



Research Paper

## Role of Joint Liability Group on Sustainable Livelihood With Special Reference to Jlg Members in Western Odisha

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### ABSTRACT

Microcredit and JLG has emerged as an important tool to ensure sustainable livelihood. In the past few decades it has helped out remarkably in reducing the poverty. Microfinance is not only about giving micro credit to the poor rather it is an economic and social development tool whose objective is to help poor to work their way out of poverty. This paper makes an humble attempt to assess the extent to which the Joint liability Group helps their members in enhancing their socio-economic standing. The study was conducted in Western Odisha. The sampling technique used for the purpose is multistage sampling. In the first stage, Deliberate sampling is used and three districts (Bargarh, Bolangir, Sonepur) were selected. In the second stage, Quota sampling is used in which Bargarh and Barpali in Bargarh District, Bolangir and Loisinga in Bolangir district and Sonepur and Binika in Sonepur District were selected as the concentration of JLG members is higher in these areas. In the third stage simple random sampling is used. 232 respondents were selected. The study is based on primary data which were collected through personal interview and questionnaire method in the selected area. Paired t-test is used to find out whether joining JLG has a significant impact on the sustainable livelihood of its members.

**KEY WORDS:** Income, Social status, Saving & Investment, sustainability

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### I. INTRODUCTION

As per the latest update done by the World Bank, India is home to almost one third of the world's poor. Among lot of poverty alleviation programs taken up by central government and state government in India, microfinance plays an important role. In the past few decades it has helped out remarkably in reducing the poverty. Analysis show that people who have taken microfinance have been able to increase their income and hence to improve their standard of living. Microfinance is not only about giving micro credit to the poor rather it is an economic and social development tool whose objective is to help poor to work their way out of poverty. It covers a wide range of services like credit, insurance, savings remittance and also non-financial services like training, counselling educating etc. Microfinance institutions serve as a supplement to banks and in some sense a better one too. The main two forms of group-based credit are - Self-Help Group (SHG) & Joint Liability Group (JLG). NABARD (National Bank for Agriculture and Rural Development) had introduced the concept of Joint Liability Group (JLG) in 2006-07 as an informal group comprising 4 to 10 individuals coming together for the purpose of availing bank loan either individually or collectively through the group mechanism against mutual guarantee. JLGs can be formed primarily consisting of lessee farmers and small farmers. In other words they are the cultivators without the ownership of land. The JLG members offer a joint undertaking to the Bank that makes them eligible for loan. The management of the JLG is simple with little or no financial administration. JLG members are expected to support themselves mutually in carrying out occupational and social activities. Members should be of similar socio economic status, background and environment carrying out farming and allied activities agreeing to form a JLG so that the group would be homogeneous and organised and to develop mutual trust and respect. Joint Liability Group (JLG) was introduced with the objective of providing loans to small and poor farmers who could not collateral securities. Primarily as JLG is intended to be a credit group, savings by the members is voluntary and the members have to be motivated to save. The overall improvement of economic conditions of the group members is the major advantage of Joint Liability Group. This paper makes an humble

attempt to assess the extent to which the Joint liability Group helps their members in enhancing their socio-economic standing.

## **II. REVIEW OF LITERATURE**

The microfinance industry in India witnessed unprecedented growth over the last couple of decades; from just a few players offering SHG and JLG loans to a matured market, the industry has come a long way. The model had its genesis as a poverty alleviation tool, focused on economic and social upliftment of the marginalised sections through lending of small amounts of money without any collateral for income-generating activities. (Jagriti Bhattacharyya) A recent report by MFIN, showed that the MFI loan portfolio had reached Rs 2.31 lakh crore at the end of FY2020, touching the lives of 5.89 crore customers.

Social capital plays a crucial role in functioning of the joint liability group and microcredit has emerged as an important tool to ensure sustainable livelihood. Studies found that there are much contributions of microcredit towards the sustainable livelihood of the poor borrowers (Bhuiyan, Siwar, Ismail, & Islam, 2012). With accumulation of funds, groups are expected to achieve means for sustainable livelihood, which leads to fulfillment of basic needs of life for longer period of time. Joint liability lending schemes had a positive impact on the repayment performance of borrowers. The expected success was basically attributed to the non-traditional characteristics of the collateral, specifically social collateral used in the sense that social collateral of borrower takes the place of traditionally accepted forms of physical collateral, joint liability lending relied upon social capital of the group (Besley and Coats, 1995). The joint liability mechanism was better than individual borrowing in terms of increasing the social welfare among the poor borrower, charging lower interest rates and generating high repayment rates (Abdul Karim, 2009). Nair (2001) studied the increasing tendency to use the term microfinance as a sure shot tool for poverty alleviation. But at this point of time, microfinance only referred to formalised institutions thus leaving aside a large informal section (individuals and informal associations). The formal financial institutions (commercial banks, cooperatives and the Regional Rural Banks (RRBs)) also ventured into microfinance in a massive way by adopting the Self-Help Group (SHG)-Bank Linkage Program model (Bansal, 2003). Chatterjee (2009) observed that poverty and hunger arise not because there are no goods or food, but because billions of people lack income to purchase them. Availability of financial services can bring in the desired change and development (Fisher and Sriram, 2002). Road Map for prosperity of Assam (2005) suggests that JLGs were to address that midsegment of rural population through effective credit products. Ghatak (2000) demonstrated advantage of group lending with joint liability. So in the quest of growth, profitability and at last sustainability it is very essential to take up a study which evaluates the social objective of MFIs—to bring in improvement in the lives of the marginalised sections of the society

### **NEED OF THE STUDY**

There have been several positive changes that has taken place across the length and breadth of the country since the inception of Joint Liability Group. Joint Liability Group has enhanced the living circumstances of the people in terms of sustainability. Yet there have been challenges in certain areas in Odisha weakening the functions and objectives of the programme. This paper focuses on the role of JLGs' on social development of its members in Western District of Odisha.

### **OBJECTIVES OF THE STUDY**

1. To find out the factors responsible for sustainable livelihood
2. To study the impact of JLG on social development of its members with respect to different indicators.

### **HYPOTHESES OF THE STUDY**

**H<sub>01</sub>**: There is no difference in the amount of money spent on food items before joining JLG and after joining JLG

**H<sub>a1</sub>**: There is significant difference in the amount of money spent on food items before joining JLG and after joining JLG

**H<sub>02</sub>**: There is no difference in the amount of money spent on clothing before joining JLG and after joining JLG

**H<sub>a2</sub>**: There is significant difference in the amount of money spent on clothing before joining JLG and after joining JLG

**H<sub>03</sub>**: There is no difference in the amount of money spent on child education before joining JLG and after joining JLG

**H<sub>a3</sub>**: There is significant difference in the amount of money spent on child education before joining JLG and after joining JLG

### III. METHODOLOGY

The study was conducted in Western Odisha. The sampling technique used for the purpose is multistage sampling. In the first stage, Deliberate sampling is used and three districts(Bargarh, Bolangir, Sonepur) were selected . In the second stage , Quota sampling is used in which Bargarh and Barpali in Bargarh District, Bolangir and Loisinga in Bolangir district and Sonepur and Binika in Sonepur District were selected as the concentration of JLG members is higher in these areas. In the third stage simple random sampling is used. 232 respondents were selected.The study is based on primary data which were collected through personal interview and questionnaire method in the selected area. Paired t-test is used to find out whether joining JLG has a significant impact on the sustainable livelihood of it's members.

### IV. DATA ANALYSIS AND FINDINGS

After collecting relevant data, these are classified and tabulated and analyzed by paired t-test.For the purpose all the assumptions of t-test.i.e

- Dependent variable should be continuous (i.e., interval or ratio level) and the paired measurements must be recorded in two separate variables.
- The subjects in each sample, or group should be the same. This means that the subjects in the first group are also in the second group.
- Normal distribution (approximately) of the difference between the paired values
- No outliers in the difference between the two related groups ;are verified.The working hypotheses are then tested .

Analysis-1

#### Case Processing Summary

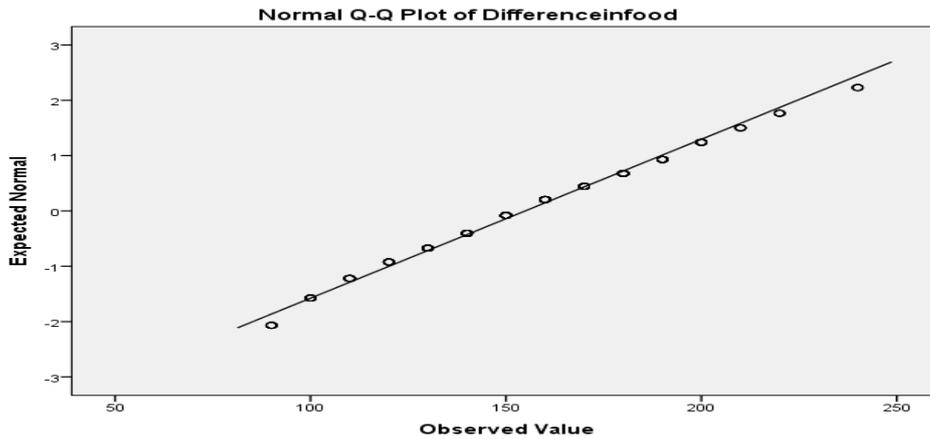
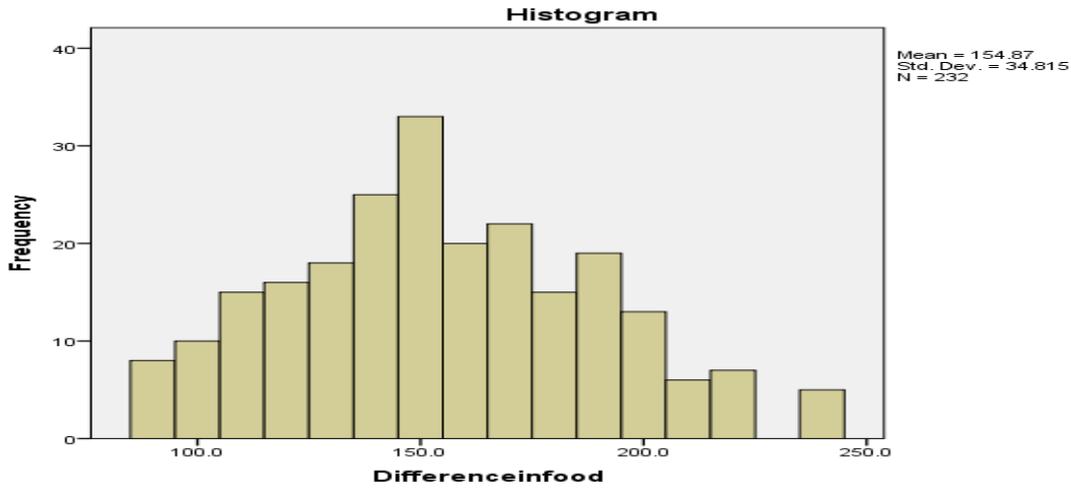
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Differenceinfood	232	85.9%	38	14.1%	270	100.0%

#### Descriptives

			Statistic	Std. Error
Differenceinfood	Mean		154.871	2.2857
	95% Confidence Interval for Mean	Lower Bound	150.367	
		Upper Bound	159.374	
	5% Trimmed Mean		154.205	
	Median		150.000	
	Variance		1212.104	
	Std. Deviation		34.8153	
	Minimum		90.0	
	Maximum		240.0	
	Range		150.0	
	Interquartile Range		50.0	
	Skewness		.220	.160
	Kurtosis		-.442	.318

In Descriptive statistics , Mean, Median, Variance, Standard deviation, skewness and kurtosis for the variable (Difference in amount of money spent before and after joining JLG) which is metric has been calculated. As a rule of thumb if value of skewness divided by S.E of skewness remains within the range of  $\pm 1.96$  then the distribution is considered as Normal. Same rule applies for kurtosis. From the above table we can see that for skewness it is 1.375 and for kurtosis it is -1.38 which can be considered as approximately normal.

**Differenceinfood**



All the assumptions of t-test are met and so we can run t-test to find out whether there is any significant difference in the amount of money spent on food items before joining JLG and after joining JLG

**T-Test**

There are three tables: Paired Samples Statistics, Paired Samples Correlations, and Paired Samples Test. Paired Samples Statistics gives univariate descriptive statistics (mean, sample size, standard deviation, and standard error) for each variable entered. Paired Samples Correlations shows the bivariate Pearson correlation coefficient (with a two-tailed test of significance) for each pair of variables entered. Paired Samples Test gives the hypothesis test results.

**Paired Samples Statistics**

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 AmountspentonFoodBeforeJoiningJLG	1813.922	232	453.3728	29.7654
AmountspentonFoodafterJoiningJLG	1968.793	232	443.2986	29.1040

**Paired Samples Correlations**

	N	Correlation	Sig.
Pair 1 AmountspentonFoodBeforeJoiningJLG & AmountspentonFoodafterJoiningJLG	232	.997	.000

SPSS report the correlation between the two variables when a Paired *t* Test is run because though our primary interest when we run a Paired *t* Test is finding out if the means of the two variables are significantly different but it's also important to consider how strongly the two variables are associated with one another, especially when the variables being compared are pre-test/post-test measures. And we can see from the above table that it is significant.

**Paired Samples Test**

		Paired Differences			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	AmountspentonFoodBeforeJoiningJLG- AmountspentonFoodafterJoiningJLG	-154.8707	34.8153	2.2857	-159.3742

**Paired Samples Test**

		Paired Differences	t	df	Sig. (2-tailed)
		95% Confidence Interval of the Difference Upper			
		Pair 1			

First column signifies the pair of variables being tested, and the order the subtraction was carried out. Mean is the The average difference between the two variables which is calculated to be -154.87. Standard deviation is the standard deviation of the difference scores which is 34.81. Standard error means the standard error (standard deviation divided by the square root of the sample size) which is found to be 2.28. *t* is the test statistic for the paired T test. *df* stands for the degrees of freedom for this test which is one less than the number of observation. Sig. (2-tailed) gives the *p*-value corresponding to the given test statistic *t* with degrees of freedom *df* which is significant and the null hypothesis is rejected. In other words it may be concluded that there is significant difference in the amount of money spent on food items before joining JLG and after joining JLG.

**Analysis-2**

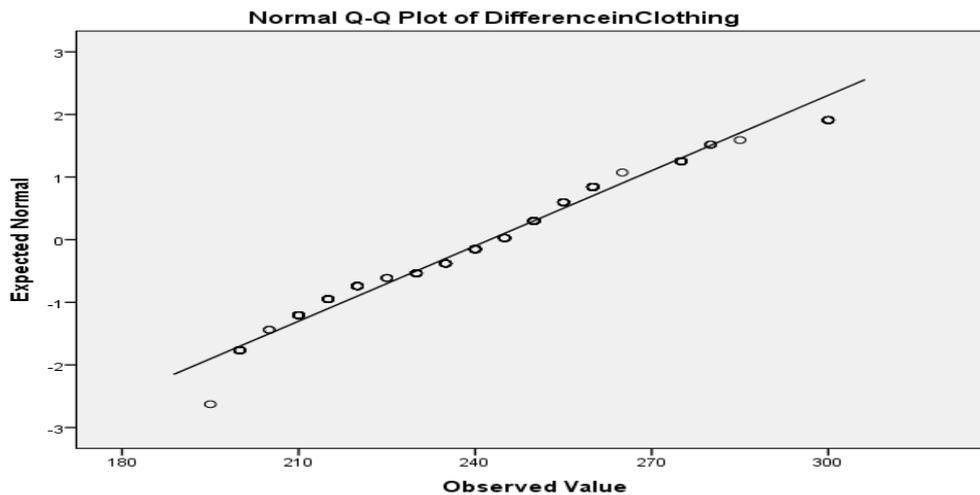
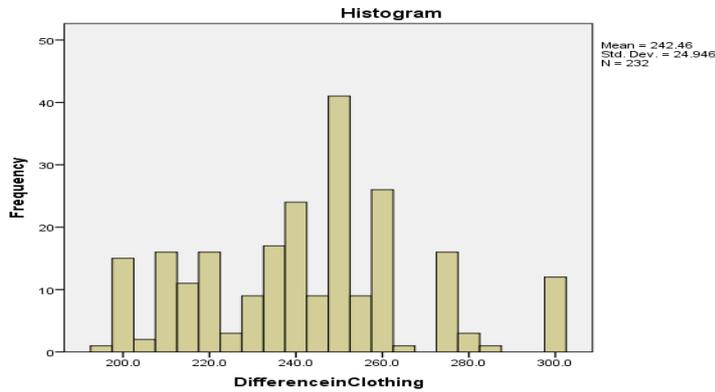
**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
DifferenceinClothing	232	85.9%	38	14.1%	270	100.0%

**Descriptives**

			Statistic	Std. Error
DifferenceinClothing	Mean		242.457	1.6378
	95% Confidence Interval for Mean	Lower Bound	239.230	
		Upper Bound	245.684	
	5% Trimmed Mean		241.643	
	Median		245.000	
	Variance		622.293	
	Std. Deviation		24.9458	
	Minimum		195.0	
	Maximum		300.0	
	Range		105.0	
	Interquartile Range		40.0	
	Skewness		.254	.160
	Kurtosis		-.192	.318

**DifferenceinClothing**



Here also the skewness and kurtosis remains within the range of  $\pm 1.96$ . So it is approximately normal and hence we can run the t-test.

**T-Test**

**Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	AmountspentonclothBeforeJoiningJL	863.190	232	179.1797	11.7637
	G				
	AmountspentonclothafterJoiningJLG	1105.647	232	179.7949	11.8041

**Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	AmountspentonclothBeforeJoiningJL	232	.990	.000
	G&AmountspentonclothafterJoiningJ			
	LG			

**Paired Samples Test**

	Paired Differences			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference
				Lower

Pair 1	AmountspentonclothBeforeJoiningJLG	-242.4569	24.9458	1.6378	-245.6838
	AmountspentonclothafterJoiningJLG				

**Paired Samples Test**

		Paired Differences	T	df	Sig. (2-tailed)
		95% Confidence Interval of the Difference			
		Upper			
Pair 1	AmountspentonclothBeforeJoiningJLG– AmountspentonclothafterJoiningJLG	-239.2300	-148.041	231	.000

The *p*-value corresponding to the given test statistic *t* with degrees of freedom *df* which is significant and the null hypothesis is rejected. In other words it may be concluded that there is significant difference in the amount of money spent on clothing items before joining JLG and after joining JLG.

**Analysis-3**

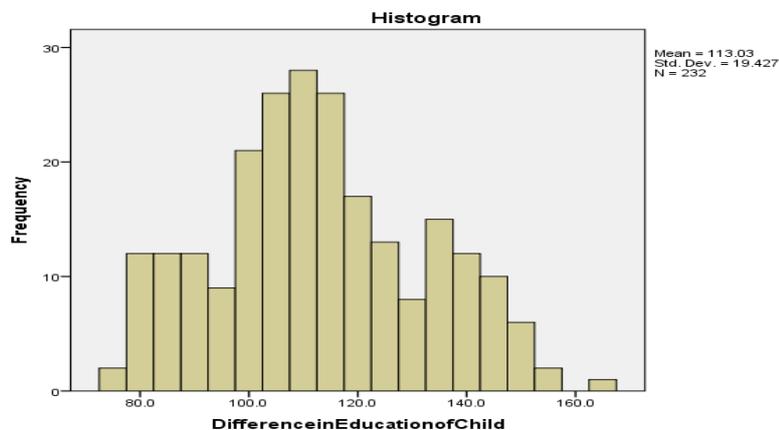
**Case Processing Summary**

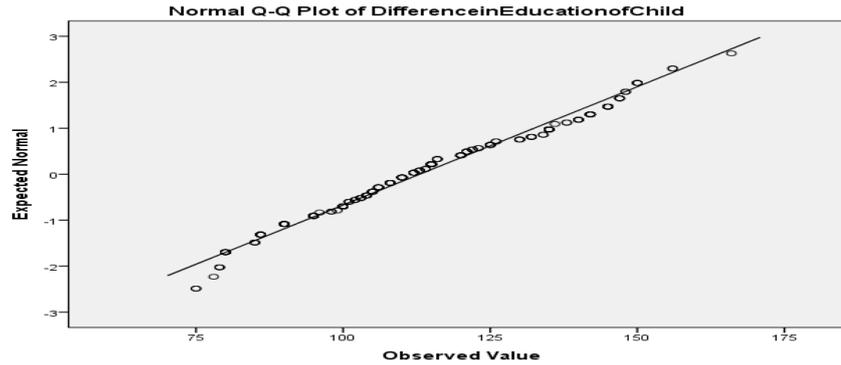
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
DifferenceinEducationofChild	232	85.9%	38	14.1%	270	100.0%

**Descriptives**

		Statistic	Std. Error	
DifferenceinEducationofChild	Mean	113.030	1.2755	
	95% Confidence Interval for Mean	Lower Bound	110.517	
		Upper Bound	115.543	
	5% Trimmed Mean	112.806		
	Median	111.000		
	Variance	377.415		
	Std. Deviation	19.4272		
	Minimum	75.0		
	Maximum	166.0		
	Range	91.0		
	Interquartile Range	25.0		
	Skewness	.223	.160	
	Kurtosis	-.562	.318	

**DifferenceinEducationofChild**





The skewness and kurtosis remains within the range of  $\pm 1.96$ . So it is approximately normal and hence we can run the t-test.

**T-Test**

**Paired Samples Statistics**

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Amount spent on Education of child Before Joining JLG	121.422	232	66.7555	4.3827
Amount spent on education of child after Joining JLG	234.453	232	75.2076	4.9376

**Paired Samples Correlations**

	N	Correlation	Sig.
Pair 1 Amount spent on Education of child Before Joining JLG & Amount spent on education of child after Joining JLG	232	.970	.000

**Paired Samples Test**

	Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference
					Lower
Pair 1 Amount spent on Education of child Before Joining JLG - Amount spent on education of child after Joining JLG		-113.0302	19.4272	1.2755	-115.5432

**Paired Samples Test**

	Paired Differences	t	df	Sig. (2-tailed)	
					95% Confidence Interval of the Difference
					Upper
Pair 1 Amount spent on Education of child Before Joining JLG - Amount spent on education of child after Joining JLG		-110.5172	-88.619	231	.000

The *p*-value corresponding to the given test statistic *t* with degrees of freedom *df* which is significant and the null hypothesis is rejected. In other words it may be concluded that there is significant difference in the amount of money spent on child education before joining JLG and after joining JLG

**V. CONCLUSION**

From the study it is evident that there is an improvement in the social status. The social status of clients had improved in general after becoming the member of JLG programme. This is a big leap forward. The results were same as in the study conducted by Mishra and Manesh Chowbey (2011) who revealed that there was improvement in social status in post-JLG situation. It is also found that there is a significant difference in the status of the members before joining the JLG and after joining the JLG.

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