

## **IMPACT OF SELF HELP GROUP IN ECONOMIC DEVELOPMENT OF RURAL WOMEN WITH REFERENCE TO DURG DISTRICT OF CHHATTISGARH**

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### **ABSTRACT**

Self Help Groups (SHG) proves to effective tools of alleviating poverty. Self Help Group helps to enhance the living standard of rural women by providing them loan for their economic development. This paper attempts to deal with the economic development of rural women through Self Help Group with reference to Durg district of Chhattisgarh. A sample of 250 SHG members was considered for the study from the three blocks of Durg district. It is found from the study that Individual Economic Indicators has significant impact on Economic Development. It was found that two antecedents i.e., income and asset resources have significant impact on economic development.

**KEYWORDS:** Self Help, Rural Women

### **INTRODUCTION**

In India the majority of people live in rural areas, where the main hurdles for the development is poverty. Earlier rural people are dependent on local merchants and landlord for their financial needs who charge maximum interest rate on principal amount. The concept of Microfinance which is started in Bangladesh which is popularly known as Self Help Group proves to be one of the effective tools to eradicate the poverty and also help poor to get loan easily at minimum interest rates. Self Help Group provides a platform to the rural women to get empowered both socially and economically. In India SHG concept proves to be a boon for alleviation of poverty and for the economic and social development. It provides loans to poor landless women with minimum interest rates for income generating activities and self employment.

There is several NGO's and Government agencies were working for the formations of SHG and they also provide training facilities to the women so that they can start their own small business or they become self employed by various income generating activities. They also helps in forming rules and regulations and group norms, they also provide training about how to maintain book keeping, basic accounts, conducting meetings, and saving habits. (women Self Help Group, 2014)

SHG consists of 10-20 women member of similar social and economic conditions (sudhakar, 1993). After the formation of group they help each other to solve their personal and financial problems. SHG provide opportunity to the women to get financially independent. They save small amount on monthly basis, which they deposits in the bank in group name. After six month of regular savings and inter lending, bank investigate the working of groups and their books of accounts in details, if they find good then they link with bank. After linking up with bank group can take of loan up to Rs 300,000 in a year. (Fernandez, 1996)

This paper attempts to analyze the impact of economic development of women through Self Help Groups in Durg district of Chhattisgarh using regression method.

## REVIEW OF LITERATURE

(Singh, 2014)

Had used social empowerment index for studying social parameters like, self confidence, skills, social awareness and recognitions and ability to access various public facilities and economic empowerment to measure parameters like household assets, household income, household expenditure, household savings, loan and housing type. It was reveals from the study that after joining microfinance programme women become both socially and economically empowered. Both social empowerment index and economic empowerment index has shown positive growth.

**SIDBI (2008)** has conducted longitudinal study of 25 MFIs from the country as a whole to analyze relationship between microfinance and poverty reduction. The study reveals that microfinance programme lead to tremendous work to reduce the poverty and helps in increasing the standard of living of the people. It also increases the various opportunities of income generation and people can easily access to bank credit. The most important change was that now people are no longer dependent on moneylender for credit or loan after joining MFI.

**Monique Cohen, (1996)** had prepared a household economic portfolio model (HHEP) to analyze that help in analyzing the impact of microenterprise services at three levels like (i) at individual level, (ii) at enterprise level and (iii) at household level. This model helps to study the factors like social, economic and local factors that affect the household. This model helps in measuring the impact at microenterprises level, household level, and at individual level

**(Reji, 2013)** in his study “observes that examines the empowerment impact of microfinance programme of Neighborhood Groups (NHGs) in Kerala. It was found in the study that NHG not only provides savings and credit facilities to its members but also it provide social empowerment to its members. It was also found that there is increase in employment opportunities to the members after joining NHG.

**(Venkatesh, 2015)** has observed in his study that after joining SHG economic status of the members have been changed drastically. People became more aware about financial transactions, saving money, about bank transactions and about avenues for income generations and self employment. It was found from the study that SHG helps in eradicating the poverty as well as make people economically as well as socially strong. It was suggested that if the no.of SHG increased the pace of economic growth will be higher.

## RESEARCH METHODOLOGY

### Area of Study and Sample Size

Study was conducted in Durg district of Chhattisgarh. It consists of total three blocks namely; Durg, Patan and Dhamdha. 250 SHG members were considered as a sample size of the study.

### Type of Research

Hypothesis testing research method is used for the proposed study, for this hypothesis is formulated for the same.

**Analysis of Data**

Data was analyzed with the help of statistical software SPSS 21, regression method is used to analyze the impact of Self Help Group in economic development of rural women of Durg District of Chhattisgarh.

**Research Variables**

**Table 1**

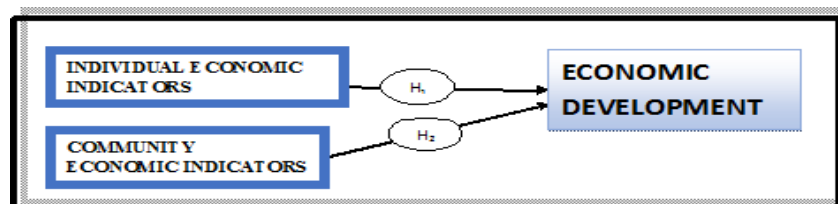
Independent and Dependent Variable		
Independent Variables	Source	Dependent Variable
Independent Economic Indicator (A)	Dr. H. Ramananda Singh, Dr. N. Dhaneshwar Singh (2013 )	Economic Development (X)
Community Economic Development (B)		

**Research Instrument**

**Table 2**

Indicators	Variables	Items	Scale	Source
Individual Economic Indicators (A)	Income (A1)	A11	Improved income earning capacity	www.self-help-approach/doc/trainingmanual.
		A12	Improved livelihood skills	
		A13	Access to independent income	
		A14	Significant increase in own income	
		A15	Reduce risk in crisis situation	
	Decision Making (A2)	A21	Significant power to save income	
		A22	Significant power to use in own discretion	
		A23	Control on assets	
		A24	Control over family resources within family	
Assets Resources (A3)	A31	Ownership of assets		
	A32	Greater access to financial resources within family		
	A33	Financial self-reliance		
Community Economic Indicators (B)		B1	Employment Opportunities	
		B2	Income Generation Opportunities	
		B3	Improve Cash Economy	
		B4	Reduce Migration	
Economic Development (X)		X1	Household Assets	Dr. H. Ramananda Singh, Dr. N. Dhaneshwar Singh (2013)
		X2	Household Income	
		X3	Savings	
		X4	Expenditure	
		X5	Loan	
		X6	Housing Type	

**Research Model**



**Figure 1**

## Research Hypothesis

**Hypothesis 1 (H<sub>1</sub>):** There is a significant impact of individual economic indicators on economic development of rural women under self-help group.

**Hypothesis 2 (H<sub>2</sub>):** There is a significant impact of community economic indicators on economic development of rural women under self-help group.

## Data Analysis and Interpretation

### Reliability & Validity of Measures

Exploratory Factor Analysis (EFA) was conducted for the purpose of data reduction. It is used to remove redundant (highly correlated) variables from the instrument, perhaps rearranging the entire data with a smaller number of uncorrelated variables. The purpose of structure detection is to examine the underlying (or latent) relationships between the variables.

EFA was conducted on 22 items of the instrument developed inclusive of 6 items of Economic Development as dependent variable and 16 items for two independent variables i.e. Individual Economic Indicators and Community Economic Indicators with the help of SPSS (version 21). Maximum Likelihood method of extraction was chosen to extract the factors, with squared multiple correlations used as prior communality estimates. As suggested by Fabrigar, Wegener, MacCallum, and Strahan (1999), an oblique rotation using promax with Kaiser Normalization was at first performed to determine the size of the correlations between the extracted factors. When correlations existed between the factors, the oblique solution was retained.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic that indicates the proportion of variance in the variables that might be caused by underlying factors. For the KMO statistic, Kaiser (1974) recommends a bare minimum of 0.5 and that values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb (Hutcheson Sofroniou, 1999). For this data the value is 0.848, which is considered as good degree of common variance and so it can be considered that sample size of 250 is adequate for factor analysis. The Bartlett's test of Sphericity is used to examine the hypothesis that the variables are uncorrelated in the population. In other words, the population correlation matrix is an identity matrix i.e. each variable correlates itself ( $r=1$ ) but there is no correlation with the other variable ( $r=0$ ). Small values (less than 0.05) of the significance level indicate that a factor analysis may be useful for the data and the hypothesis is accepted (Field, 2000). For this data, Bartlett's test is highly significant ( $p < 0.001$ ), and therefore factor analysis is appropriate and each variable correlates itself but there is no correlation with the other variable i.e. the data is free of multicollinearity as shown in table

**Table 3: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.848
Bartlett's Test of Sphericity	Approx. Chi-Square	2733.728
	Df	190
	Sig.	.000

EFA resulted into the convergence of four factors as hypothesised in this study based on theoretical understanding along with their respective total percentages of variance explained as shown in table. The cumulative percentage sum of square loadings is 60.83%, which is under the acceptable range. Communality Coefficient ( $h^2$ ) values indicate the

proportion of each variable's variance that can be explained by the retained factors.

The communality coefficient (suppression below 0.3) for all the items is good and above 0.3, so all the items can be retained. Pattern coefficient matrix (using promax rotation), is preferable to interpret, since it includes the coefficients that only represent the unique contribution of each variable to the factor, thus accounting for the inter-factor correlations. All the items of a particular exogenous variable as hypothesized on the basis of theory are loaded under same factor with high loading values; hence all the items are retained in the instrument for further analysis.

The factor analysis as shown in table yielded five factors corresponding to the five variables including independent and dependent variables both. The result of factor analysis shows that all the items of both dependent and independent variables will be retained except A11 and X6 due to low and scattered loading values. 4 items of Income (A1) variable of Individual Economic Indicators i.e. A12, A13, A14 and A15 will be retained due to high loading values of 0.757, 0.851, 0.912 and 0.917 respectively, whereas A11 will be eliminated due to low loading values. All the 4 items of Decision Making (A2) variable of Individual Economic Indicators i.e. A21, A22, A23 and A24 will be retained due to high loading values of 0.884, 0.902, 0.773 and 0.780 respectively. 3 items of Assets Resources (A3) variable of Individual Economic Indicators i.e. SQ31, SQ32 and SQ33 will be retained with high loading values of 0.729, 0.555 and 0.780 respectively. 4 items of Community Economic Indicators (B) i.e. B1, B2, B3 and B4 will be retained due to high loading values of 0.620, 0.616, 0.911 and 0.704 respectively. 5 items of dependent variable Economic Development (X) i.e. X1, X2, X3, X4 and X5 will be retained due to high loading values of 0.555, 0.901, 0.539, 0.471 and 0.614 respectively. Hence, total 20 items will be considered for further multivariate analysis to test the hypothesis formulated under study

**Table 4: Exploratory Factor Analysis**

% Of Variance Explained after Eliminating Other Factors after Rotation	22.309	19.370	9.778	6.102	3.279	H <sup>2</sup> (Communality Coefficient)
	Factor					
Items	1	2	3	4	5	
A12	.757					.601
A13	.851					.776
A14	.912					.830
A15	.917					.877
A21		.884				.788
A22		.902				.820
A23		.773				.676
<b>Table 4: Contd.,</b>						
A24		.780				.614
A31					.729	.481
A32					.555	.503
A33					.841	.729
B1				.620		.395
B2				.616		.436
B3				.911		.733
B4				.704		.525
X1			.555			.492
X2			.901			.687
X3			.539			.322
X4			.471			.331

X5			.614			.551
Extraction Method: Maximum Likelihood.						
Rotation Method: Promax with Kaiser Normalization.						

The coefficients of the inter factor correlations among the variables indicates that the independent and dependent variables are not correlated with each other as all the values are below 0.7 as shown in table.

**Table 5: Exploratory Factor Analysis – Inter-Factor Correlations**

Factor	1	2	3	4	5
1	1.000				
2	-.118	1.000			
3	.571	.015	1.000		
4	.061	.254	.039	1.000	
5	.124	-.428	-.147	-.486	1.000
Extraction Method: Maximum Likelihood.					
Rotation Method: Promax with Kaiser Normalization.					

Finally, internal consistency reliability to test unidimensionality was assessed by Cronbach's alpha. Maximum likelihood estimated matrices were used, because they do not have to be inverted prior to the computation of Cronbach's alpha (van Horn, 2003). The resulting alpha values ranged from 0.70 to 0.87, which were above the acceptable threshold 0.70 suggested by Babbie (1992). According to Babbie (1992), the value of Cronbach Alpha is classified based on the reliability index classification where 0.90-1.00 is very high, 0.70-0.89 is high, 0.30-0.69 is moderate, and 0.00 to 0.30 is low. The analysis showed the Cronbach's Alpha value, higher than 0.70, falls into the classification of high.

The table indicates that total 20 items will be considered comprising of both independent and dependent variables after factor reduction (exploratory factor analysis). The mean and standard deviation of the data for each variable were also estimated. The mean value for Income (A1) variable of Individual Economic Indicator is 5.6 (i.e. more than average), which depicts that the women's of self-help group are satisfied with the Income earned after associating with Self Help Group. Rest all the variables i.e. Decision Making (A2) and Assets Resources (A3) variable of Individual Economic indicators and the second independent variable i.e. Community Economic Indicators (B) have mean value lower than average. The mean value of dependent variable i.e. Economic Development (X) has mean value of 5.6 (i.e. more than average), which depicts that the women's develop economically after associating with the Self Help Group. Standard deviation depicts that the data are not very much deviated from the mean.

**Table 6: Mean, SD and Cronbach's Alpha**

Variables	Sample Size	Items	Mean	SD	$\alpha$
A1	250	4	5.7	1.0	0.924
A2	250	4	3.4	0.9	0.905
A3	250	3	3.3	0.9	0.776
B	250	4	3.0	0.8	0.799
X	250	5	5.6	0.9	0.784
SD: Standard Deviation					
$\alpha$ – Cronbach's Alpha					

The chi-square test for Goodness-of-fit was estimated for the data and the result shows that the P-value (sig.) is 0.013 (<0.05) which is significant, hence the model is fit for the data collected as shown in table.

**Table 7: Goodness-of-Fit Test**

Chi-Square	df	Sig.
133.836	100	.013

- **Hypothesis 1:** Impact of Independent Economic Indicator on Economic Development

The Statistical Package for the Social Sciences (SPSS) (Version 21) was used to facilitate the analysis. The regression analysis was conducted to determine the impact Self Help Group on Individual Economic Indicators and Community Economic Indicators

Regression statistics in table shows that correlation value R is 0.594, which depicts that there is moderate relationship between Individual Economic Indicators and Economic Development. The value of R Square is 0.353 i.e. the model explains 35% of variables and there may be other indicators of economic development. The value of Durbin Watson test (1.998) depicts that the model is good as the value is near to 2.

**Table 8: Regression Statistics**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.594	.353	.345	.7224	1.998
Predictors: A3, A1, A2; Dependent Variable: X					

Table reveals that Individual Economic Indicators has significant impact on Economic Development as F (calculated value) (44.689) is greater than F (table value) (2.184), moreover, the p value (significant value) is 0.000 which is less than 0.05 significance level. Therefore, research hypothesis H<sub>1</sub> is accepted.

**Table 9: ANOVA**

Model	Sum of Squares	DF	Mean Square	F	Sig.	
1	Regression	69.964	3	23.321	44.689	0.000
	Residual	128.376	246	0.522		
	<b>Total</b>	<b>198.341</b>	<b>249</b>			
Predictors: A3, A1, A2; Dependent Variable: X						

Among all the three antecedents of Individual Economic Indicators, two antecedents i.e. Income (A1) and Resource Asset (A3) have significant impact on Economic Development with p values of 0.000 and 0.023 respectively as shown in table.

**Table 10: Coefficients**

Model	Un Standardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	2.895	.420		6.888	.000
	A1	.539	.047	.592	11.455	.000
	A2	.020	.057	.020	.352	.725
	A3	.130	.057	-.128	-2.295	.023
Predictors: A3, A1, A2; Dependent Variable: X						

The beta coefficients for significant antecedent of Individual Economic Indicators i.e. Income (A1) and Resource Asset (A3) are 0.539 and 0.130 respectively. It depicts that if Income of women's under Self Help Group is increased by 0.539 units, they will develop economically by 1 unit and if Resource Asset is increased by 0.130 units, women's will

develop economically by 1 unit.

- **Hypothesis 2:** Impact of Community Economic Indicator on Economic Development

Regression statistics in table shows that correlation value R is 0.030, which depicts that there is very week relationship between Income and Resource Asset. The value of R Square is 0.001 i.e. the model does not explains economic development. The value of Durbin Watson test (2.109) depicts that the model not so good as the value is greater than 2.

**Table 11: Regression Statistics**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.030	.001	-.003	.8939	2.109

**Predictors:** B; **Dependent Variable:** X

Table reveals that Community Economic Indicators does not has significant impact on Economic Development as F (calculated value) is 0.225, which is greater than F (table value) (2.184), moreover the p value (significant value) is 0.636 which is more than 0.05 significance level. Therefore, research hypothesis H<sub>2</sub> is rejected.

**Table 12: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	.180	1	.180	.225	.636
	Residual	198.161	248	.799		
	<b>Total</b>	<b>198.341</b>	<b>249</b>			

**Predictors:** B; **Dependent Variable:** X

## CONCLUSIONS

Self Help Groups proves to very effective means for economic development of rural women of Durg district of Chhattisgarh. It is found from the study that that Individual Economic Indicators has significant impact on Economic Development as F (calculated value) (44.689) is greater than F (table value) (2.184), moreover, the p value (significant value) is 0.000 which is less than 0.05 significance level. Therefore, research hypothesis H<sub>1</sub> is accepted. Whereas Community Economic Indicators does not has significant impact on Economic Development as F (calculated value) is 0.225, which is greater than F (table value) (2.184), moreover the p value (significant value) is 0.636 which is more than 0.05 significance level. Therefore, research hypothesis H<sub>2</sub> is rejected.

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