


Table 5: Size of Business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Micro	50	44.6	50.0	50.0
	Small	30	26.8	30.0	80.0
	Medium	20	17.9	20.0	100.0
	Total	100	89.3	100.0	
Missing	System	12	10.7		
Total		112	100.0		

Figure 5: Size of Business

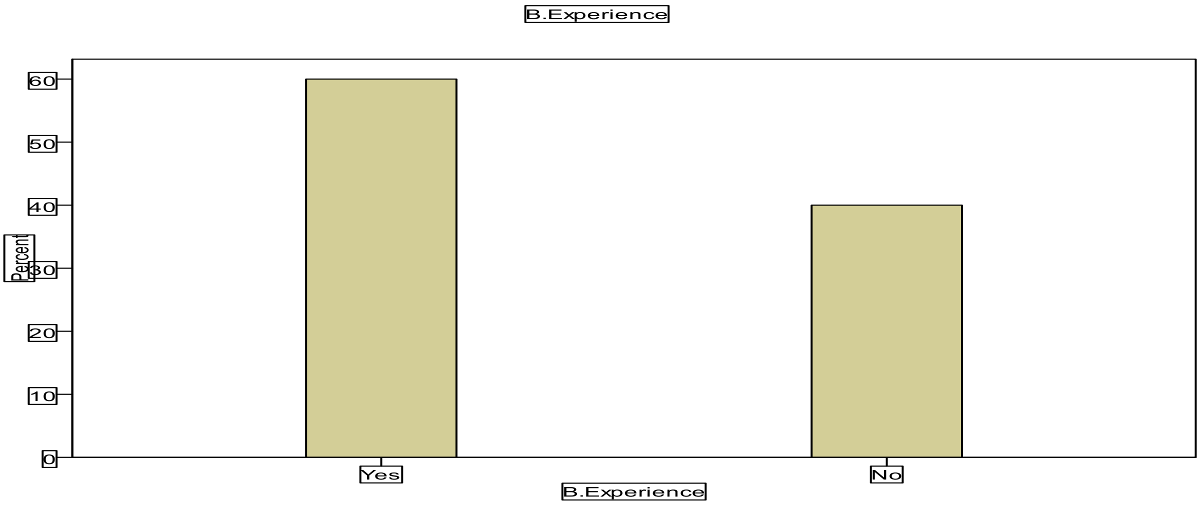


According to Table-6, 60 respondents(60 percent) were experienced of business before joining MFI and rest 40 respondents (40 percent) were not experienced of business before joining MFIs.

Table 6: B.Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	60	53.6	60.0	60.0
	No	40	35.7	40.0	100.0
	Total	100	89.3	100.0	
Missing	System	12	10.7		
Total		112	100.0		

Figure 6: Business Experience before and after joining MFIs



According to Table-7, As far as business sector of the respondents are concerned 20 respondents (20 percent) were from farming sector, 30 respondents (30 percent)were petty trade segment, whereas very less proportion of 10 respondents(10 percent) were from automobile workshop.

Table 7: Business Sector

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Farming	20	17.9	20.0	20.0
	Petty Trade	30	26.8	30.0	50.0
	Small Scale Manufacturing	20	17.9	20.0	70.0
	Automobile Workshop	10	8.9	10.0	80.0
	Others(Specify)	20	17.9	20.0	100.0
	Total	100	89.3	100.0	
Missing	System	12	10.7		

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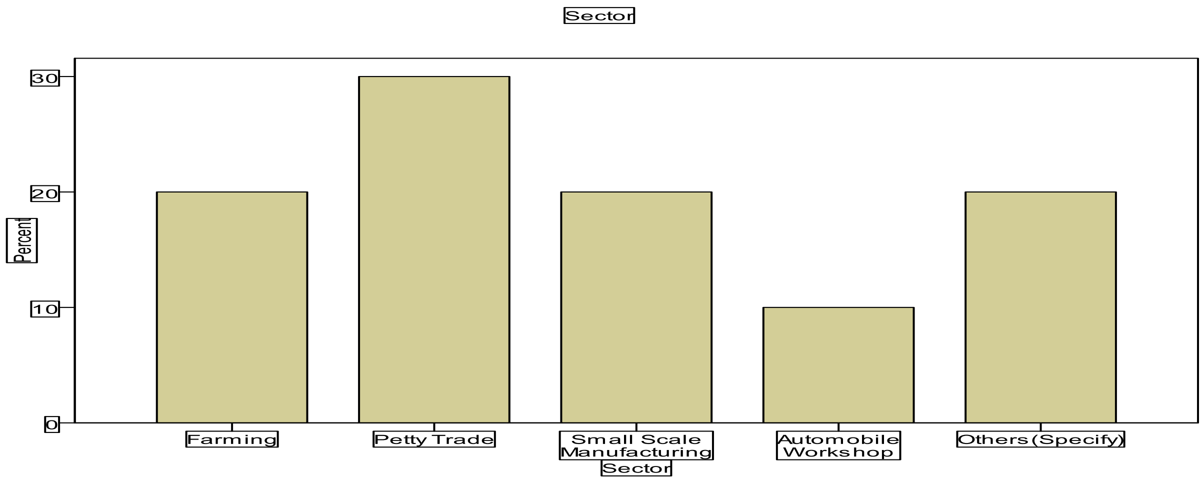
Table 7: Business Sector

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Farming	20	17.9	20.0	20.0
	Petty Trade	30	26.8	30.0	50.0
	Small Scale Manufacturing	20	17.9	20.0	70.0
	Automobile Workshop	10	8.9	10.0	80.0
	Others(Specify)	20	17.9	20.0	100.0
	Total	100	89.3	100.0	
Missing	System	12	10.7		
Total		112	100.0		

Figure 7: Business Sector



8.1. Regression Analysis:

Regression is the statistical relationship between two or more variables. In simple regression two variables are being taken into consideration, i.e one is dependent and another is independent. When more than two independent variables are taken for analysis in the relationship it is called multiple regressions.

Regression analysis is concerned with the derivation to find out values of dependent variable based on independent variable.

The linear equation is depicted as: $Y=b_0+b_1x_1+b_2x_2+\ldots.+b_nx_n$

Where,

Y is the dependent variable.

$X_1,X_2,\ldots X_n$ are the independent variable .

b_1,b_2 are coefficient of variables.

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Table-8 highlights the result of the linear regression equation model. The **r =0.746** indicates a strong relationship between the dependent and independent variables. The coefficient of determination **r^2 = 55.6%** shows the accuracy predictive accuracy of a statistical model.

Table 8: Regression Analysis

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.746[a]	.556	.413	1.07779

a. Predictors: (Constant), Development, Income, Livelihood, Employment

b. Dependent Variable: Revenue

As per table-9, the p-value is **p=0.0468** which is less than **p<0.05**, therefore we accept alternative hypothesis "There is a significant positive relationship in socioeconomic factors (i.e. livelihood, business development, income, and employment) before and after the involvement of microfinance." and reject the null hypothesis.

Table 9: Testing of Hypotheses 1

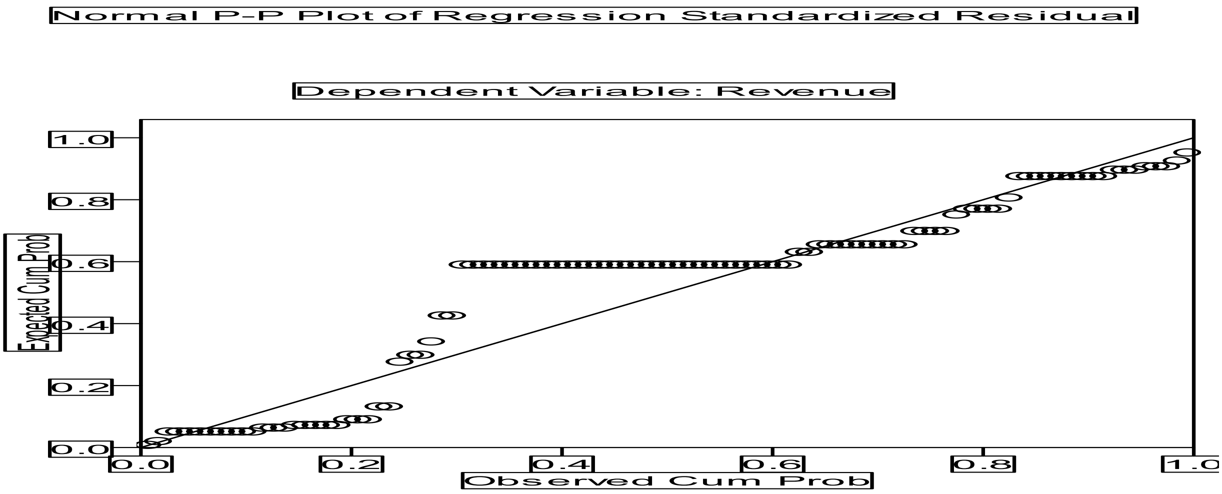
ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.435	4	.859	.739	.0468[a]
	Residual	110.355	95	1.162		
	Total	113.790	99			

a. Predictors: (Constant), Development, Income, Livelihood, Employment

b. Dependent Variable: Revenue

Figure 8: Regression Standardization Residual



As per table-10, the result of the linear regression equation model. The **r =0.524** indicates a moderate positive relationship between the dependent and independent variables. The coefficient of determination $\mathbf{r^2}$ = **27.4%** shows the accuracy predictive accuracy of a statistical model.

Table 10: Regression Analysis

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.524[a]	.274	.267	.60234

a. Predictors: (Constant), Employment

b. Dependent Variable: Income

According to table-11, the p-value is **p=0.000** which is less than **p<0.05**, therefore we accept alternative hypothesis “There is a positive correlation between the magnitude of microfinance loans and sustainable economic growth to alleviate poverty.” and reject the null hypothesis.

Table 11: Testing of Hypotheses 2

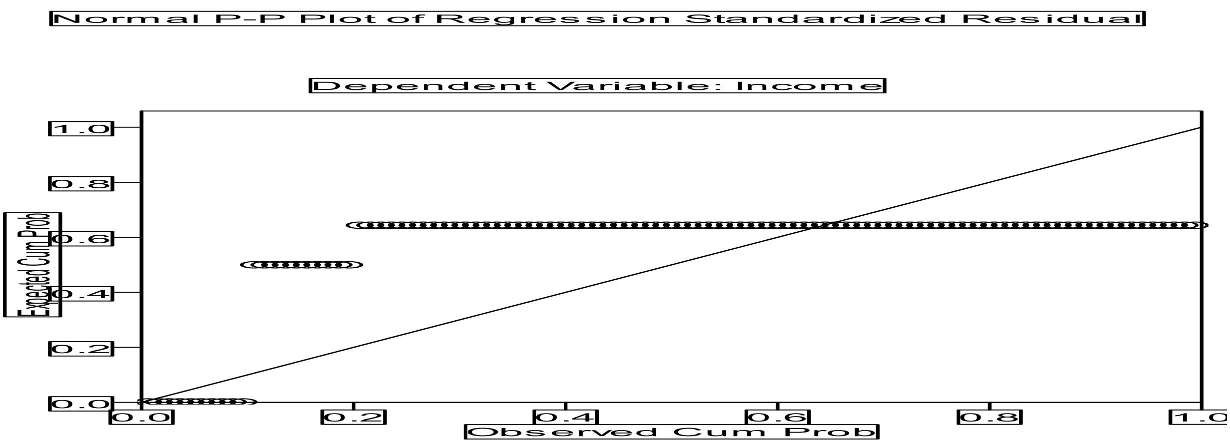
ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.444	1	13.444	37.056	.000[a]
	Residual	35.556	98	.363		
	Total	49.000	99			

a. Predictors: (Constant), Employment

b. Dependent Variable: Income

Figure 9: Regression Standardization Residual



9. Conclusion of the Study

The study concludes that microfinance has a positive effect on reducing poverty. Primary data obtained from a questionnaire-based survey of AU Small Finance Bank borrowers in the Delhi-NCR area was used to assess these aspects. Thirty percent of the responses were female borrowers and sixty percent were male borrowers. More than 40% of those surveyed said they had started their enterprises with help from microfinance institutions.

Empirical results derived from primary data show that microfinance contributes positively to the reduction of poverty, which in turn promotes socioeconomic growth and ultimately leads to the eradication of poverty. To boost borrowers' income and loan exposure in the automotive and agricultural industries, microfinance institutions should also offer training and skill development.

In India, microfinance banks have been operating in rural regions for the past 20 years, and their function has been crucial. The Reserve Bank of India and the Indian government should take the appropriate action to encourage the expansion of the microfinance industry. The relevant state governments also take the necessary actions to inform the public about the advantages of using microfinance organizations' services to improve their financial situation and quality of life.

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