

# Women's Access to Rural Credit and Micro Finance in West Bengal

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## Abstract

The present paper examined the status of women in the state of West Bengal on the basis of microfinance. The paper is based on secondary data collected from published trend analysis report of NABARD from the year 2009-10 to the year 2014. The study was conducted on four types of banks, namely public sector banks, private sector banks, regional rural banks, and cooperative banks taken as the independent variable ; savings amount, total loan disbursed amount, outstanding loan amount were considered as the dependent variables. An attempt was made in the present study to analyze the data related to microfinance for women in the state of West Bengal by using a statistical tool, MANOVA. The analysis of the data found out that there is significant mean variation between the three variables of the four types of banks.

**Key words:** women empowerment, savings, total loan disbursed, outstanding loan, microfinance, public sector banks, private sector banks, regional rural banks, cooperative banks

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The concept of women empowerment was introduced in the year 1985 at the International Women's Conference held at Nairobi. Empowerment is a procedure that helps women to recognize their capability, capacity, identity, strength, and power and their application in their day to day life. As a result, they can easily take part in decision making, access resources, are able to properly plan their time for their work as well as their family, and they can also know the difference between right and wrong, and free themselves from any irrelevant customs, traditions, and practices (Deshmukh-Ranadive, 2002).

In India, women empowerment was focused upon in the Eighth Five Year Plan in the year 1992-1997 through Panchayati Raj institutions by adopting the National Policy for Empowerment of Women, 2001 into action and which ensured the survival, protection, and development of women and children's rights in India. Women and children's rights were focused upon in the Tenth Five Year Plan, 2002-2007 (Deshmukh-Ranadive, 2002).

Micro finance is a development initiative taken by the Government of India, along with the Reserve Bank of India, NABARD, and other commercial banks, regional rural banks and cooperatives, which proved to be beneficial for the clients as well as the micro finance institutions. Among the potential clients, women are found to be the most reliable one in terms of repayment of loans and their utilization. When women take a loan, the whole household and the family benefits from it, and that's the reason women are preferred while sanctioning loans ; moreover, microfinance can empower women as it imparts awareness, strength, and confidence in them to fight against poverty (Deshmukh-Ranadive, 2002).

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To help women for meeting their needs, micro-credit initiatives have been taken by the women self-help groups (SHGs) consisting of 10-20 members, who come together with the purpose of saving and rotating loans among the members. These groups get formal support for widening their lending network and capacities. This entire process starting from formation of a group to regulating finances for women is in itself empowering (Deshmukh-Ranadive, 2002).

Since the past decades, women's organizations like Primary Agricultural Co-operative Credit Societies (PACS), West Bengal ; Self Employed Women's Association (SEWA), Ahmedabad ; Annapurna Mahila Mandal in Mumbai ; Working Women's Forum (WWF), Chennai have been doing a great job in fulfilling the credit needs of the women in the respective states, and their efforts have made a huge difference in the life of women, and have created a paradigm shift in the quality of micro-finance delivery (Deshmukh-Ranadive, 2002).

## **Scenario in West Bengal**

Association of Micro Finance Institutions (AMFI) – West Bengal, has a target of initiating a change in the state's rural structure by empowering (especially) the poor women who are underprivileged and exploited socially and economically. AMFI boasts of being the first to take this type of initiative in the State through the collective network of MFI players. This unique effort has been undertaken by these institutions for enhancing the income - generating activities among 40 lakh poor women and approximately 13,000 employees from lower financial background by providing them micro-finance services in West Bengal (Association of Microfinance Institutions (AMFI), 2014).

If the districts of West Bengal are studied individually, Menon (2011) observed that agriculture-related organizations are ushering in women empowerment in Birbhum district of West Bengal. The backward class women of Birbhum district found a new turn in their life as they found means of sustainable socioeconomic upliftment for themselves and their families through new ways of agriculture, the work they have been doing since their childhood.

According to Menon (2012), the tribal women of Purulia district of West Bengal, with help of the NGOs and SHGs, have learnt to implement several water management techniques which are efficient for irrigation, multi-crop approach, and achieved the target of food sufficiency in these regions of limited rainfall. These tribal women are ready to fight against any social ills in their lives ; the water management revolution by these ordinary village women have proved to have created wonders, and with the help of the self help groups, the water management programme was successful.

The West Bengal government in the year 2012 raised the subsidy from 20% to 30% of the SHGs in the state. In the same year, the govt. launched a programme named 'Anandadhara' under the sponsorship of the National Rural Livelihood Mission (NRLM). The agenda behind this programme is to mobilize and support the rural poor into self-managed institutions, where these underprivileged people can access their rights and public services.

The National Rural Livelihood Mission is the new form of Swarnajayanti Gram Swarajgar Yojana (SGSY) administered by the Union Rural Development Ministry, whose main aim is to alleviate poverty. In 2012, the Union Rural Development Ministry called upon the state of West Bengal to be a partner and participate in the poverty alleviation initiative taken by them. The idea behind this programme is to connect at least one women from every family among the rural poor in the country with the help of a SHG to create a socioeconomic activity. West Bengal State Rural Livelihoods Mission (WBSRLM) formed under the West Bengal Societies Registration Act, 1961, with the help of Panchayats and Rural Development Department implemented NRLM in the state ("Mamata announces "anniversary gift" to West Bengal SHGs," 2012).

Though women hold an important position in the socioeconomic cultural society, the most unfortunate thing is that women are the sufferers of ill health, illiteracy, nutritional deficiencies, and above all, female foeticide still prevails in many parts of India, and as a result, the percentage of female population is becoming less day by day.

Empowerment is a multidimensional process, which helps women to enhance awareness, access scarce economic resources, participate in the social issues, and to achieve these objectives, all women should be organized into a self-reliant group, which will help the women to provide strength and take collective corrective action at the right time. The SHG movement has gained a tremendous momentum in West Bengal, though it started late, as it was found that approximately 1.5 lakh SHGs out of 3.5 lakh SHGs were formed under the Swarnajayanti Gram Swarojgar Yojana (SGSY); the second programme which supported this SHG movement in West Bengal was the NABARD supported SHG-Bank Linkage programme (Mandal, Majumder, & Rahman, n.d.).

The West Bengal Tribal Development Co-operative Corporation Ltd. (WBTDCC), with the support of Backward Classes Welfare Department (BCWD) and Government of West Bengal had set up Large Scale Multipurpose Cooperative Societies (LAMPS) in the year 1976 under the West Bengal Societies Act, 1973 and operated at a primary level in 15 districts of the state towards providing micro-credit to the tribal women in West Bengal with an objective of women development and empowerment (Mandal, et al., n.d.).

## Review of Literature

Access to microfinance, especially by the rural and deprived women participants, contributes to their poverty alleviation and reduction, and at the same time, it also contributes to women's empowerment in the areas of decision making. The microfinance institutions are doing a great job in empowering women of the rural areas by providing them micro-credit and other financial services to meet up their needs and demands.

Mula and Sarker (2013) made an attempt to study women empowerment through microfinance in Cooch Behar District of West Bengal. The study was based on primary data, where 144 members from 48 SHGs formed the sample size, and the analysis was done by paired *t*-test and impact index. The study focused on the indicators of empowerment, like employment, investment, savings, assets, and consumption. The results showed a positive trend, and it was seen that these factors influenced the income of the members significantly.

Das (2012a) studied the impact of micro finance and SHGs in effective reduction of poverty, creating awareness, empowering women, and ensuring sustainable development of the nation. An attempt was made to study this impact on the women members of Karimganj, Hailakandi, and Cachar districts of Assam. Das (2012b) tried to conduct a descriptive analysis on impact assessment in case of women empowerment. This study was also done in the three districts of Assam, namely Karimganj, Hailakandi, and Cachar, and the paper made an attempt to study the meaning of empowerment and focused on the different concepts and empowerment indicators. The study found that the SHGs created a positive impact on the women members in the area of decision making pattern, economic empowerment, building awareness, and entitlement.

Swain (2007) argued on the basis of secondary data gathered from different results that true women empowerment is only possible when women take part in challenging the existing norms and cultures of the society and effectively try to improve their well-being.

Anjugam and Ramasamy (2007) made an attempt to study the women related microfinance programme in Coimbatore and Ramanathapuram districts of Tamil Nadu with the help of multi-stage purposive and random sampling techniques. It was observed that indebtedness, backwardness, and presence of microcredit programmes in the villages encouraged the participation of women in this programme.

Sarumathi and Mohan (2011) made an attempt to study the three dimensions of microfinance in women's empowerment : economical, psychological, and social dimensions. The study was based on primary as well as secondary data collected from the rural areas of Pondicherry. Primary data was collected from field survey in the study region ; whereas, secondary data was collected from NGOs' reports and other documents. The analysis of the data was done by using percentage method, simple correlation coefficient, cross tabulation, and paired *t*-test. The results showed an increase in all the three indicators of rural women's empowerment.

Bhavanishankar and Singhe (n.d.) tried to evaluate the women's self help groups in India from an angle of their contribution towards gender development. It was observed that the women worked collectively to bring changes in the village and panchayat levels, which showed empowerment. By participating in the democratic processes like community development along with their own work, they contributed significantly to bring a positive transformation in the society structures.

Karimzadeh, Nematnia, and Karimzadeh (2011) tried to link the three aspects, namely micro-finance, self-help groups, and micro-entrepreneurships of women, and made an attempt to review the importance of these three aspects in poverty alleviation and women empowerment in India.

Basu (n.d.) attempted to study the relation between women's tendencies towards safer investment and their desire to raise their bargaining position in the households. Women empowerment was examined with respect to control of savings and income, control over loans, purchasing power, and capacity in the Hooghly district of West Bengal. The study was based on Nash bargaining game theoretical model, where the empirical study was done with 100 SHG members in the Hooghly district of West Bengal in 2006. The empirical findings focused on the policies related to women empowerment and economic growth.

Gaiha and Nandhi (2007), based on a survey conducted in selected villages in Pune district, assessed the importance and benefits of microfinance through self-help groups, where the benefits were in terms of higher income, savings, and consumption. The study also made an attempt to assess the key dimensions of women empowerment in the form of freedom of women in choosing and choice shaping their own lives.

Kurkarni (2011) focused on the promise of microfinance institutions and the challenges they faced for women's empowerment in various aspects like political, cultural, economic, and organizational. The case analyzed the cultural aspect for deeper understanding of the linkages between microfinance institutions and women's empowerment, and suggested solutions and areas of enquiry through policymaking.

Kalpana (2008) focused on the not symmetrical relationship. The study observed that when women's groups sought bank credit, they are subject to institutional imperatives, systemic corruption, and political compulsions that shape the behaviour of rural development.

From the above review, it can be observed that limited studies have been conducted in the context of women empowerment in the state of West Bengal with reference to the savings amount, total loan disbursed amount, and outstanding loan amount.

## Research Objectives

- (1) To understand the types of banks that have contributed maximum for the objective of women empowerment in West Bengal on the basis of savings amount, total loan disbursed amount, and outstanding loan amount.
- (2) To verify whether there is any significant difference in these three amounts between the various types of banks.

## Hypotheses

- ➔ **H0:** There is no significant difference in the means of public sector banks, private sector banks, regional rural banks, and cooperatives to provide maximum micro finance to the women.
- ➔ **H1:** There is a significant difference in the means of public sector banks, private sector banks, regional rural banks, and cooperatives to provide maximum micro finance to the women.

## Research Design

In the present study, MANOVA or multivariate analysis of variance is used to analyze the data. In statistics, MANOVA is a procedure which is used to determine two or more dependent variables, and compare population means of several independent groups. MANOVA is real and most effective when correlation exists between the dependent variables.

### Assumptions:

- (1) There are two or more dependant variables.
- (2) The independent variable should comprise of two or more independent groups.
- (3) There is no relation between the observations of each group or between the groups.
- (4) Sample size should be large.
- (5) There are no univariate or multivariate outliers.
- (6) A linear relationship exists between each pair of dependent variables for each group of the independent variables.
- (7) There is multivariate normality and homogeneity of variance-covariance matrices, as well as there is no multi-collinearity.

## Research Methodology

In the present study, the state West Bengal has been taken as the study area. The study is purely based on the secondary data collected from 'The status of Micro finance in India' : A report published by NABARD. A 5 year span (2009-10 to 2013-14) was considered as the study period.

Four types of institutions have been taken into consideration, namely the public sector banks, the private sector banks, regional rural banks, and the cooperatives. In the previous years, there were less number of banks in West Bengal that participated in the micro finance programmes, but in 2013-14, it was found that many more banks in the public sector and private sector came forward to contribute for the rural development of West Bengal.

Presently, the public sector banks include 22 banks, namely Allahabad Bank, Andhra Bank, Bank of Baroda, Bank of India, Bank of Maharashtra, Canara Bank, Central Bank of India, Corporation Bank, Dena Bank, IDBI Bank, Indian Bank, Indian Overseas Bank, Oriental Bank of Commerce, Punjab National Bank, Punjab and Sind Bank, State Bank of India, State Bank of Travancore, Syndicate Bank, UCO Bank, Union Bank of India, United Bank of India, and Vijaya Bank.

The private sector banks include four banks, namely Federal Bank, HDFC Bank, ICICI Bank, and Karnataka Bank. The regional rural banks include three banks, namely Bangiya Gramin Vikash Bank, Paschim Banga Gramin Bank, and Uttarbanga Kshetriya Gramin Bank. The cooperatives include 18 cooperative banks, namely Balageria District Central Cooperative Bank (DCCB) , Bankura DCCB, Birbhum DCCB, Burdwan DCCB, Darjeeling DCCB, Dk. Dinajpur DCCB, Hooghly DCCB, Howrah DCCB, Jalpaiguri DCCB, Malda DCCB, Mugberia DCCB, Murshidabad DCCB, Nadia DCCB, Purulia DCCB, Raiganj DCCB, Tamluk-Ghatal DCCB, Vidyasagar DCCB, and West Bengal SCB.

In the study, a total of three variables have been considered (a) the savings amount of the SHGs, (b) the total loan amount disbursed through the SHGs, (c) and the outstanding loan amount pending to be disbursed to the SHGs under the four types of banks, namely public sector banks, private sector banks, regional rural banks, and cooperative banks.



**Table 1. Between-Subjects Factors**

Banks	Value Label	N
1	Public Sector Banks	5
2	Private Sector Banks	5
3	Regional Rural Banks	5
4	Cooperative Banks	5

**Table 2. Descriptive Statistics**

	Banks	Mean	Std. Deviation	N
Savings	Public Sector Banks	19734.3960	5936.72936	5
	Private Sector Banks	2.5280	3.17007	5
	Regional Rural Banks	21473.7260	10133.79376	5
	Cooperative Banks	14678.4320	7010.12428	5
	Total	13972.2705	10696.66207	20
Loan Disbursed	Public Sector Banks	16675.0880	2091.31889	5
	Private Sector Banks	1.6000	2.60768	5
	Regional Rural Banks	18454.4100	4134.33699	5
	Cooperative Banks	8722.8760	6600.44107	5
	Total	10963.4935	8365.74102	20
Outstanding Loan	Public Sector Banks	60791.5780	15059.09915	5
	Private Sector Banks	1.8260	2.65081	5
	Regional Rural Banks	68582.5640	26092.43985	5
	Cooperative Banks	14658.7520	7504.69135	5
	Total	36008.6800	33240.32404	20

## Analysis and Results

In the study, the analysis is done on these four types of banks, namely public sector banks, private sector banks, regional rural banks, and cooperative banks of West Bengal, and each bank is given a number, from 1 to 4, where 1-public sector banks, 2-private sector banks, 3-regional rural banks, and 4-cooperative banks, and these values are written under the heading 'Banks' in the variable 1 column. The savings amount of these banks are written under the heading 'Savings' in the variable 2 column, total loan disbursed amount of these banks are written under the heading 'Loan Disbursed' in the variable 3 column, and outstanding loan amount of these banks are written under the heading 'Outstanding Loan' in the variable 4 column. The study is based on secondary data collected from the published trend analysis report of NABARD for six years, 2010-2014, and the data can be seen in the Appendix Table 1. Multivariate test or MANOVA is conducted for these four types of banks to find if there is any significant mean variation between the savings amount, total loan disbursed amount, and outstanding loan amount of these banks. Variable 1 : banks are considered as fixed factor ; variable 2 : savings amount, variable 3 : total loan disbursed amount, and variable 4 : loan outstanding amount are considered as dependant factors for the analysis purpose.

With the help of SPSS V 20, the analysis was conducted. The Table 1 gives an idea of the between subject factors. The Table 2 depicts the descriptive statistics, mean, standard deviation, and so on. The objective is to know whether the study accepts the null hypothesis or the alternate hypothesis. According to the theory, null hypothesis

**Table 3. Box's Test of Equality of Covariance Matrices**

Box's M	210.891
<i>F</i>	7.517
<i>df</i> 1	18
<i>df</i> 2	904.638
Sig.	.000

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + Banks.

**Table 4. Multivariate Tests**

	Effect	Value	<i>F</i>	Hypothesis <i>df</i>	Error <i>df</i>	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.953	95.226 <sup>b</sup>	3.000	14.000	.000	.953
	Wilks' Lambda	.047	95.226 <sup>b</sup>	3.000	14.000	.000	.953
	Hotelling's Trace	20.406	95.226 <sup>b</sup>	3.000	14.000	.000	.953
	Roy's Largest Root	20.406	95.226 <sup>b</sup>	3.000	14.000	.000	.953
Banks	Pillai's Trace	1.352	4.378	9.000	48.000	.000	.451
	Wilks' Lambda	.048	9.420	9.000	34.223	.000	.636
	Hotelling's Trace	11.444	16.106	9.000	38.000	.000	.792
	Roy's Largest Root	10.664	56.876 <sup>c</sup>	3.000	16.000	.000	.914

a) Design: Intercept + Banks

b) Exact statistic

c) The statistic is an upper bound on *F* that yields a lower bound on the significance level.

will be rejected if  $F > p$ , and if  $F < p$ , then the null hypothesis will be accepted and the alternate hypothesis will be rejected.

The Table 1 shows that the study is based on four types of banks, for 5 years, from 2010 to 2014. The Table 2 provides the mean and standard deviation for the three different dependent variables, which have been split by the independent variable. In addition, the Table also provides the means values and standard deviation values for the groups that are split by the dependent variable.

Box's M test of equality of covariance matrices or homogeneity of covariance matrices examines the correlation between the dependent variable which should be equal between the groups. It is seen that the significance is less than .001. The value can be seen from the Table 3.

The Table 4 shows that the "Sig." value is .000, which means  $p < .05$ . This means that the banks' performance is significantly dependent on the number of self-help groups under them. As found, there is a significant difference in the performance of the banks based on the SHGs  $\{F(9, 34) = 10, p < .05; \text{Wilk's } \Lambda = 0.048, \text{partial } \eta^2 = .64\}$ .

The Table 5 shows that the SHGs have a statistically significant effect on savings  $\{F(3, 16) = 10; p < .05; \text{partial } \eta^2 = .66\}$  and total loan disbursed  $\{F(3, 16) = 22; p < .05; \text{partial } \eta^2 = .80\}$  and loan outstanding  $\{F(3, 16) = 24; p < .05; \text{partial } \eta^2 = .82\}$ . It is important to make an alpha correction to account for multiple ANOVAs being run, but in this case, statistical significance at  $p < .001$  is being accepted. In this study, it is found that for the three variables, savings, total loan disbursed, and outstanding loan,  $F > P$ , and it can be said that there is a significant mean variation between the three variable of the four types of banks. Therefore, the null hypothesis is rejected and the alternate hypothesis is accepted.

**Table 5. Tests Between Savings, Total Loan Disbursed, and Outstanding Loan**

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Savings	1425631472.383 <sup>a</sup>	3	475210490.794	10.161	.001	.656
	Loan Disbursed	1069598088.145 <sup>b</sup>	3	356532696.048	21.930	.000	.804
	Outstanding Loan	17137814563.532 <sup>c</sup>	3	5712604854.511	23.706	.000	.816
Intercept	Savings	3904486858.503	1	3904486858.503	83.483	.000	.839
	Loan Disbursed	2403963794.491	1	2403963794.491	147.863	.000	.902
	Outstanding Loan	25932500706.848	1	25932500706.848	107.614	.000	.871
Banks	Savings	1425631472.383	3	475210490.794	10.161	.001	.656
	Loan Disbursed	1069598088.145	3	356532696.048	21.930	.000	.804
	Outstanding Loan	17137814563.532	3	5712604854.511	23.706	.000	.816
Error	Savings	748321535.809	16	46770095.988			
	Loan Disbursed	260128744.672	16	16258046.542			
	Outstanding Loan	3855649133.884	16	240978070.868			
Total	Savings	6078439866.696	20				
	Loan Disbursed	3733690627.309	20				
	Outstanding Loan	46925964404.264	20				
Corrected Total	Savings	2173953008.192	19				
	Loan Disbursed	1329726832.818	19				
	Outstanding Loan	20993463697.416	19				

a. *R* Squared = .656 (Adjusted *R* Squared = .591) , b. *R* Squared = .804 (Adjusted *R* Squared = .768),

c. *R* Squared = .816 (Adjusted *R* Squared = .782)

To follow up these significant ANOVAs with Tukey's HSD post-hoc tests, the multiple comparison table has been formed (Table 6). The Table 6 shows a comparison between the different types of banks with respect to the dependent variable. The Table shows that the mean scores for savings are not statistically significantly different between public sector banks and private sector banks ( $p=.002$ ), public sector banks and regional rural banks ( $p=.977$ ), public sector banks and cooperative banks ( $p=.654$ ), private sector banks and regional rural banks ( $p=.001$ ), private sector banks and cooperative banks ( $p=.018$ ), and regional rural banks and cooperative banks ( $p=.422$ ).

The mean scores of the total loan disbursed are statistically significantly different for public sector banks and private sector banks ( $p < .05$ ) and private sector banks and regional rural banks ( $p < .05$ ), but not between public sector banks and regional rural banks ( $p=.896$ ), public sector banks and cooperative banks ( $p=.030$ ), private sector banks and cooperative banks ( $p=.017$ ), and regional rural banks and cooperative banks ( $p=.007$ ).

The mean scores of loan outstanding are statistically significantly different for public sector banks and private sector banks ( $p < .05$ ), private sector banks and regional rural banks ( $p < .05$ ), and regional rural banks and cooperative banks ( $p < .05$ ), public sector banks and cooperative banks ( $p=.001$ ), but not between public sector banks and regional rural banks ( $p=.856$ ), and private sector banks and cooperative banks ( $p=.464$ ).

## Discussion

In the study, public sector banks, private sector banks, regional rural banks, and cooperative banks have been



**Table 6. Multiple Comparisons of Public Sector Banks, Private Sector Banks, RRBS, and Cooperative Banks**  
**Tukey HSD**

Dependent Variable	(I) Banks	(J) Banks	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Savings	Public Sector Banks	Private Sector Banks	19731.8680*	4325.27900	.002	7357.1590	32106.5770
		Regional Rural Banks	-1739.3300	4325.27900	.977	-14114.0390	10635.3790
		Cooperative Banks	5055.9640	4325.27900	.654	-7318.7450	17430.6730
	Private Sector Banks	Public Sector Banks	-19731.8680*	4325.27900	.002	-32106.5770	-7357.1590
		Regional Rural Banks	-21471.1980*	4325.27900	.001	-33845.9070	-9096.4890
		Cooperative Banks	-14675.9040*	4325.27900	.018	-27050.6130	-2301.1950
	Regional Rural Banks	Public Sector Banks	1739.3300	4325.27900	.977	-10635.3790	14114.0390
		Private Sector Banks	21471.1980*	4325.27900	.001	9096.4890	33845.9070
		Cooperative Banks	6795.2940	4325.27900	.422	-5579.4150	19170.0030
	Cooperative Banks	Public Sector Banks	-5055.9640	4325.27900	.654	-17430.6730	7318.7450
		Private Sector Banks	14675.9040*	4325.27900	.018	2301.1950	27050.6130
		Regional Rural Banks	-6795.2940	4325.27900	.422	-19170.0030	5579.4150
Loan Disbursed	Public Sector Banks	Private Sector Banks	16673.4880*	2550.14090	.000	9377.4843	23969.4917
		Regional Rural Banks	-1779.3220	2550.14090	.896	-9075.3257	5516.6817
		Cooperative Banks	7952.2120*	2550.14090	.030	656.2083	15248.2157
	Private Sector Banks	Public Sector Banks	-16673.4880*	2550.14090	.000	-23969.4917	-9377.4843
		Regional Rural Banks	-18452.8100*	2550.14090	.000	-25748.8137	-11156.8063
		Cooperative Banks	-8721.2760*	2550.14090	.017	-16017.2797	-1425.2723
	Regional Rural Banks	Public Sector Banks	1779.3220	2550.14090	.896	-5516.6817	9075.3257
		Private Sector Banks	18452.8100*	2550.14090	.000	11156.8063	25748.8137
		Cooperative Banks	9731.5340*	2550.14090	.007	2435.5303	17027.5377
	Cooperative Banks	Public Sector Banks	-7952.2120*	2550.14090	.030	-15248.2157	-656.2083
		Private Sector Banks	8721.2760*	2550.14090	.017	1425.2723	16017.2797
		Regional Rural Banks	-9731.5340*	2550.14090	.007	-17027.5377	-2435.5303
Outstanding Public Sector Banks Loan	Public Sector Banks	Private Sector Banks	60789.7520*	9817.90346	.000	32700.5354	88878.9686
		Regional Rural Banks	-7790.9860	9817.90346	.856	-35880.2026	20298.2306
		Cooperative Banks	46132.8260*	9817.90346	.001	18043.6094	74222.0426
	Private Sector Banks	Public Sector Banks	-60789.7520*	9817.90346	.000	-88878.9686	-32700.5354
		Regional Rural Banks	-68580.7380*	9817.90346	.000	-96669.9546	-40491.5214
		Cooperative Banks	-14656.9260	9817.90346	.464	-42746.1426	13432.2906
	Regional Rural Banks	Public Sector Banks	7790.9860	9817.90346	.856	-20298.2306	35880.2026
		Private Sector Banks	68580.7380*	9817.90346	.000	40491.5214	96669.9546
		Cooperative Banks	53923.8120*	9817.90346	.000	25834.5954	82013.0286
	Cooperative Banks	Public Sector Banks	-46132.8260*	9817.90346	.001	-74222.0426	-18043.6094
		Private Sector Banks	14656.9260	9817.90346	.464	-13432.2906	42746.1426
		Regional Rural Banks	-53923.8120*	9817.90346	.000	-82013.0286	-25834.5954

The error term is Mean Square (Error) = 240978070.868.

\*. The mean difference is significant at the .05 level.

considered. The three areas on which the study has been conducted are : savings, total loan disbursed, and loan outstanding. After analyzing the data, it is found that the banks' performance is significantly dependent on the number of self-help groups under them. As found, there is a significant difference in the performance of the banks based on the SHGs { $F(9, 34) = 10, p < .05$ ; Wilk's  $\Lambda = 0.048$ , partial  $\eta^2 = .64$ } (as seen in the Table 4).

The Table 5 shows that the SHGs have a statistically significant effect on savings, total loan disbursed, and loan outstanding. Considering the statistical significance at  $p < .001$ , it is found that  $F > P$  for the three variables : savings, total loan disbursed, and outstanding loan. Therefore, it can be said that there is a significant mean variation between the three variable of the four types of banks. Therefore, the null hypothesis is rejected, and the alternate hypothesis is accepted.

The Table 6 shows a comparison between the different types of banks with respect to the dependent variable. The relation is shown between the savings, total loan disbursed, and loan outstanding of the four banks. The results show that in some cases, it is statistically significant and in some cases, vice versa. The paper ultimately helps to find out the relation of the variables in case of the four banks individually as well as in groups.

The results of the paper direct towards the acceptance of the alternative hypothesis, as there is a significant difference in the means of public sector banks, private sector banks, regional rural banks, and cooperatives in case of providing micro finance and rural credit to the under privileged women of the society. The four types of banks provide credit to the rural masses through the self-help groups ; however, the total requirement of the loans was not being fulfilled by these banks. As a result, it is seen that a huge amount of loans show the outstanding status, though a huge amount has been disbursed. It is expected that in the near future, the amount of loan outstanding will minimize and more requirement will get fulfilled, and for that, an expansion in the bank branch network is needed.

The research is based on the accessibility of micro finance and rural credit by the women of West Bengal. The study is based on 5 year data on how much the WSHGs could save, how much loan was disbursed to them, and how much loan was outstanding by the concerned banks. The ratio of the number of SHGs and loan disbursed should increase so that more and more WSHGs can avail the services of rural credit and microfinance. This paper will help the banks as well the WSHGs to understand the ratio, and meet up the challenges as required.

## Conclusion

Microfinance for women is an important topic of the recent times. It has been observed that among the potential clients, women are found to be the most reliable ones in terms of repayment of loans and their utilization. When a woman takes a loan, the whole household and the family benefits from it. Microfinance can empower women, as it imparts awareness, strength, and confidence to them to fight against poverty. Several SHGs in West Bengal as well as the Government of West Bengal are doing a great job as they are helping the poor women to break the cycle of poverty by giving them access to microfinance services so that they can become self employed and can earn their livelihood. An attempt is made in the present study to analyze the data related to microfinance for women in the state of West Bengal by using a statistical tool, MANOVA. The analysis of the data found out that there is significant mean variation between the three variables of the four types of banks. Therefore, the null hypothesis is rejected, and the alternate hypothesis is accepted.

## Limitations of the Study and Scope for Further Research

The scope of the research is limited to the state of West Bengal for a period of five years : from 2010-2014. The remaining states of the country have been not taken into consideration. Hence, the results cannot be generalized for pan -India. Moreover, the number of years considered for the study can be a limitation, as the results could come to be more accurate if few more years were taken into consideration and the results may also show a new dimension towards the study. The limitations can act as pointers for future research in this direction.

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**Appendix Table 1. Exclusive Woman Self Help Groups in West Bengal**

Particulars / Year	Public Sector Com Banks		Private Sector Comm Banks		RRBs		Cooperative Banks	
	No of SHGs	Amount	No of SHGs	Amount	No of SHGs	Amount	No of SHGs	Amount
<b>2009-10</b>								
Savings	226282	11619.53	0	0	147373	25029.49	149557	12460.99
Loan Disbursed	40134	17627.24	0	0	27588	17068.45	3630	460.94
Loans Outstanding	198299	49576.93	0	0	124190	42015.22	108346	12792.66
<b>2010-11</b>								
Savings	264161	16300.02	0	0	171052	22570.50	120398	23844.23
Loan Disbursed	33314	13962.42	0	0	32067	23975.26	40544	8039.79
Loans Outstanding	198905	59357.39	0	0	145088	44638.51	68569	10172.55
<b>2011-12</b>								
Savings	303687	20741.80	71	2.04	174898	4576.46	123772	7015.09
Loan Disbursed	31035	16921.12	3	6	18772	21046.06	25101	4872.41
Loans Outstanding	164157	69479.80	3	3.32	113408	50735.92	30695	7008.46
<b>2012-13</b>								
Savings	245991	23167.79	8	7.73	181399	31864.84	105405	10103.58
Loan Disbursed	30111	19435.07	1	2	15463	13270.36	41452	13017.20
Loans Outstanding	211362	63493.24	7	5.81	164469	109007.40	71214	16910.83
<b>2013-14</b>								
Savings	214180	26842.84	45	2.87	153014	23327.34	153292	19968.27
Loan Disbursed	21544	15429.59			26697	16911.92	97234	17224.04
Loans Outstanding	181932	79392.70	4		124317	79173.60	95301	26409.26

Source: NABARD