AFFECTING FACTORS LOAN TAKEN FROM SHG IN DISTRICT BIRBHUM

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Contents :

1.Introduction:

Self-Help Group or in-short SHG is now a well-known concept. It is now almost two decade old. It is reported that the SHGs have a role in hastening country's economic development. SHGs have now evolved as a movement. Mainly, members of the SHGs are women. Consequently, participation of women in the country's economic development is increasing. They also play an important role in elevating the economic status of their families. This has led boost to the process of women's empowerment.

SHG is a holistic program of micro-enterprises covering all aspects of self-employment, organization of the rural poor into self Help groups and Loans to Self Help Groups are purpose neutral loan. Banks shall embrace concept of Total Financial Inclusion and meet the entire credit requirements of the SHG members namely a) income generation activities, b) social needs like housing, education, marriage etc and c) debt swapping, their capacity building, planning of activity clusters, infrastructure build up, technology, credit and marketing.

The eligibility criteria for the SHGs to avail loans : SHG should be in active existence at least since the last 6 months as per the books of account of SHGs and not from the date of opening of S/B account.

Self-Help Group refers to self-governed, peer controlled, informal group of people with same socio-economic background and having a desire to collectively perform common purposes. Here poor people voluntarily come together to save whatever amount they can save conveniently out of their earnings, to mutually agree to contribute to a common fund and to lend to the members for meeting their productive and emergent needs.

SHGs have been able to mobilize small savings either on weekly or monthly basis from persons who were not expected to have any savings. They have been able to effectively recycle the resources generated among the members for meeting the emergent credit needs of members of the group.

SHG is a group formed by the community women, which has specific number of members like 15 or 20. In such a group the poorest women would come together for emergency,

disaster, social reasons, economic support to each other have ease of conversation, social interaction and economic interaction.

A SHG is an informal association to enhance the member's financial security as primary focus and other common interest of members such as area development, awareness, motivation, leadership, training and associating in other social inter-mediation programs for the benefit of the entire community.

1.2 Objectives of SHG:

1. To inculcate the savings and banking habits among members.

2. To secure them from financial, technical and moral strengths.

3. To enable availing of loan for productive purposes.

4. To gain economic prosperity through loan/credit.

5. To gain from collective wisdom in organising and managing their own finance and distributing the benefits among themselves.

6. To sensitize women of target area for the need of SHG and its relevance in their empowerment.

7. To create group feeling among women.

8. To enhance the confidence and capabilities of women.

9. To develop collective decision making among women.

10. To encourage habit of saving among women and facilitate the accumulation of their own capital resource base.

11. To motivate women taking up social responsibilities particularly related to women development.

12. It acts as the forum for members to provide space and support to each other.

SHGs are considered as one of the most significant tools to adopt participatory approach for the economic empowerment of women, SHG is a group of people that meets regularly to

discuss issues of interest to them and to look at solutions of commonly experienced problems. The group may or may not be promoted by Government or non-Government institutions.

The SHG is group of rural poor who have volunteered to organize themselves into a group for eradication of poverty of the members. They agree to save regularly and convert their savings into a common fund known as Group Corpus. The members of the group agree to use this common fund and such other funds that they may receive as a group through a common management.

Generally all members of the group should belong to families below the poverty line (BPL). However, if necessary, a maximum of 20% and in exceptional cases, where essentially required, upto a maximum of 30% of the members in a group may be taken from families marginally above the poverty line (APL) living continuously with BPL families and if they are acceptable to the BPL members of the group.

This will help the families of occupation groups like agricultural labourers, marginal farmers, and artisans marginally above the poverty line, or who may have been excluded from the BPL list to become members of the SHG. However, the APL member will not be eligible for the subsidy under the scheme.

The group shall not consist of more than one member from the same family; a person should not be a member of more than one group. The BPL families must actively participate in the management and decision making, which should not ordinarily be entirely in the hands of AIM, families. Further, APL members of the SHG shall not become office bearers (Group Leader, Assistance Group leader or Treasurer) of the group.

The group should devise a code of conduct (Group management norms) to bind itself. This should be in the form of regular meetings (weekly or fortnightly) functioning in a democratic manner allowing free exchange of views, participation by the members in the decision making process. The group should be able to draw up an agenda for each meeting and take up discussions as per the agenda.

The members should build their corpus through regular savings. The group should be able to collect the minimum voluntary saving amount from all the members regularly in the group meetings. Tiu- savings so collected will be the group corpus fund. The Group Corpus Fund

should be used to advance loans to the members. The group should develop financial management norms covering the loan sanction procedure, repayment schedule and interest rates.

The members in the group meetings should take all the loaning decisions through a participatory decision making process. The group should be able to prioritise the loan applications, fix repayment schedules, fix appropriate rate of interest for the loans advanced and closely monitor the repayment of the loan installments from the loan

The group should operate a group account preferably in their service area bank branch, so as to deposit the balance amounts left with the groups after disbursing loans to its members. The group should maintain simple basic records such as minute's book, attendance register, loan ledger, general ledger, cash book, Bank pass book and Individual pass books. 50% of the groups formed in each block should be exclusively for the women.

In the case of disabled persons, the groups formed should ideally be disability-specific wherever possible, however, in case sufficient number of people for formation of disability-specific groups are not available, a group may comprise of persons with diverse disabilities or a group may comprise of both disabled and non-disabled persons below the poverty line.

1.3 Need of Self-Help Group (SHG):

The very existence of SHGs is highly relevant to make the people of below poverty line hopeful and self-reliant. SHGs enable them to Increase their income, improve their standard of living and status in society. It acts as a catalyst for bringing this section of society to the main stream. Ultimately, the nation reaps the advantages of socialism .The Government of India and various state Governments have been implementing various programs for rural upliftment . However, rural poverty and unemployment still persist in the country. This problem is becoming severe and acute. The available latest statistics relating to the Indian Economy indicates that about 26% of the total population in the country belongs to the rural poor.

Considering the gravity and intensity of the problem, many Voluntary Development Organizations (VDOs) have come forward with different programs for the rural poor in the country. These agencies undertake various innovative programs and schemes to address the

issues of poverty and unemployment prevailing in our country. Among the various programs "Swarna Jayanti Grama Swarojgar Yojona" (SGSY) is an important one. This program was launched on 1st April, 1999, at 75: 25 costs sharing between Central and State Governments.

The main objective of this programme is to bring the beneficiaries above the poverty line by providing income generating assets to them through bank credit and government subsidy. The Self-Help Groups (SHPs) are the major component of this scheme. Women are a vital part of the Indian Economy, both at the national and the household levels. They make one-third of the national labour force.

Compared with their menfolk , Indian women contribute a much larger share of their earnings to basic family maintenance with the result that women's earnings positively and immediately affect the incidence and the security of poverty.

Despite all this, social conventions and gender ideology deprive them of the access to, and control over, the resources which would enable them to increase their productivity. Women form the backbone of agricultural operations and majority of agricultural labourers are woman. Seventy to eighty percent of the field work is done by women.

l inequa Most post-harvest and processing tasks are their sole responsibility. They are heavily involved in animal husbandry, particularly small livestock. About 85 percent of persons engaged in dairy production are women. Since independence, government's policy on women's development has taken varying types of emphasis: from the initial welfare oriented approach to the current focus on development and empowerment.

The planning commission, with the aim of converging the benefits in the social and economic development sectors for women in the Ninth plan, envisaged "inclusion of an identifiable women component plan in the programme of the respective ministries right from the planning process, and to monitoring and implementation of programs to ensure the reach of benefits to

women".

The Ninth Plan Document (1997-2000) also laid emphasis on the participation of people in the planning process, and the promotion of self-help groups. Self-Help Group (SHG) is a

homogeneous group of poor, women. This group is a voluntary one formed on areas of common interest so that they can think, organize and operate for their development.

SHGs function on the basis of co-operative principles and provide a forum for members to extent support to each other. It is considered is a means of empowerment. SHGs organize very poor people who do not have access to financial system in the organized sector. In groups, normally transparency and accountability are lacking.

However, in a group like SHG, they are ensured through collective action of the members. This scheme mobilises the poor rural people especially women to form groups for mutual benefits. SHGs play a crucial role in improving the savings and credit and also in reducing poverty and socialities .

2. Objectives

1. Which factors affecting loans taken from SHG in this area ?
We survey the place, "Ramnagar" in district Birbhum which was a tourist area. So theirs earning dependent on tourist center. In covid pandemic situation theirs monthly income has decreased.

2 .Second object of this programme is to bring the beneficiaries the poverty line by providing income generating assets to them through bank credit and government subsidy. The SHG are major component of this scheme.

3. In the area which amount of advantage get the women from SHG is more than bank.

4.Not at all the women stand in their suitable place by the SHG Loan.

3. MOTIVATION

In rural area poor household do   not depend on formal sector for various problem ,they depend on informal sector because they have no collateral and documents, they have no education and there affired of going to be formal institution such as bank. When they easily get loan   from informal sector like as SHG Group. Different of studies point out that in rural area,   the womens who are deprived from formal sector credit like as Samapti Guha Tata Institution of Social Science etc. So SHG had great role for creating women's need credit . So

we search the factor which are affected significantly or insignificantly on SHG Loan. From this survey we easily understood that which subject dependent for variable.

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4. <u>**Literature Review**</u>

There exists large number of research studies and article on loans taken from SHG group. Mele se Duta and Zegeye Paulos (2017) was conducted to asses the contribution of SHGs in income improvement of women members in Damot Gale distric. This study find that household age, education level ,dependency ratio, livestock ownership, access to loan ,attitude towards SHG, training investment and saving amount affected SHG income improvement of the study area significant at 1%,5% and 10%.Factors determining participation of women in microfinance programme in Tamil Nadu have been identified following the multi-stage purposive and random sampling technique and selecting Coimbatore and Ramanathapuram districts for the study.

M. Anjugam and C. Ramasamy (July- December,2007) observed that socially backward, landless and marginal farm households participate more in this programme.

Possession of livestock and consumer goods by the member households has been found to deter the joining of group. The study shows that majority of the households received loans from formal sources for agricultural purpose. However a lower proportion on SHG members availed insurance service due to their low income. Deepak Shah and Sangram Panigrahi (September,2015) examines the determinants of credit delivery from formal and informal sources to women households who belong to below poverty line (BPL) in Ganjam district of Odisha ,apart from analyzing determination of participation of women in self-help groups to avail credit ,and identifying the factor influencing loans borrowed by BPL households. The study shows that majority of the households received loans from formal sources for agricultural purpose. However a lower proportion on SHG members availed insurance service due to their low income. The result of logistic estimates clearly showed that factors such as age, education , number of children of the responds, status as head of the household, sources of income status as head of the household etc. played a crucial role in determining women's participation in SHGs to borrow credit. The purpose of this study was to investigate factors that influence the performance of self-help groups finance by Women by Enterprise Fund in North Imenti Constituency, Meru Country. Kithinji (2017) finding of this study are of great importance to government policy makers, especially when formulating legislation to govern

self-help groups, and when devising strategies to boost women empowerment ,especially economically. In addition , lenders (government, banks NGOs and microfinance organization)will find this study important in helping them understand how help SHGs to critically understand challenges facing them and how to overcome these barriers. Finally , the study is an addition to the corpus of literature on SHGs. Several studies indicate that self-help group programmes often in the form of credit or micro credit schemes and savings have succeeded in changing the lives of women by economically empowering them which is the main objective of women Self Help Groups. Thus the development of the women Self Help Groups is important if this objective is to be achieved. This is evident from the increasing factors that influence the development of women Self Help groups in Kesses constituency, Uasin Gishu County in Kenya.

Tallam Kipygo (2015) also aimed at establishing specifically the influence of funding, education, training and group bylaws on development of women Self help groups.

The study design used was descriptive in nature and aimed at explaining the relationships between variables. The target population was1380 self help group women from 92 WSHGs in Kesses constituency, Uasin Gishu County. The article "Economic self-help group programmes for improving women's empowerment"   , M Vojtkova (September,20219) uses an integrated mixed-methods approach. A meta-analysis on the data from the quantitative studies he shows the average 'typical' effect of SHG programmes on the four empowerment indicators to examine what is generalisable   . Meta-analysis is applied alongside the qualitative evidence to examine context-specific findings. Furthermore, qualitative studies are used to understand the possible causal pathways underlying the observed impact and he find based on the results of randomised controlled trials and high quality quasi-experimental studies, following detailed critical appraisal.26 The figure shows the mean impact of SHGs on each of the outcome variables examined in the systematic review, together with maximum and minimum effects shown by the 95 per cent confidence intervals (CIs). The purpose of this study is to look at India's experience in using the self –Help Group Bank Linkage Programme as a core development strategy aimed to empower women, Nada Amer Abdulhafedh Al-Kubati and Doris Padmini Selvaratnam (8 september,2021 uses a trend analysis of SHG-BLP's progress in India during the last decade (2010–2020) following Tripathi (2014) and Kumra and Sharma (2018) in using averages, percentages, and the annual compound growth rates (CGR) to evidence increase in loans, income and savings, which are measures of economic aspects of sustainable development (SDG1 & SDG10).

Their experience shows that the Self-Help Group Bank Linkage Programme can empower women entreprenerial activities, anhance confidence and trust, provide technical skills and market access, Those are part of sustainable development goals and increase sustainable livelihood .The article "Patterns of loan use for women,s self-help groups in rural Rajstan" Sumeet Sekhon. Miriam Grant (DECEMBER,2021) examine pathways to productive loan use, an indicator which signifies poverty alleviation. Although we did not find significant evidence of poverty alleviation, program participation had a positive impact on respondent households: a) an increase in the capacity of respondents to use loans for second-order consumption with increasing lengths of time in the program, and b) an increase in the amount and frequency of available credit for consumption smoothing and crises . The article "Impact of Bandhan Microfinance on Empowerment of Rural Women in Tinsukia District of Assam" Mayuri Bora and Inameeka Baruah (march,2022) findings that large percentage (71.29%) respondents belonged to medium socioeconomic level. The findings also revealed that there was significant improvement in economic, psychological, personal and socio-cultural empowerment of women after availing loan from Bandhan Microfinance. The article "SHG Models of Microfinance in Loaning Performance of SHGs: A Study on Barpeta District of Assam" The study reveals that, the SHGs under model-III have been obtained more amount and frequent loans than SHGs under model-II in the district during the period of study. The article" An analysis of women's self-help groups' involvement in microfinance program in India" Gaurav Joshi (3 october,2019) has been conducted in Nainital district of Uttarakhand (India) in 2018. Primary data have been gathered from women respondent only on factors relating to the ownership of asset, housing characteristics and other demographic. details. Both SHG and non-SHG women members have been chosen as key informants during the survey. Multi-stage purposive and stratified random sampling has been used for the selection of respondents and SHGs. The logic regression model has been formulated to describe the causes that influence the participation of women in SHGs. Also, an empowerment index has been constructed to measure the effect of SHGs on women empowerment The results show that factors including age, education, family type and distance from the market have a significant impact on the participation of women in SHGs. Also, there is a significant difference in both these values which suggests that the value of the empowerment index gets significantly increased after joining the SHGs. The article "Role of SHGs: A Case Study in Bardhaman District, West Bengal" Suparna Kundu, B.K. Bera and Prattoy Sarkar (june,2013) The study has been conducted based on primary data collected from randomly selected 34 SHGs belonging to purposively selected cluster of 7 villages of Raina block of Bardhaman

district, West Bengal. These SHGs are formed, nurtured and linked with the Cooperative societies of the respective villages. The data pertains to the period 2009-10. The necessary socio-economic information regarding concerned SHG members are collected through specially prepared pre-tested schedule following personal interview method. Basically, percentages and tabular method are employed to fulfil the various objectives of the study. The study reveals that initially most of the members of SHGs were very poor and they had no alternative sources for generating some additional income but after involvement in SHGs they have been able to increase their income as well as savings from their additional economic activities. Again it has been found that the SHGs have become instrumental in empowering the normal housewives in terms of their capacity building and household decision making along with other social and economic activity.

The place "Ramnagar in distric Birbhum " where we visit for survey. My subject is "Loan taken from SHG ". Above the literature review , we did not find any studies on SHG work in district Birbhum. So , I try to fulfil in this area on SHG Loan.

5. <u>Methodology</u>

Research on   dependent variable - SHG Loan and independent variable -family size and female income should be done on the basis of survey, which are undertaken to collect the information. From that survey data, we have to form a descriptive statistics and then analyze the whole matter. In this case the sample area was Birbhum district. A basic interview schedule of 48 questions was prepared and data was collected by surveying the people of this place. So, that's why the study is based on primary data. To continue the research we used different primary data which we have collected from different family of that village. In this paper we have used data on family wise. In this survey, throughout the day I met various people, in Ramnagar village area of Birbhum district and collected data. The participant in the survey consisted of people of different genres, like rickshaw-pullers, farmers, unemployed, educated, uneducated, servicemen, businessmen, house-makers, students, senior citizen etc. From among them, around 30 people co-operated with me and participated in my survey. We use descriptive statistics simply to describe what's going on in our data. To describe the data collected by me, I used pie-chart, column-chart and bar chart. As the data collected by me is Qualitative rather than being quantitative, I put their percentile in pie-chart, histogram and s`tudied various subjects related to them like:

- Loan from SGH

- Family size
- Female income
- Interest rate
- Name of SGH group etc.

Now, in the objective as we have already discussed how member of family and family sixe affects on SHG Loan to study it we will be using a 3- variable model with the help of Classical Linear Regression Model. And the core factors that we will obtain to see that whether they are statistically significant or not we will have to perform the t- test and we will perform f- test to check whether that overall regression is statistically significant or not.

6. RESULT AND ANALYSIS

For this study I had collected individual-level data from each household. The data used in this analysis was collected through a structured interview schedule from District Birbhum of the state of West Bengal . According to the census Birbhum district has a population of 3,502,387 roughly equal to the nation of Lithuania or the US state Connecticut. This gives it a ranking of 84 th in India. The district has a population density of 771 inhabitants per square km. The data was collected through sampling method. Administratively ,distric Birbhum is divided into eight community development blocks .Out of these eight blocks, one blocks viz Illambazar was selected randomly .And Ramnagar village was selected for sampling .

Ramnagar village is located in Illambazar subdivision of Birbhum district in West Bengal ,India .It is situated 9.4 km away from sub-district headquarter Illambazar (tehsildar office) and 338.8 km away from district headquarter suri . As per 2009 states, Illambazar is the gram panchayat of Ramnagar village.
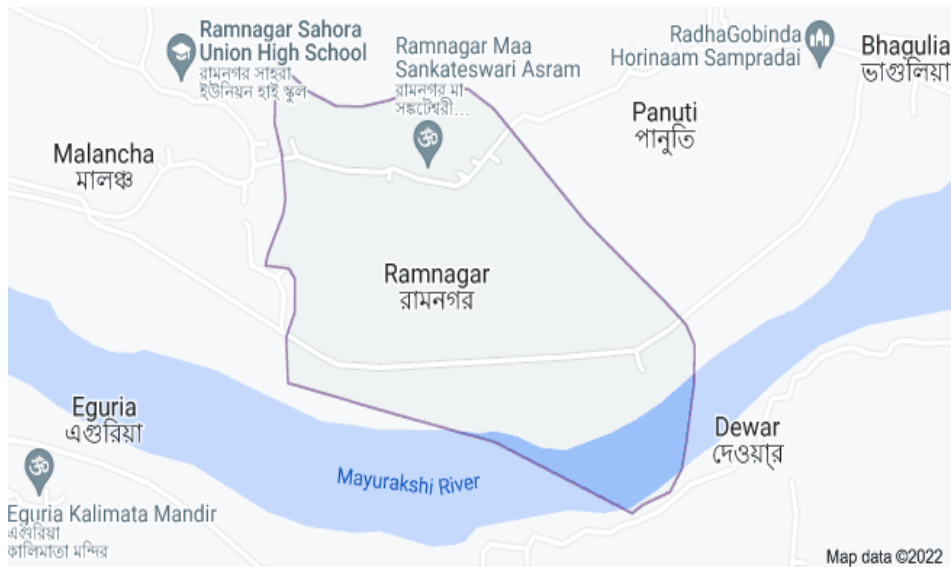
Ramnagar

Area3.87 km²

Population (2020)1133

Population Density402 people per km²

Male Population565

Female Population568

Nearest Railway Station & Distance Bolpur Shantiniketan, 6.74 km

MAP OF RAMNAGAR

To examine the family ,who are join with Self- Help group ,from those family we collected data such as female income ,amount of loan, member of loan etc which data I used my statistical tests. Using the two variable regression analysis, Amount of loan from SHG as the dependent variable and two variable like female income and family size were selected as independent variables. In this study we have analysis comparative regression.

Show the descriptive value statistics of the variable used in the analysis . For this study we have randomly drawn a sample of 30 villagers. As for age of the respondents ,the minimum age found is 22 years and the maximum of age is 60 years. The average age among the respondents is 41 years .The minimum family size is respondents is 2 member and the maximum family size is 6 members .On average ,Female maximum income is 6000 and the minimum female income is 0 ,the family of respondents is about 4 members. The respondents are also asked on the approximate yearly income that they received after joining SHG program.

Our regression model is specified as :

$$Y = \alpha + X1.\beta1 + X2.\beta2 + \varepsilon$$

Where Y is our dependent variable which represents SHG Loan . X1 and X2 are our explanatory/dependent variables which represents family size and female income. $\beta1$ and $\beta2$ are our regression coefficients.

Descriptive Statistics of Different Types of Loan taken during survey-

SHG LOAN		FAMILY SIZE		FEMALE INOME	
Mean	54827.58621	Mean	4.241379	Mean	2051.724
Standard Error	4372.458858	Standard Error	0.196366	Standard Error	334.1639
Median	50000	Median	4	Median	2000
Mode	80000	Mode	4	Mode	0
Standard Deviation	23546.41156	Standard Deviation	1.057462	Standard Deviation	1799.528
Sample Variance	554433497.5	Sample Variance	1.118227	Sample Variance	3238300
Kurtosis	-1.11602022	Kurtosis	-0.29533	Kurtosis	-0.39733
Skewness	0.181897555	Skewness	0.256897	Skewness	0.487452
Range	80000	Range	4	Range	6000
Minimum	20000	Minimum	2	Minimum	0
Maximum	100000	Maximum	6	Maximum	6000
Sum	1590000	Sum	123	Sum	59500
Count	29	Count	29	Count	29

The above table represents the Mean, Median, Mode, Standard Error, Standard Deviation, Sample variance, Kurtosis, Skewness, Range, Minimum, Maximum, Sum, and Count of the variables taken.

The mean of the data represents an average of the of the given collection of the data . the Mean of total Number of family size(X1) is 4.241379. The Mean of total Number of Female Income (X2) Is 2051.724. The total Gross of SHG loan (Y) is 54827.58621.

Median is the middle value of the given list of data ,From the above table , we can see that the Median of total Gross of SHG loan (Y) is 54827.58621 . The Median of Number of family size(X1) is 4.241379. The Median an of total Number of Female Income (X2) Is 2051.724. Therefore, we find that among 30, half the values are less than or equal to the median value and rest half of the values are greater than or equal to Median value.

The Mode refers to the most frequent, repeated, or common number in the data. The mode of SHG loan (Y) is 8000. The mode of family size (X1) Is 4. The mode of Female income is (X2) Is 0 respectively. So ,here we can not see any mode value 0f X2.

From the above table we can see that also get the standard deviation of the data set .A standard deviation is a statistic that measure the dispersion of a dta set relative to its means .From the given data set we see that the standard deviation of SHG Loan (Y) Is 23546.41156.Similarly we can also get the standard deviation of family size (X1) Is 1.057462 and female income (X2) is 1799.528.

Variance which tells us about the degree of spread of the data in a sample .In our data sample variance of SHG Loan (Y) Is 554433497.5.The sample variance is family size (X1) Is 1.057462 and female size (X2) Is 1799.528 respectively.

We also get kurtosis of the data from the above table. The Kurtosis of total SHG Loan (Y) is -1.11602022.The kurtosis of family size (X1) Is -0.29533 and female income (X2) is -0.39733.Here we notice that the two independent variable X1 and X2 have negative value and

the dependent variable Y Is also negative .So, they refers that the distribution are peaked and has thick tails.

Skewness measure the lack of symmetry in data distribution , In the above table we can see that the skewness of SHG Loan (Y) is 0.181897555. The skewness of independent variable family size (X1) and female income (X2) are 0.256897, 0.487452 respectively .Here we can see that the positive skewness which means that the right-side tail of the frequency curve is longer .

The above table also shows the range of SHG Loan (Y),Family size (X1),Female income (X2) .

Range is the difference between the two extremes, viz the largest and the smallest value .The

range of Y is 8000 and the X1 and X2 are 4 ,6000 respectively.

Figure -1 Total number of loan taken from SHG

SHG LOAN RANGE
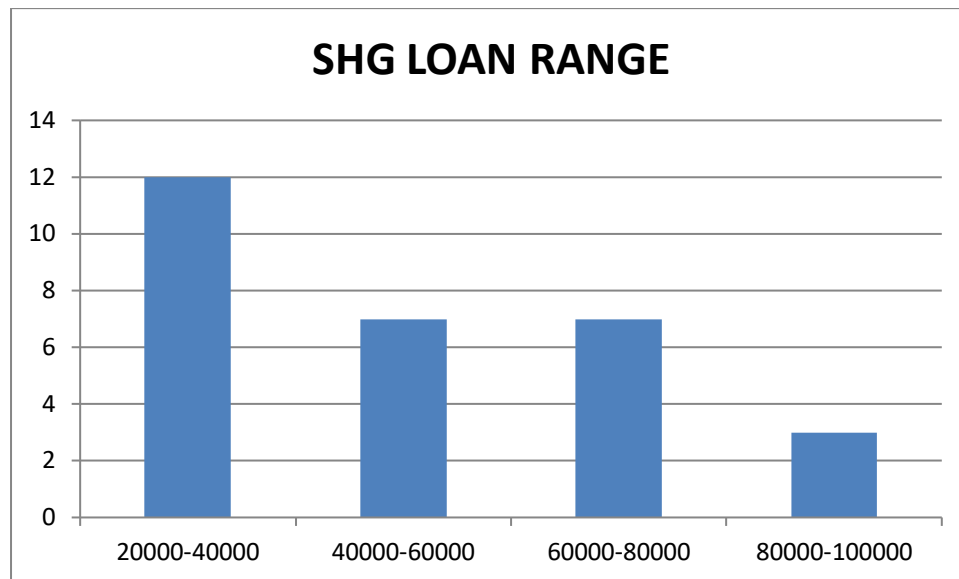
In figure -1 we represent total amount loan taken loan from Self-Help group (SHG) in rural area for different purpose. In our survey we see that the maximum loan is 100000 and the minimum loan is 20000 .The highest number of people taken loan in Rs.20000-40000 and the lowest number of loan in Rs.80000-100000.In our suvey we see 30   observation. Among this observation 12 people have in Rs. 20000-40000 ,7

people have in Rs.40000-60000,other 7 people have in Rs. 60000-80000 and 3 people have in Rs. 80000-100000 respectively.
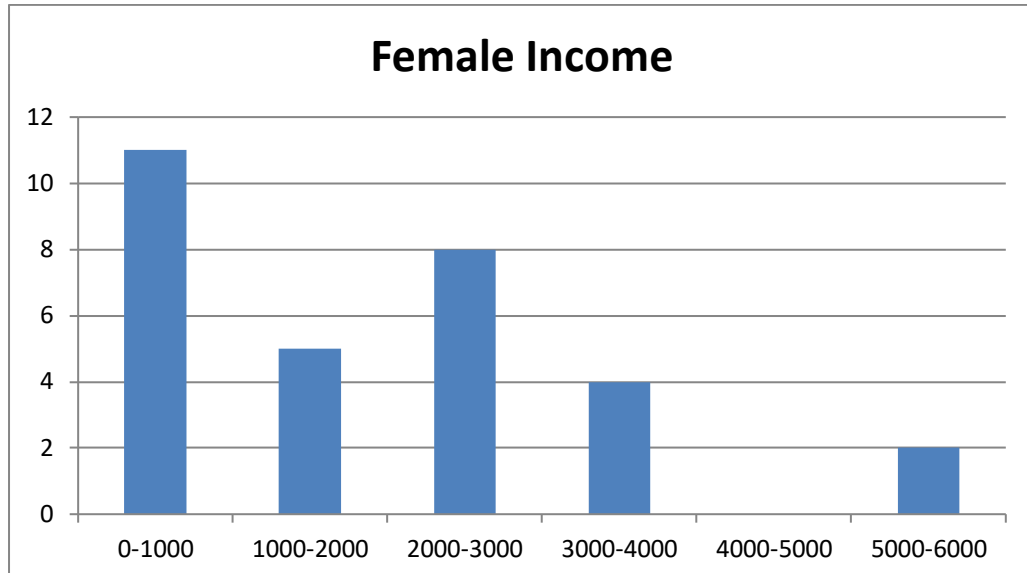
Figure -2
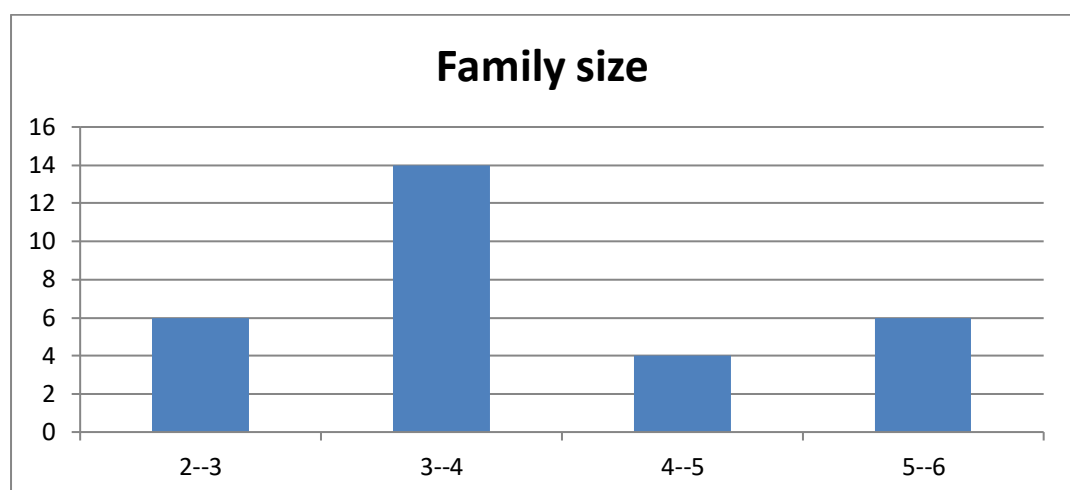
Family size

In figure -2 represent the family size of this family,who are related with SHG group.The highest family member in one family is 6 and the smallest family

member in family is 2.In our survey we observe that most family have 3-4 members.

Figure -3

In figure -3 represent that the income of female person in a family of rural area.In our suvey the highest female income is 6000 and more family have no income from female .The biggest number of family have no earn from female member yet she taken loan from SHG. Visiting 30 family ,We can observe that 11 family have earn from female Rs.0-1000 per month.5 family earn from Female Rs.1000-2000.8,4 family earn from female Rs. 2000-3000,3000-4000 respectivly. Very smallest number of family earn from female 5000-6000.
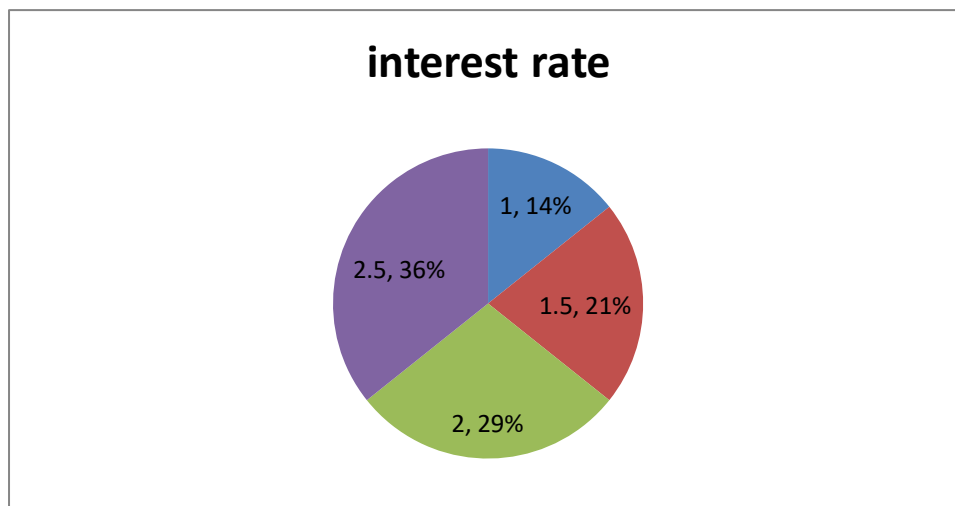
Figure -4
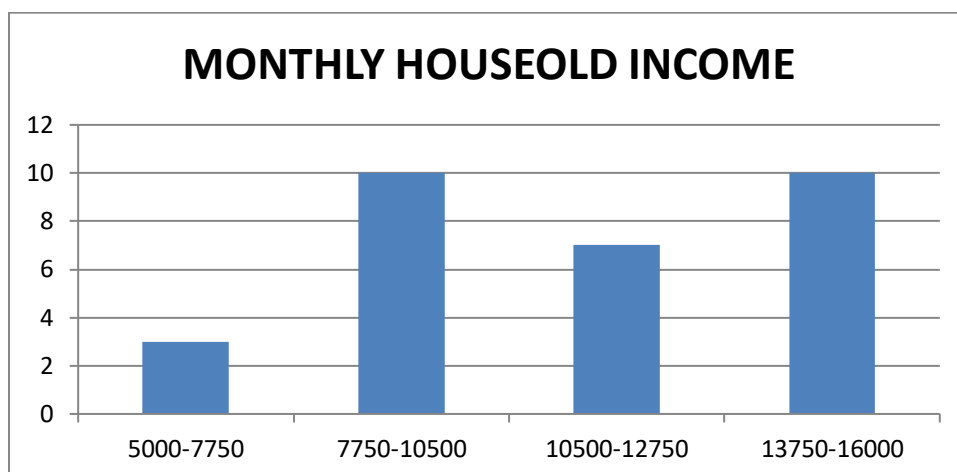
In figure -4 we represent that the monthly family income of household .after visiting survey areas we see that 10 families monthly income in Rs.13750 – 16000,other 10 families monthly income in Rs.7750-10500.7 families monthly income in 10500-12750 and small number of families monthly income in 5000-7750.

Figure -5
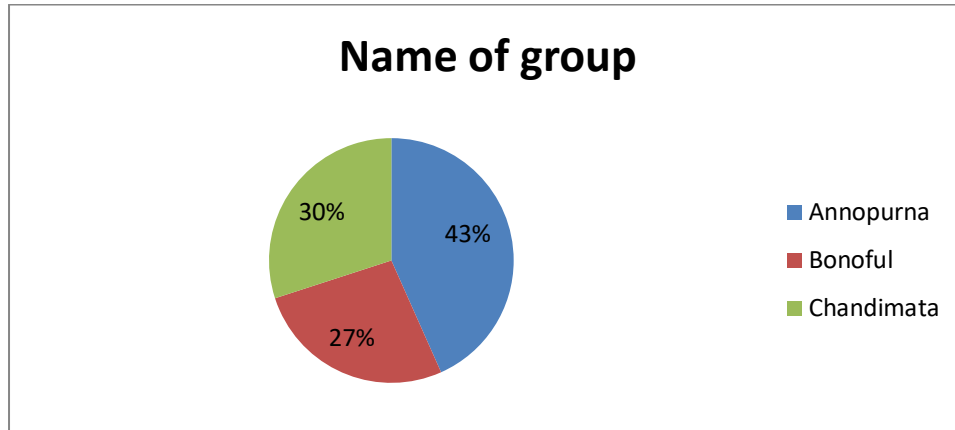
In figure 5 , many female can related with SHG group in rural area. In our survey we get 3 groups which are Annapurna , Bonoful , Chandimata. The biggest percentage of member join with Annapurna SHG .The smallest percentage of member join with Bonoful.

Figure – 6

□

In our survey -

1% interest rate – 10 member paid

1.5% interest rate – 7 member paid

2% interest rate- 6 member paid

2.5% interest rate – 7member paid

In figure -6 we represent that interest rate of loan which taken from SHG group. our survey 10 members repay her loan by 1% interest .7 member ,6 members, other 7 members repay her loan by 1.5%,2%,2.5% respectively. Large number of people repay by 1% interest and small number of member repay by 2% interest.

Figure -7
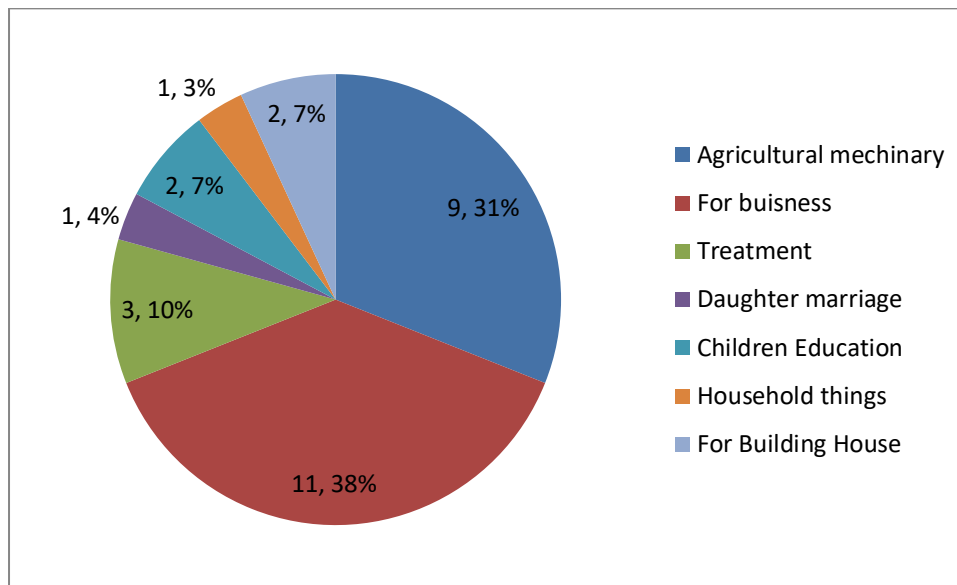
 In figure -7 we represent that purpose of loan from SHG group. We see that coverage for knowing purpose of the loan ,For business is the highest(38%) purpose of loan and for buying household things is the smallest (3%)purpose of loan. Except these

purpose we know other purpose from rural area i.e for buying Agriculture mechinary

(31%),Treatment (10%),for make building (7%),children education (7%),Daughter marriage (4%).

Result of Regression –

Regression	Statistics
Multiple R	0.426
R Square	0.181
Adjusted R Square	0.121
Standard Error	21705.85
Observation	30

ANOVA

	df	SS	MS	F	Significance F
Regression	2	2.83 εi +09	1.41 εi +09	2.998854	0.0666622
Residual	27	1.27 εi +10	4.71 εi +08		
Total	29	1.55E+10			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	13700.81392	17233.556	0.795008	0.433542	-21659.5	49061.15	-21659.5	49061.14904
family size	8569.059751	3710.8477	2.309192	0.02882	955.0292	16183.09	955.0292	16183.09031
female income	2.076754194	2.2327993	0.9301123	0.360555	-2.50457	6.65808	-2.50457	6.658079867

From the above relationship we can say that there is proportional relation between dependent variable and independent variable. The relations are statistically significant .In determining the interrelation ,the study fits a multiple linear regression model where the SHG loan is dependent variable and regressed on Family size and female income are the explanatory variables .The model specification is as follows :

The model specification is as follows:

$Y_i = \alpha + \beta_1 X_{1i} + \beta_{2i} X_{2i} + \varepsilon_i$ ---------(1)

Where,

I = 1,2,3,-,-,-,n

Y_i = SHG Loan

X_1 = family size

X_2 = female inome`

ε_i = disturbance term,

α = intercept term

β_1 and β_2 = slope coefficients

Estimating the equation (i) by OLS estimator we get –

$\hat{Y} = \alpha + \hat{\beta}_1 X_{1i} + \hat{\beta}_2 X_{2i}$ ....(ii)

$\hat{\alpha}$, $\hat{\beta}_1$ and $\hat{\beta}_2$ are the numeric estimate of α, $\hat{\beta}_1$ and $\hat{\beta}_2$ respectively.

$\hat{Y}_i$ gives the numeric estimate of Y_i for different values of X_i.

And obtain the estimate of residual $e_i = \varepsilon_i$

$e_i = Y_i - \hat{Y}_i = Y_i - \hat{\alpha} - \hat{\beta}_1 X_{1i} - \hat{\beta} X_{2i}$ ....(iii)

In the above table the goodness of fit (R^2) =0.181761, it means the regression out of 100% variation 18% variation can explain by the two explanatory variable X_1 and X_2. And adjusted R-Square = 0.121151is also implies that out of 100% variation 12% variation is explained by the explanatory variables. Here R-Square is greater than Adjusted R-Square, implies that as the number of explanatory variable increases, the Adjusted R-Square increase less than R-Square.

The standard error here refers to the estimated standard deviation of the error

term (ε)= 21705.85

Estimated values are:

$\bar{Y}$= 55000

$\bar{X}1i$= 4.3

$\bar{X}2i$= 1983.33

Estimated value of slope coefficients:

$\hat{\alpha}$ = 13700.8

$\hat{\beta}1$ = 8569.06

$\hat{\beta}2$ = 2.076754

Hypothesis Testing:

For testing the significance of $\hat{\beta}1$ and $\hat{\beta}2$ we have to test the validity of the null hypothesis (H N) that the value of $\hat{\beta}1$ and $\hat{\beta}2$ is equals t zero against the alternative hypothesis (H A) is not equal to 0. We set our hypothesis as:

H N : $\hat{\beta}1 = 0$

H A : $\hat{\beta}1 \neq 0$

Now we have to compute the t-value which is denoted by t*. The formula for computing t* is

$|t*| = \lambda/2 \ / \ SE(\hat{\beta}1) = (8569.06) \ / \ (3710.84) = 2.309$ where SE($\hat{\beta}1$) is the Standard Error of $\hat{\beta}1$

Estimated value of |t*| is 2.309. Now we have to compare the value of |t*| with the critical value of t from the t-table for the significance of $\lambda/2$ and degrees if freedom n-k-1. Here n is the number of observation i.e., 30.

At 10% level of significance $\lambda/2$, (n-3) is 1.703

We see that |t*| < t $\lambda/2$, (n-3), i.e., absolute value of computed t is greater than the value of critical-t at 10% level of significance $\lambda/2$ and degrees of freedom i.e., 27. So H N is accepted and we can conclude that $\hat{\beta}1$ is statistically significant at 10% level of significance.

H N : β̂2 = 0

H A : β̂2 ≠ 0

Now we have to compute t value which is denoted by t*. The formula for computing t* is

$$|t^*| = β̂2 / SE(β̂2) = (2.076) / (2.232) = 0.930$$

Where SE(β̂2) is Standard Error of β̂2.

Estimated value of |t*| is 0.930 . Now we have to compare the value of |t*| with the critical value of t from the t-table for the significance of $λ/2$ and degrees if freedom n-k-1. Here n is the number of

observation i.e., 30.

At 10% level of significance $λ/2$, (n-3) is 1.703

We see that |t*| < t $λ/2$, (n-3), i.e., absolute value of computed t is less than the value of critical-t at 10% level of significance $λ/2$ and degrees of freedom i.e., 27. So H N is rejected and we can conclude that β̂ and alternative hypothesis is accepted, and slope coefficient is statistically insignificant.

F-TEST:

FOR examining the overall significance of the estimated multiple regression

model, we may apply the analysis of variance

(ANOVA) technique. H 0: $β_1 = β_2 = 0$

H 1 : At least one of $β_1$ and $β_2$ does not equal zero.

In the ANOVA table we get F* = 0.4263

The table value of F 2(2,27) =2.511 at 10% significance

The table value of F 2(2,27) =5.49 at 1 % significance.

The table value of F 2(2,27) =3.35 at 5 % significance.

Now, we see that F*> F 2(2,27).Hence the null hypothesis is accepted and there is over all significant of the estimated regression model.

From the above relationship we can say that there is proportional relation between dependent variable and independent variable. The relations are statistically insignificant.

Policy suggestion

Since our sample size is small for this reason the variable - female income is not significance. When family size increase, taken from SHG Loan also increase. Here of take of loan should be take different of policy suggestion.

Those family have many members theirs tendency to take loan from SHG. From here we easily understood that the burden of the world is on women. Then she wants to take a loan under the pressure of the world. Just at that moment we can also see that several women are self – dependent by working in sevarel sector or depend on home-craft industry. Therefore ,the extent participation of female workers in different industry activities needs to be explored. The following suggestion can be useful:

- Arrangement of training special program on cottage industry.

- Focusing on women's higher education.

- Encouraged by the government their needs to help with different types of allowance .

- Women need job opportunities in different sectors.etc

- More awareness programs should be created at different levels especially in rural and regionally backward areas regarding the basic formal and informal sectors and their benefits.

- The central government introduced for women "Mudra loan for women" "Annapurna Scheme", "Mahila Udyam Nidhi Yojana" "Bhartiya Mahila Bank Business Loan" etc of every citizen in India. The proper utilization of government schemes will help them.

Conclusion

After studying all the findings and results of our research, the study was conducted to assess the contribution of SHG in income improvement of women members in Ramnagar .Data for the study was collected from 30 rural SHG members . we can conclude that the majority of the people in the survey area keep of their female income and family members. But without any urgent need, they don't use banks and formal sector for various problem .So, they easily want to loan from informal sector like as SHG.

While doing the survey we can see that most of the female depend on SHG .Most of the female responders don't know how to transact money in banks . In general, females are more financially illiterate than their male counterparts.

Those family have more family members, obviously the pressure of the world is on female member of the family. Then she wants to take a loan under the pressure of the world. Just at that moment we can also see that several women are self – dependent by working in sevarel sector or depend on home-craft industry.

Borrowing is not a good thing for a family, due to this the consumption of the family decreases. However , they are forced to take a loan.

We take in two variable in our research which are female income and family size .At the conclusion we easily understood that the variable –female income is not significance .Because more family have female income but it's very low for consumption. When the pressure of the world is on female member of the family . Then she wants to take a loan under the pressure of the world. The second variable – family size which is lightly affected on our research .

To attain the stated objectives of the study we have use different methods of data analysis i.e descriptive analysis and econometric analysis used to identify the effect on independent variable on dependent variable .With descriptive analysis percentage, graphs, charts and tables were presented.

From our research , it is clear that we did not get our research is fulfilled from this place.

BIBLIOGRAPHY

Anjugam, M and T, Alagumani, (2001) Impact of microfinance through self-help groups – A case study, Indian Journal of Agricultural Economics, 56 (3): 458.

Anjugam1 . M and. Ramasamy. C, (2007)Determinants of Women's Participation in Self-Help Group (SHG)-Led Microfinance Programme in Tamil Nadu –A case study ,a gricultural Economics Research Review Vol. 20 July-December 2007 pp 283-298.

Factors Affecting Income Improvement of Women Self Help
Group Members: The Case of Damot Gale Woreda, Wolaita Zone,
Ethiopia
Data .M, Paulos .Z (2017) Factors Affecting Income Improvement of Women Self Help Group Members: The Case of Damot Gale Woreda, Wolaita Zone, Ethiopia-A case study ,Journal of Economics and Sustainable Development ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.8, No.15,2017.

Shah. D and Panigrahi .S (2015) Determinants of Participation of Women in Self-Help Groups (SHGs) and Credit Delivery from Formal and Informal Sources to BPL Households in Odisha- A Case Study , September 2015 ,Indian Journal of Agricultural Economics 70(3):405-416.

Aleem. I 1990 Imperfect information, screening, and the costs of informal lending: a study of a rural credit market in Pakistan, World Bank Econ. Rev., 4 (3) (1990), pp. 329-349

Ali. Z and Ahmed .M (2014) Public sector microfinance and rural wellbeing: evidence from BRDB Bangladesh Dev. Stud., 37 (3) (2014), pp. 27-49

Angelucci . M, Dean. K and Zinman . J (2015) Microcredit impacts: evidence from a randomized microcredit program placement experiment by *Compartamos Banco* Am. Econ. J. Appl. Econ., 7 (1) (2015), pp. 151-182

Attanasio. O, Augsburg.B and De Haas.R , Emilia Fitzsimons, Heike Harmgart (2015) The impacts of microfinance: evidence from joint-liability lending in Mongolia Am. Econ. J. Appl. Econ., 7 (1) (2015), pp. 90-122 Baland et al., 2020

Marie Baland .J , Demont .T, Somanathan.R(2014) Child education and labor decisions of long-run microfinance participants in rural India Econ. Dev. Cult. Change (2020)

Banerjee.A and Duflo. E (2010)Giving credit where it is due J. Econ. Prospect., 24 (3) (2010), pp. 61-80

Banerjee.A, Duflo.E, Glennerster.R, Kinnan.C (2015)The miracle of microfinance? Evidence from a randomized evaluation Am. Econ. J. Appl. Econ., 7 (1) (2015), pp. 22-53

Berg . C, Shahe Emran. M, Shilpi .S (2015)Microfinance and Moneylenders: Long-Run Effects of MFIs on Informal Credit Market in Bangladesh.

Beasley .T (1994)How do market failures justify interventions in rural credit markets World Bank Res. Obs., 9 (1) (1994), pp. 27-47.

Bose .P (1994)Formal–informal sector interaction in rural credit markets J. Dev.Econ., 56 (2) (1998), pp. 265-280.

Botsch . M, Malmendier. U (2017)Inflation Experiences and Contract Choice – Evidence from Residential Mortgages(2017).

Breza .E, Kinnan . C(2018)Measuring the Equilibrium Impacts of Credit: Evidence from the Indian Microfinance Crisis, National Bureau of Economic Research Working Paper No. 24329 (2018).

Brishti .G, Roy Chowdhury .P(2013)Micro-finance competition: motivated micro-lenders, double-dipping and default J. Dev. Econ., 105 (2013), pp. 86-102.

Clarke.D, P. Romano.J, Michael Wolf (2019)The Romano-Wolf Multiple Hypothesis Correction in Strata IZA DP No. 12845(2019).

Crépon.B, Devoto.F, Duflo.E, Parienté.W(2015) Estimating the impact of microcredit on those who take it up: evidence from a randomized experiment in Morocco Am. Econ. J. Appl. Econ., 7 (1) (2015), pp. 123-150.

Datta.U (2015) Socio-economic effects of Jeevika: a large-scale self-help group project in Bihar, India World Dev., 68 (2015), pp. 1-18.

Deininger.K, Liu.Y (2013)Economic and social impacts of an innovative self-help group model in India World Dev., 43 (2013), pp. 149-163.

Demont(2016)Microfinance spillovers: a model of competition in informal credit markets with an application to Indian villages Eur. Econ. Rev., 89 (2016), pp. 21-41

Desai .R, Joshi.S Collective action and community development: evidence from self-help groups in rural India World Bank Econ. Rev., 28 (3) (2014).

Filmer.D, Lant H. Pritchett Estimating wealth effects without expenditure data - or tears: an application to educational enrollment in states of India

Frison.L, Stuart J. P(1990) Repeated measures in clinical trials: analysis using mean summary statistics and its implications for design Stat. Med., II (1992), pp. 1685-1704

Galab.S, N. Rao.C(1270) Women's self-help groups, poverty alleviation and empowerment Econ. Polit. Wkly., 38 (12/13) (2003), pp. 1274-1283.

Ghatak .M (1990) Group lending, local information and peer selection J. Dev. Econ., 60 (1) (1999), pp. 27-50

Hoff, Stieglitz .J (1990)Introduction: imperfect information and rural credit markets: puzzles and policy perspectives World Bank Econ. Rev., 4 (3) (1990), pp. 235-250.