THE IMPACT OF MICROFINANCE ON POVERTY REDUCTION THROUGH WOMEN'S EMPOWERMENT

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Abstract

This study examines how Microfinance Institutions (MFIs) and micro-credit (MC) facilities has put a positive impact on poverty reduction by empowering the women of the society. Women's Empowerment has become a central issue for the development of the country. Microfinance (MF) has hence taken an initiative and played a very important role by providing MC and improving the financial condition of these women. In this study, the survey method of data collection has been adapted and we have considered 336 respondents of SHGs out of 400 questionnaires yielding a response rate of about 84% from the people residing in rural areas of the Alipurduar district of West Bengal. After the collection of the data, a reliability test (Cronbach Alpha) has been done followed by correlation (Pearson) and multiple Regression analyses which were used to test the hypothesis. It was observed that the three variable that was taken into consideration (i.e., socioeconomic status, women's position in the family/society, and financial benefit from SHGs) have a significant positive impact on women's empowerment through MF. The findings in the study bring up certain valuable contributions to the MFIs for better designing of the policies and strengthening and encouraging their future work to empower women and reduce the level of poverty. If the women are encouraged to join the SHG and MFIs provide financial benefits to them, the objective of equal participation may be achieved.

Keywords: *Microfinance institutions (MFIs), Women Empowerment, Micro Credit (MC), Self Help Group (SHG/SHGs), Women's position in family/society, Poverty reduction.*

HIGHLIGHTS

- 72% of respondents have just completed 12th standards or below that.
- The monthly family income of the respondents is low. Therefore, the savings are also low.
- 36% of respondents have a family size more than the average family size of West Bengal (4.5) as well as that of India (4.8).
- Continuing equation (iv) → $Y_j = a + b_1X_{1j} + b_2X_{2j} + b_3X_{3j} + \varepsilon$
  $(We)_j = 0.681 + 0.0.234(Fb)_j + 0.182(Wp)_j + 0.164(Ss)_j + \varepsilon$
- Regression model is fit to show the positive impact of MF on poverty reduction through women empowerment.

INTRODUCTION

Gender inequality has come up as a very huge problem for the growth of women these days. There is a big difference between men and women in today's world because of gender inequality *(Divya Khatter, 2018)*. If we compare the financial condition of both men and women globally it is observed that women are around 70% poorer than men *(Rejoice Solomon, 2021) (Manjoor & Mander, 2009)*. As India is a

developing country, women are still dominated by the man in their household activities, and this discrimination against women by society results in poverty, lack of education, and a lower standard of living *(Rehman,2007)*. Therefore, MF plays an important role in empowering women in order to eliminate this kind of evil.

MFIs differ widely from other official banking sectors. Unlike other banks, MF provides loans to the poor who do not have to hold any property to the mortgage. MF functions on the principle of forming groups, and these members of the groups take the guarantee of one another in repaying the loan amount. Thus, MFIs play a vital role in encouraging women to take up more and more entrepreneurial activities *(Cak & Degermen, 2015)*. And we know that these entrepreneurs are one of the important factors responsible for women's empowerment *(Nawaz, 2010)*. In simple words, MF can be stated as a "Bank for the poor" *(Pushpender Kumar & Divya, 2021)*

The main motive to empower women is to equally distribute the power of both men and women. Both the sexes should be provided equal opportunities for their development *(Kabeer 2003)*. It has been seen that due to inequality in society women are not given the chance to make their decisions, to have choices, or to participate in any of the household economic activities. With the help of MF and MC, a woman can start to participate in economic activities, which reduces the poverty in the economy and result in their self-independence, and as well as women can even support their families and can enhance growth. This will surely bring development to the economy. These women also gain self-confidence, and self-esteem and also starts understanding their potential *(Panigraphy and Bhuyan, 2006)*.

REVIEW OF LITERATURE

Many studies have already been done to understand the concept of MF and how it benefits the common people. MF has played an important role in empowering women and mainly they have focused on women because it has been observed that the rate of repayment of loans in the case of women is much higher than that of men without any delay *(Knowles and Luke, 2018)*. Many studies have also found how this MC system has played a vital role in poverty reduction and has made women self-independent.

In recent times, many authors have tried to connect women's empowerment through MF *(Shagufta Tariq, 2018)*. Women Empowerment gives respect and dignity to the women *(Rashmi Mate, Gajanan. N, Atul Kapdi, 2021)*. On the other hand, Micro Finance is one of the most important and effective poverty-reducing strategies for rural development *(Nirpinder Kaur, Harpreet Kaur, 2017)*. MFIs and the Government have started offering training programs to improve the financial literacy of women *(Nawaz, 2015)*. The intention of MFI in offering this training program is to boost Women's Educational engagement and improve their performance *(Akinsemolu & Olukoya, 2020)*. Nowadays women are becoming more responsible and are coming up with better ideas for earning and doing business but for that, they not only need loans but also savings, money transfers, and insurance. *(Madhusmita Kanungo, 2012)*. MF promotes the Cash Flow by way of granting loans to the poor and financially backward section of people for self-employment and recovery of loans. *(Madhusmita Kanungo, 2012)*. MFI works on the simple concept of lending based on survival skills. *(Ibtissem and Bouri, 2013)*. And due to the Group lending System, the borrowers can trust one another and because of this, the loan amount can be successfully repaid within the due course of time *(Knowles and Luke, 2018)*. Women taking loans through the MF program have been found to utilize the loan more efficiently, taking part in the expenditure and purchase decisions and having control of their savings *(Weber and Ahmed, 2014)*. In the earlier study by *(Goetz and Gupta, 1996)* it was found that 63% of the women who take loans from MFI, were utilized as well as controlled by the male member of the family. Hence the women somehow fail to have control over credit *(Samanta, 2009)*. However in recent time, with the increasing role of women in the household decision-making, the women's status and quality of the life has improved *(Leach and Sitaram, 2002)*. MF comparatively has reduced the workload for Women and has also reduced verbal and physical abuses *(Khan and Bibi,2011)* *(Swain and Wallentin, 2009)*. MF has also increased the proportion of women in higher education *(Muhammad, Shaheen, Naqvi & Zehra, 2012)*.

Several MFIs have come forward to establish and enhance women's empowerment. The Grameen Bank was one of the first MFIs to take initiatives regarding women's empowerment and grab global attention *(Goldberg, 2005)*. MFIs provide several services to the people including microcredit *(Sanyal, 2009)*. But due to certain difficulties, people in some regions especially the rural area people were not able to enjoy the adequate amount of facilities provided by these Institutions *(Vallabh and Chatrath, 2006)*. This is due to the location profile of the urban and the rural zones which varies greatly based on available opportunities and choice of livelihood *(Abass et al. 2013)*. However, MF collaborating with the banking sectors and coming up with a flexible infrastructure and easy access, helped the remote area people in their livelihood changes *(Bi and Pandey, 2011)* *(Armendariz and Murdoch, 2007)*. MFIs have succeeded in changing the lives of poor women, enhancing incomes, and generating positive externalities such as self–esteem, etc. MF is seen as a tool for poverty elimination by providing various services characterized as financial and non-financial to the financially backward group of the society *(Lubna Mohammad Thaher, 2021)*. It has been seen that after joining SHGs the number of working days of the beneficiaries in livestock, business, and other professions has increased. Thus, it indicates that SHGs generate employment opportunities *(Surender Kumar Sehrawat, 2011)* *(Indhumathi & Palanivelu, 2013)*. The income earned by the women through certain schemes helps them to support their families *(Shipa Nandi, 2015)*. Greater financial independence for rural women increases their bargaining capacity, reduces violence against women, and enables them to gain more influence over decision-making in the family *(Samanta,2009)* *(Sarkar & Baishya (2012)*. With the help of MF, women became Self-independent, solving their problems independently, and their income has also increased *(Dr. Ranu Sharma, 2021)*.

MFIs over time have tried to shape the lifestyle of the beneficiaries and also created Leadership qualities in them *(Datta & Sahu, 2021)*. *(Datta & Sahu, 2021)* have also found in their study that there are also many other aspects of MF in the emergence of motivation among the borrowers that make them set up their micro-start which will lead them to a better life. when these people start a new business and become entrepreneurs, it enhances their creativity and brings in leadership quality within them.

It is difficult to measure empowerment as it is qualitative in nature *(Gram Morrison and Skordis-Worrall, 2019)*. Economic Empowerment is one of the terms that can be considered a quantitative term for measuring empowerment. It helps in poverty reduction as a result the women can efficiently take a financial decision for the family, and other economic issues, land use, and so on *(Huma Rehman, Amani Moazzam, and Nighat Ansari, 2020)*. In a study by *(Esther Duflo,2012)* she stated that there is a close association between economic development and women's Empowerment. Because of the MC from the MFIs, the Women have started participating in the community development program, access to employment, political participation, etc *(Kandpal, Baylis, and Arends – Kuenning, 2013) (Datta and Sahu, 2018)*.

However, there is certain criticism about the role of MF in the empowerment process. *Barua (2012),* in his study, states that the loan amount or the MC that was given to the member of SHGs was so small that it was not helpful for the member to fight against poverty. He also mentioned that there is a failure of SHGs. According to *(Mahmood, 2011)* there is a high percentage of women borrowers who do not have any training or any idea about how to use the loan amount productively. It has also been observed that MF has a partial impact on women's empowerment as there are several other factors related to it such as Technology etc *(Evan Selinger, 2008)*.

By Studying the above literature, we have observed that women's empowerment through MF can be explained under different dimensions, such as social, education, health, etc. Several studies show that MFIs have a positive impact on the borrower and society *(Shankar, 2013)*. A huge number of studies have been conducted around the world, especially in Bangladesh and Africa *(Rashid et al. 2015)*. In India Comparatively only some studies have been done in the southern part *(Garikipati,2008) (Kandpal, Baylis, and Arends- Kuenning, 2013)*. So considering the above study, we observed that the eastern part of our country is less explored in the field of MF. So, certain ground-level communication is required to create awareness among the people regarding MF.

This Study is an initiative to analyze the impact of MF on Women's Empowerment and how it has helped in the poverty reduction of the people of a district in the Northern part of West Bengal. So based on the discussion made above, certain objectives as been guidelines for this study, and accordingly testable hypothesis has been developed.

OBJECTIVES

This study aims to analyze whether becoming a member of an SHG has financially empowered women or not. The key objectives of this study are:
1. To investigate the relationship between the impact of MF on reducing the poverty.
2. To investigate the relationship between the impact of MF on women's empowerment.

RESEARCH METHODOLOGY

The study was conducted in the Alipurduar district of West Bengal where the SHG movement has made rapid growth in recent years. The respondents were selected from different parts of the district, where the majority of the respondent were from Kamakhyaguri and Barobisa. Here SHGs are formed under government schemes. A group of a minimum of 8-10 members is being formed who are members of SHGs. The people who are controlling this group consists of the respondents who are not members of the SHGs but are resident of the same area and are working as a government worker in the gram panchayat (GP). The main aim is to find out whether SHGs have helped in the reduction of poverty and at the same time have empowered women. Due to time constraints, the primary data was collected utilizing questionnaires, where all the questionnaires were not completed fully by the respondents. The method adopted for collecting the data was purposive random sampling.

The data collected from the respondent was regarding the structure and profile of SHG members, and the economic, financial, and social benefits derived by SHGs member. Secondary data was collected from the records maintained by the SHGs member themself and also a wide range of information like saving, interest rates, the recovery procedure, assets created, ownership gained, external assistance received, etc. were ascertained from the records maintained by each SHG.

Nature of the Research – Descriptive Research (This is mainly adapted for categorizing, analyzing, and then summarizing the data into a comprehensive form *(Nachmias and Manchmal, 1992)* and inferential (t-statistics and ANOVA for inferring the result, regression, and predicted line fitting)

Sample design:

Area of the research study –Rural area of Alipurduar District (80% of the sample was from Kamakhyaguri & Barobisa and the rest 20% was from the other part of Alipurduar district of West Bengal)

Sample Unit: Rural SHG women (beneficiaries of MF services) of Alipurduar district of West Bengal.

Population Size: Through a survey of the Government employee who was looking after the SHGs, it was been found that there were approx. 2400 SHG members in the said Area. (The data was derived from the workers who were government workers in the gram panchayat (GP) controlling the SHGs groups)

Sample size: For this research, the sample size has been determined by using the Cochran's Formula ($n_0 = Z^2pq/e^2$); where Z = 1.96, p = 0.5, q = (1-p), e = 0.05, n_0(calculated) = 385 (rounded-up to nearest zero), but the population of our study is not very large, therefore; n_0 adjusted ($n = n_0/1 + (n_0 - 1)/N$); where N = 2400 (estimated) and n = 332 (approx.). Final data collected from 336 respondents for the study.

Sample method: Purposive sampling (researchers relied on their own judgment when choosing members of the population to participate in their survey).

Collection method: undertaking the survey method, a list of the SHG members was collected from the MFI office. Then 400 questionnaires were prepared to collect the data from the respondents. Due to various constraints like shortage of time from the borrower's end, unavailability of the borrowers, miscommunication, etc. 336 responses were successfully completed.

Research Instrument: Structured Questionnaire (Five-point Likert scale questions were being framed to know about the benefits that the members of SHGs enjoy after joining the group)

Statistical test Applied: Descriptive statistics (frequency and percentage), Reliability Statistics *(Cronbach's Alpha),* Correlation (Pearson correlation) & Multiple Regression Analysis.

Hypothesis formation:
Ho1: There is no significant impact of MF on socio-economic status, women's position, and financial benefit of the women.
Ho2: There is no significant impact of MF on women's empowerment.

Survey Measures: 14 statements were asked based on 5 points Likert scale ranging from "Strongly Agree" (1) to "Strongly Disagree" (5). These 14 statements are as follows:
- Did MF increase your importance/role in your family?
- Did MF help you to build up your status in your society?
- Did MF Help you to become economically Self-dependent?
- Did MF reduce your financial crisis?
- Did MF reduce your poverty?
- Did MF help you to start a new business?
- Did MF help you to build confidence?
- Did MF increase your family income?
- Did MF help you to have ownership of an asset?
- Did MF help you to participate in social activities?
- Did MF help you in the upliftment of society?
- Did MF help you to become part of the decision taker in the family?
- Do you think MF has played a vital role in empowering you as a woman?

DATA ANALYSIS AND MAJOR FINDINGS

Table 1. Items adapted for research to show Dependent Variable (DV) and Independent Variable (IV)

Women empowerment (We) through MF	Y (dependent variable)
Socioeconomic status (Ss) of the women	X1 (Independent variable)
Women's position (Wp) in the family	X2 (Independent variable)

Financial benefits (Fb) after joining SHGs	X3 (Independent variable)

The result of demographic dimensions which have been asked in the questionnaire to the selected 336 members has been put with 6 variables shown in **Table 2**; i.e., age, education level, marital status, family size, monthly income, and monthly savings. **Age:** As per table 2, it shows that the majority of the respondent belongs to the age group of 35-50, (n =97, 29%) whereas it was observed that only 65 (20%) belongs to the 18-25 years age group. **Education**: As far as educational qualification is concerned, the maximum number of respondents were 12th pass (n =106, 32%), and only 8% of the respondent (n=29, 8%) were having post-graduation degrees. If we include 8th, 10th, and 12th pass together, the number of respondents becomes 241 (61 + 74 + 106) while graduate and post-graduate together are just 95 (28%) which shows the low rate of higher education among females. **Marital status**: The major part of the respondents was married (n=233, 69%) while 103 (31%) were married. **Family size:** Observing the family size, we found that 214 (116 + 98) respondents have a family size of 5 or less than 5 and 122 (60 + 62, 36%) respondents have a family size more than the average family size of West Bengal (4.5) as well as that of India (4.8). **Monthly income:** Regarding the monthly income, the maximum respondent (n = 170, 51%) were falling in the range of below 10,000 per month, and only 86 (25%) of the respondent falls in the range of 30000 to 50000 per month, which shows that the income of most of the family is low. The minimum number of respondents is able to earn 10000 to 30000 per month**. Monthly saving:** Similarly, due to the low monthly income the monthly savings of most of the family (n=155, 47%) is nearly zero (0), followed by the range of 200-2000 that hold 25%of the respondent and the rest 25% saves 2000-5000 per month. Only 14 (14%) respondents are able to save 5000 to 10000 per month. Continuing from the monthly income; 166 (80 + 86, 49%) respondents are able to 10000 to 50000 per month but either because of family size or health conditions; they are not able to save more than 2000 in a month because 46% respondents are not able to save and 25% respondents are able to save between 200 – 2000 in a month.

Table 2. Demographic profile of respondents; Age, Education, Marital status, Monthly income, and Monthly saving

Demographic variable	Category	Statistics	
		Frequency	Percentage
Age	18-25	65	19%
	25-35	91	27%
	35-50	97	29%
	Above 50	83	25%
Education level	8th	61	18%
	10th	74	22%
	12th	106	32%
	Graduation	66	20%
	Post-Graduation	29	8%
Marital status	Married	233	69%
	Unmarried	103	31%
Size of family	Three	116	35%
	Five	98	29%
	Seven	60	18%
	More than seven	62	18%
Monthly Income	Below 10000	170	51%
	Below 30000	80	24%
	Below 50000	86	25%
Monthly savings	0	155	46%
	200-2000	83	25%
	2000-5000	84	25%
	5000-10000	14	4%

Source: Primary data

Reliability Statistics

To check and prove the internal reliability of the study, the Cronbach's Alpha Test of Reliability has been adapted. By applying this test, we can specify whether the items for each dimension or variable are internally consistent or not. According to *Nunnaly (1978), Cronbach's Alpha* should be 0.700 or above. However, *Garson (2002)* has mentioned in his study that for preliminary research, co-efficient alpha in the range of 0.5 to 0.6 is still a minimum acceptable level of reliability. The below table shows that the reliability test conducted for the variable for the reduction in poverty through women empowerment is highly reliable and consistent. The table shows that all the variables used to test Cronbach's Alpha are acceptable as the value is above 0.700.

Table 3. Reliability Statistics (Cronbach's Alpha) to show internal consistency

S. No.	Study Variable	No. Of Statements Used	Cronbach's alpha
1.	Women empowerment through MF	1	----
2.	Socio-economic status	3	0.711
3.	Women's position in the family	5	0.745
4.	Financial benefits	5	0.794

*Source: Primary Data

Correlation Analysis

In order to determine the strength, significance, and direction of the bivariate relationship of the variable, Pearson's correlation coefficient has been used. The table below shows that the P-value of all the three independent variables are correlated with the dependent variable (women empowerment) and they are less than the significant value ($p < 0.001$). Hence the correlation is statistically significant and we can say that there is enough evidence to justify that the sample is correlated. The value for Pearson's correlation for socioeconomic status ($X1$) with women empowerment through MF is 0.274. Similarly, the value for women's position correlating with women's empowerment through MF is 0.205. The value for financial benefits correlating with women empowerment through MF shows 0.225. Therefore, Women's Empowerment has a positive relationship with socioeconomic status, women's position in the house and society, and financial benefits through MFIs. Hence both the null hypothesis (i.e., H_01 & H_02) are rejected in favor of the alternative hypothesis (H_a1 & H_a2).

Table 4. Correlation		Socio Economic Status	Women Position	Financial Benefits	Women Empowerment
Socio Economic Status	Pearson Correlation	1	.410**	.501**	.274**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	336	336	336	336
Women Position	Pearson Correlation	.410**	1	.285**	.205**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	336	336	336	336
Financial Benefits	Pearson Correlation	.501**	.285**	1	.225**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	336	336	336	336
Women Empowerment	Pearson Correlation	.274**	.205**	.225**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	336	336	336	336

Source: Primary Data ** Correlation is significant at the 0.01 level (2-tailed)

Multiple regression Analysis

The following model summary shows the value of Regression, Residual, and R of the Estimate.

Table 5. Model summary showing regression, residual, d.f., mean square, F-value, and significance at a 5% level of significance (95% level of confidence)

Model Summary

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	24.571	3	8.190	11.453	< 0.001[b]
Residual	237.417	332	0.715		
Total	261.988	335			

R = 0.306[a]

a.   Dependent Variable: Women empowerment
b.   Predictors: (Constant), Socio-economic status, Women's position, and financial benefits

From the above table of the model summary, it is clear that the result of the regression analysis based on 3 independent variables (socioeconomic status, women's position, and financial benefits) indicates a positive relationship (R= 0.306) and statistically significant relationship (p < 0.001) with the dependent variable (i.e., women empowerment through MF). The value of R square is 0.094 which means the independent variable (women empowerment through MF) accounted for 9.4% of variability on the dependent variable. R square also indicates the proper fitness of the model. From a statistical perspective, the ANOVA table shows the acceptability of the model. The regression row in the ANOVA table shows the information regarding the variation accounted for by the model. The F Value is 11.453 & significance value of the F – statistic (i.e., p < 0.001) is less than 0.05 which means the regression model is fit for the data.

Table 6. Coefficients showing the value of a, b1, b2, and b3; standard error of coefficients, t-value of coefficients, and significance at 5% level of significance (95% level of confidence)

Model	Coefficients	Std. Error	t	Sig.
Constant (Y) = Women empowerment (We)	1.157	0.208	5.747	< 0.001
Financial benefits (Fb)	0.119	0.119	1.747	0.082
Women's position (Wp)	0.120	0.068	1.762	0.079
Socioeconomic status (Ss)	0.151	0.054	2.813	0.005

Dependent Variable: Women's Empowerment
Source: Primary Data

[Dependent Variable (Y) = We; Independent Variables: Fb (X_1), Wp (X_2) and Ss (X_3)]

$(\widehat{Y})_j = b_1X_{1j} + b_2X_{2j} + b_3X_{3j} \rightarrow$ **Equation (i)**

Substituting the values of IVs, DV and constants in Equation (i)

$(\widehat{We})_j = 0.119(Fb) + 0.120(Wp) + 0.151(Ss) \rightarrow$ **Equation (ii)**

{Equation (ii), when intercept is not considered} and

{When intercept is considered with its value}

$(\widehat{Y})_j = a + b_1X_{1j} + b_2X_{2j} + b_3X_{3j} \rightarrow$ **Equation (iii)**

$(\widehat{We})_j = 1.157 + 0.119(Fb)_j + 0.120(Wp)_j + 0.151(Ss)_j$

In the same way, for the predicted value of $Y_j = (We)_j$

$Y_j = a + b_1X_{1j} + b_2X_{2j} + b_3X_{3j} + \varepsilon \rightarrow$ **Equation (iv)**

$(\widehat{We})_j = 1.157 + 0.119(Fb)_j + 0.120(Wp)_j + 0.151(Ss)_j + \varepsilon$

Thus, the final Regression equation is: $(We)_j = 1.157 + 0.119(Fb)_j + 0.120(Wp)_j + 0.151(Ss)_j + \varepsilon$

[Constant coefficient = 1.157, t = 5.747, P < 0.00 and Coefficient of Socioeconomic status = 0.151, t = 2.813, p < 0.01]

The results shown above indicate that the coefficients of dependent variables differ from the independent variables. It can be observed that the most significant factor impacting women's empowerment through MF is socio-economic status (b_3=0.151) followed by financial benefits from MFIs (b_1 = 0.119) & women's position in house and society (b_2 = 0.120) respectively. The p-value for the observed t value (2.813) corresponding to socioeconomic status is 0.005 which is less than the significant value (p < 0.05) hence it has a significant influence on women's empowerment through MF, whereas women's position and financial benefit do not have a significant influence. Thus, from the above table, it is clear that the significant value of the Socioeconomic status is less than 0.05 which shows that the null hypothesis is rejected and the alternative hypothesis is accepted.

However, in the above analysis, we can see that only socio-economic status is significant and the other two independent variables (i.e. Women's position & financial benefit) are not significant. So if we apply all the three variables the model does not fit the data. Therefore

by further analysis and research, we have found out that if only the age group (25-35) and (35-50) is taken into consideration, then the data fits the model.

Table 7. Model summary for the age group of (25-50) showing regression, residual, d.f., mean square, F-value, and significance at a 5% level of significance (95% level of confidence)

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	29.080	3	9.693	15.968	.000[b]
Residual	111.091	183	.607		
Total	140.171	186			

R = 0.445[a]

a.   Dependent Variable: Women empowerment
b.   Predictors: (Constant), Socio-economic status, Women's position, and financial benefits

Source: Primary Data

The result of the multiple regression analysis presented in the above table shows that, considering the age group (25-35, 35-50) in the analysis, the R-value has changed to 0.455 And the R square value to 0.207, significant at 5% level of significance indicating that 20.7% of the variance of the dependent variable is explained by the independent variables. Hence the R square indicates a better fitness to the model than the previous analysis. Also, the F Value at a 5% level of significance is less than 0.05, which means the model fits the data well.

Table 8. Coefficients for the age group (25-50)

Table 8. Coefficients for the age group of (25-50) showing the value of a, b1, b2, and b3; standard error of coefficients, t-value of coefficients, and significance at 5% level of significance (95% level of confidence)

Model	Coefficients	Std. Error	t	Sig.
Constant (Y) = Women empowerment (We)	.681	.257	2.655	.009
Financial benefits (Fb)	.234	.083	2.835	.005
Women's position (Wp)	.182	.087	2.083	.039
Socioeconomic status (Ss)	.164	.071	2.314	.022
Dependent Variable: Women Empowerment				
Source: Primary Data				

Continuing equation (iv) → $Y_j = a + b_1X_{1j} + b_2X_{2j} + b_3X_{3j} + ε$

$(We)_j = 0.681 + 0.0.234(Fb)_j + 0.182(Wp)_j + 0.164(Ss)_j + ε$

The p-value for the observed t-value for financial benefit (Fb), Women's position in society/family (Wp), and Socioeconomic status (Ss) are 0.005, 0.039, 0.022 respectively, which is less than the significant value (p <0.05), at 5% level of significance. In the same way, the t-value for intercept as well as for constants (b_1, b_2, and b_3) are greater than 2 ~ 1.983 (critical value of t). Hence it can be said that all the 3 independent values (Fb, Wp, and Ss) have significant influence on women's empowerment through MF. In summary, there was sufficient statistical evidence to support H1 and H2. Hence both the null hypothesis (i.e., Ho1 and Ho2) are rejected in favor of the alternative hypothesis (H1 & H2), which means the regression model is fit to show positive impact of MF on poverty reduction through women empowerment.

Again, drawing the graph to show the predicted line on the basis of a, b_1, b_2, and b_3.

Graph 1. **Predicted Line:** a=0.681 (as the exciting point on the Y axis and different values of Y (We) when there is one unit of change in IVs (Fb, Wp & Ss)

Graph I: Predicted Line

$\alpha=0.681$ (as the interseting point on Y axis and different values of Y (We) when there is one unit of change in IVs (Fb, Wp & Ss)
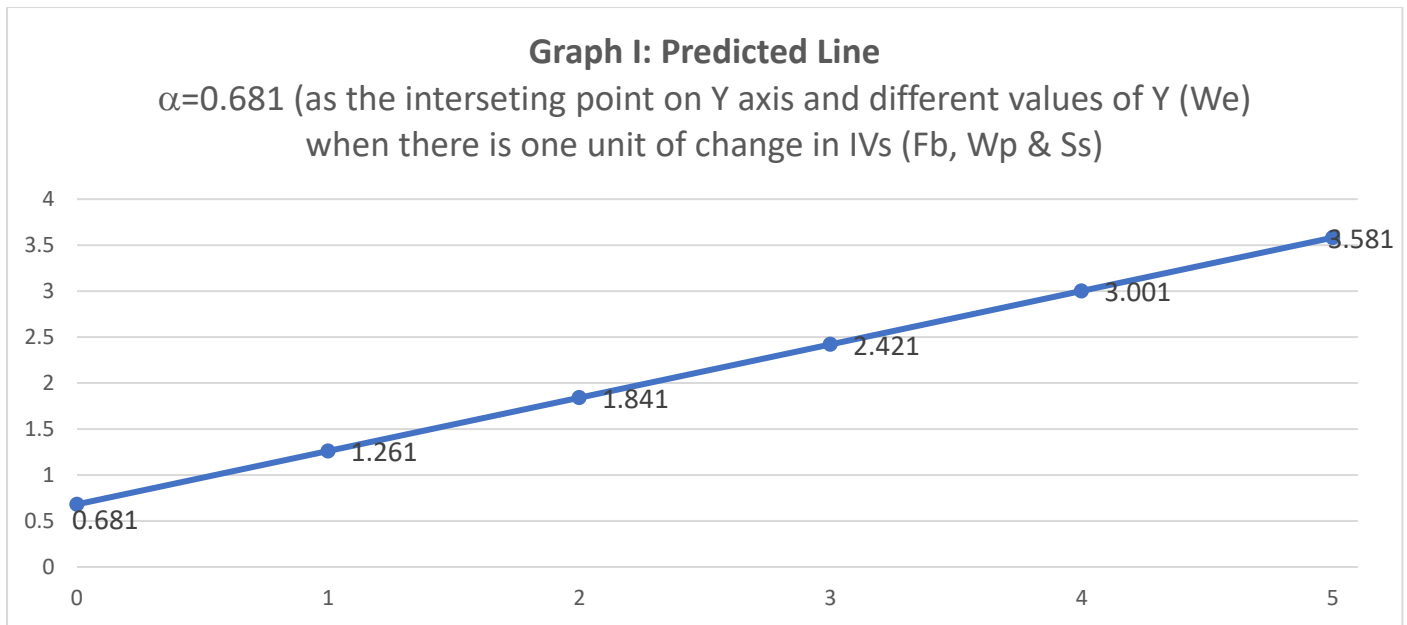
CONCLUSION

Empowering women is a need for society to bring equality among the genders. This study was mainly done to understand the impact of MFIs on women's empowerment and whether it is reducing the poverty level. From the field observation, we found out that the empowering of the women and all the other factors like socioeconomic status, and financial benefit varies from person to person. The field survey shows that there are several different classes of people with different requirements, understanding, and ability to mingle with people and so each person has a different perspective. However, the study concludes that MFI has surely helped women to bring confidence, increase their role in the family, start a new business, reduce the poverty level and empower themselves. For proving it statistically, 3 constructs were taken into consideration (Socio-economic status, women's position in the family/society, and financial benefit from SHGs) as dependent variables on Women Empowerment through MFIs and the result shows a positive correlation between the variables. Both the null hypotheses were rejected resulting in accepting the alternative hypothesis. It was observed that due to the MFIs the women's socio-economic status has improved they are also getting recognition in society and the level of poverty has also decreased. Thus, if the people specially women are included with SHG and financial benefits are provided by the MFI to the SHG members; the ultimate goal of the equal opportunity can be achieved through women empowerment. So, more members should be included with the SHG and financial benefits should be provided to them.

FUTURE SCOPE OF THE STUDY

There is also a certain limitation in the current study; i.e., age group of the respondents, hesitation of the respondents in replying to the surveyor, clear response in fist stance. All these limitation can be considered to overcome by conducting scope for future researchers. This study was conducted for a specific group of the society; i.e. SHG of the Alipurduar district in West Bengal. So, the study cannot be generalized to all women; i.e., for professionals, housewives, and social workers working non-for-profit. Thus, the future research including a wider area (women, etc.) can be taken into account for better Generalization. Also, purposive sampling has been adapted for this study to select the respondent, so the limitation of this method is bound to a particular study. Thus, there is a scope and direction given to the researcher and practitioners who want to work on the same area related to Women's Empowerment in Alipurduar district of West Bengal or for all West Bengal without specifying the district for the study.

DECLARATIONS

Conflict of interest:

Both the authors declare that there is no financial/potential conflict of interest or belief concerning the research, publication, and authorship of this article that could affect the objectivity of the authors.

Authors Contribution:

The first author initiated and drafted the idea of the paper. The second author went for fieldwork and data collection many times and the first author has performed in-office work to execute the experiments and analyze the results. Both the authors have written and edited the manuscript. Both the authors have reviewed and approved the manuscript for the same.

Authors Agreement:

Both the authors certify that the final version of the manuscript being submitted have been proved by them and both the authors warrant that the article is the authors' original work, hasn't received prior publication and isn't under consideration for publication elsewhere.

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