

Socio-Economic Development of Women through Self Help Groups With Reference To Rajnandgaon District of Chhattisgarh

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Abstract: *This study deals with the understanding of socio-economic development of rural women through Self Help Group (SHG) with reference to Rajnandgaon district of Chhattisgarh. Social development and economic development was evaluated on the basis of community and individual indicators. Hence, the study considered four independent variables, viz; Community Social Indicators, Individual Social Indicators, Community Economic Indicators and Individual Economic Indicators to analyze socio-economic development of rural women. An instrument of 46 items was generated by using social and economic indicators of socio-economic development (Singh, 2014). Questionnaire was designed and translated in local language for data collection using likert scale. Three blocks of Rajnandgaon district of Chhattisgarh 250 SHG members were selected as a sample size. Factor analysis and regression is used with the help of SPSS 21 for data analysis. The study reveals that both social and economic indicators have significant positive impact on Socio-Economic Development of rural women of Rajnandgaon district. The antecedents' social respect and communication of Individual Social Indicators have significant impact on Social Development of women of Rajnandgaon district of Chhattisgarh. Income and asset resources of Individual Economic Indicators are having greater impact on Economic development of women of Rajnandgaon district of Chhattisgarh. The study suggested that government should take initiative to promote income generating activities so that women can get economically developed. (Dr. K. Kanniammal, 2011)*

Keywords: *Self Help Group, Socio-Economic Development, Community Social Indicators, Individual Social Indicators, Community Economic Indicators and Individual Economic Indicators*

I. Introduction

India is a developing nation with mixed economy. India, with 1,220,200,000 (1.22 billion) (as per census 2011) people is the second most populous country in the world, approximately 72.2% (638,000) (Census of India, 2011) of the population lives in rural areas and the rest 27.8% (5,480) (Census of India, 2011) lives in urban areas. In India 29.8% of population lives in below poverty line (Barrientos, 2015) . As majority of the population of our country lives in rural areas they are not much aware about the banks rules and regulation and neither about the rate of interest, and this give money lenders an opportunity to charge more and more interest in lieu of small thrift. Especially women, who constitute almost half of the population of country; though they do not enjoy the same status, power and rights as men do. They are lagging behind in terms of development like education, status as well as health as compare to male members in the society. We can't imagine of developed nation when our 50% of the population are still deprived from development. It is very important to developed women through various developmental programmes as they are entering as the major labor force in our country in a very huge numbers from rural areas. This delinquency results in the need of effective and easier credit facilities system for the poor to improve their socio economic condition of rural women, and also the unsound state, illiteracy and unemployment of rural women gave rise to the new concept called Self Help Groups (SHGs).

The concept of microfinance has been evolved in India in the year 1970 as SEWA (Self Employed Women's Association) in Ahmadabad by Ella Ben Bhatt which provide credit to make women self employed and self dependent. After the success of SEWA, in the year 1987 'Mysore Resettlement and Development Agency' (MYRADA) has promoted Credit Management Groups (CMGs) (deshpande, 2006). In the year 1976, the concept of Grameen Bank was evolved by Dr. Muhammad Yunus of Chiittigong University Bangladesh provide loans to women to make them self employed.

In the year 1992 National Bank for Agriculture and Rural Development (NABARD) started promoting Self Help Groups (SHG) and started providing microcredit to rural people. SHG has gain popularity when on 1st April 1999 government launched a programme called Swarna Jayanti Gram Swarozgar Yojana (SGSY) (Thanigavel). Under SGSY government provide credit to rural landless people through SHG, so that rural people become self employed and their socio-economic condition will improve. This schemes of government become an powerful tools for poverty reduction and upliftment of poor people above the poverty line.

An SHG is a group of 10-20 individuals, voluntarily formed and related by affinity for a specific purpose. It is a group whose members use savings, credit and social involvement as instruments of empowerment. (B.V. Anantha Ramu, 2012). The SHG is an informal organization of persons from the homogeneous poor section of the society and it is controlled and managed by the members itself. It is an association of 10 to 20 local individual members who are financially weak and from the same socio-economic backgrounds. (Boruah, 2013)

In Chhattisgarh SHG is evolved by Chhattisgarh Mahila Kosh in 2002, which is run by Chhattisgarh Women and Child Development department. There are more than 80 thousand women groups have been formed by under Women and Child Development Department. Women Self Help Groups are prosperously operating 2432 fair price shops that are opened under Public Distribution System of Food Department. Women of Chhattisgarh state have become aware towards their social responsibilities. They are now readily participating in social awareness campaigns like de-addiction, malnutrition eradication, girl child education and other social causes. (sana, 2015).

In Rajnandgaon district of Chhattisgarh women were engaged in various income generating activities like making of pickles, badi-papad, chhattisgarhi cuisine, mushroom production, fishery, sericulture, sanitary manufacturing, bamboo and wooden art etc. The popular Maa Bambleshwari Janhitkari samiti Groups which headed 20,000 groups by Padmashree Phulbasan Yadav changed the socio-economic status of women. (bukhari, 2012)

In spite of eminence and unique nature of women's self-help groups in Indian states, evidence of their economic impacts is scarce, hence, need is felt to conduct a study to evaluate the socio-economic development of rural women's through self-help groups. Thus, this study aims to evaluate the efficient working of self-help groups of Rajnandgaon district of Chhattisgarh state. The effectiveness can be evaluated on the basis of the social-economic development of women's associated with these groups. Therefore, the main objective of this study is to identify various indicators of socio-economic development and to analyze their impact on the social and economic development of women's of Rajnandgaon district associated with self-help group.

II. Literature Review

In India, rural people were dependent on money lenders for their credit needs, and these money lenders charges heavy interest rates in lieu of small loans which deprive the life of rural people. For the development of rural people, in 1992 Government has launched a programme called Self Help Groups and linked it with NABARD. SHG-Bank Linkage Programme (SHG-BLP) currently connected with 74 lakh SHGs and approx 10 crore households saving with the formal banking system with savings balance of over Rs. 7, 000 crore as on 31 March 2011. (s.k.mitra, 2012)

SHG proves to be effective tools for poverty reductions and capacity building of rural people. It provides women a platform to become socially and economically independent. SHG provides them freedom express their view, feelings about the various social and political issues. SHG helps to create awareness among its members about social evils, rights of women, about laws and regulations of government in general.

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. 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 programmed 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 study reveals that after joining MFI now people are no longer dependent on moneylender for credit or loan

In a study conducted by P.V (2009), SHG leads to the social development of rural women by developing skills like entrepreneurial and technical, but it fails to achieve economic development. It was found that the microenterprises were lack in making financial and marketing vision. They need to try innovative methods or techniques to increase the sources of income in future. (Puhazhendhi & Jayaraman, 1999) Observes in his research, that there is increased in usage of loan amount in productive purpose and there is reduction in non productive purpose. There is increased in employment opportunities and there is increased in income of the group members after joining MYRADA. The only problem of the group is lack of leadership and low involvement of NGOs.

(Nadarajan, 2010) observes in the study that SHG brought positive changes in courage, self-confidence, self worthiness, skill development, awareness about environment, peace in the family, reduction of poverty improving rural savings, managerial ability decision making process and group management of members of the group. After joining SHG members become socially empowered, and there is enhancement in

mental ability and psychological well being. A similar study was conducted in Pondicherry by (Dr.K.Mohan2, 2011), in which he observes that after joining SHG women get socially, economically and psychologically empowered. SHG proves to be an effective tool for poverty eradication.

A study was conducted by Dr. Sushil Kumar Mehta (2011) in Jammu region, concluded that after joining SHG the standard of living of the people has increased their assets value has increased saving pattern has changed. It was also found that member's confidence level had increased, there is decline in domestic violence, after joining SHG women can now freely talk with outsiders, and i.e. there communication level had been improved. (Edwin Gnanadhas, 2011) reveals in his study that in last five year there is increased in amount of loan provided by SHG. Also the saving pattern has been changed of the member after joining the groups. Women involvement has been increased in SHG to become economically stronger and independent. (ANILA, 2012) observes in his study that there is positive relationship bet age group of the members and SHG activities. It was found from the study that women were economically developed as their income level has been increased after joining SHG.

For the purpose of this study, the following indicators of socio-economic development were on the basis of MYRADA training manual, specially formulated for SHG to evaluate their socio-economic development.

1. Economic Indicators: It measures the income level, saving habits, expenditure patterns, assets and living standard of the members of SHG. It helps in analyzing the financial positions of the SHG members. It can be understood at individual level and community level.
 - 1) Individual Economic Indicators: It measures the individual's control over income; relative contribution to family support; access to and control of family resources. (Anju Malhotra, 2002). Individual Economic Indicators has three variables (a) income, (b) decision making and (c) assets/resources.
 - 2) Community Economic Indicators: It measures the member's access to employment opportunities, income generating activities, credit facilities, possession of assets like land and other amenities and market area. It also analyzes the migration rate of member. (Anju Malhotra, 2002)
2. Social Indicators: It measures the women's literacy, mobility of women in locality, awareness about their rights, social respect, educations, positions and power in local institutions (Zoë Oxaal, 1997). It can be understood at individual level and community level.
 - 1) Individual Social Indicators: it measures social respect, communication and mental ability of SHG members (Singh.D. N and Singh.R.H, 2012). it measures the various aspects of social development of SHG members like freedom from domestic violence, awareness about legal rights; domestic support for exercising rights, political knowledge, freedom to speak in public forum (Anju Malhotra, 2002).
 - 2) Community Social Indicators: It measures social security of members, their awareness level, and education level, social respect outside the family and participation level in social work and other programme of the society. (Singh, 2014).

III. Research Methodology

Research Objective

1. To determine the indicators of socio-economic development of rural women with self-help group in Rajnandgaon districts of Chhattisgarh.
2. To analyze the impact of those indicators of socio-economic development of rural women with self-help group in Rajnandgaon districts of Chhattisgarh.

Research Variables

The indicators of socio-economic development were assessed through literature review to identify the socio-economic status of rural women's through self-help groups in Rajnandgaon district of Chhattisgarh. The indicators are acting as independent variables, whereas socio-economic development is dependent variable in the study as shown in table 1. Studies of various researchers like Singh.D. N and Singh.R.H. (2012) and Chen, M.A and Dunn, E. (1996) have proved that the significant impact of social and economic indicators on socio-economic development.

Table 1: Research Variables		
Independent Variables	Source	Dependent Variable
Independent Economic Indicator (A)	Singh.D. N and Singh.R.H. (2012); (chen & dunn, 1996)	Economic Development (X)
Community Economic Development (B)		Social Development (Y)
Independent Social Indicator (C)		
Community Social Development (D)		

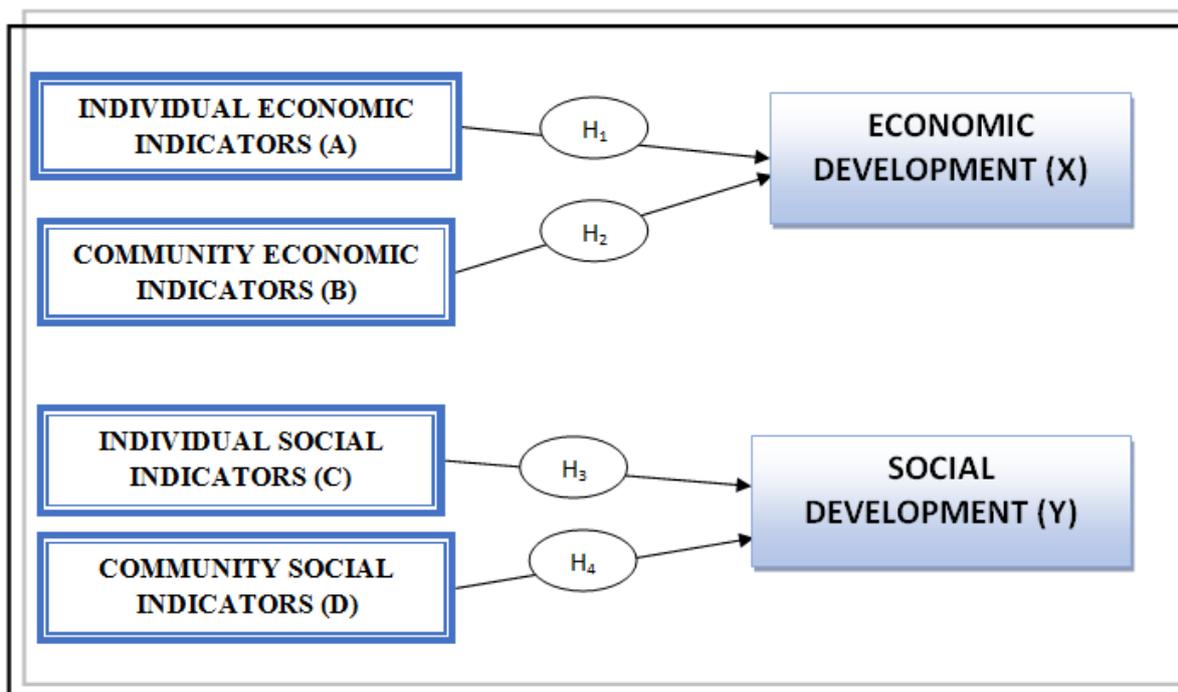
Research Instrument

For the purpose of hypothesis testing, primary data is required and for the collection of primary data, 47 items research instrument was formulated on the basis of MYRADA training manual for independent variable and on the basis of the work of Singh et al (2013) for dependent variable as shown in table 2.

Indicators	Variables	Items	Scale	Source
Individual Economic Indicators (A)	Income (A1)	A11	Improved income earning capacity	MYRADA Training Manual
		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	
Individual Social Indicators (C)	Social Respect (C1)	C11	Enhance social respect within family	
		C12	Improvement in value system	
		C13	Improvement in relationship	
		C14	Harmony in the family	
	Communication (C2)	C21	Access to information	
		C22	One way communication	
		C23	Two way communication	
	Mental Ability (C3)	C31	Confidence to speak	
		C32	Confidence to think independently	
		C33	Confidence to analyze problems	
		C34	Courage to face life in any circumstances	
Community Social Indicators (D)		D1	Social Security	
		D2	Awareness	
		D3	Participation	
		D4	Basic Amenities	
		D5	Literacy	
		D6	Attitudes on Social Issues	
		D7	Social Respect Outside the Family	
Economic Development (X)		X1	Household Assets	Singh.D. N and Singh.R.H. (2012)
		X2	Household Income	
		X3	Savings	
		X4	Expenditure	
		X5	Loan	
		X6	Housing Type	
Social Development (Y)		Y1	Self confidence	
		Y2	Communication skills	
		Y3	Social awareness	
		Y4	Respect in the family	
		Y5	Social recognition	
		Y6	Respect outside the family	

Research Model

The research model for the study showing the independent and dependent variables along with the hypothesis is shown in figure 1.



Research Hypothesis

On the basis of work of the Singh.D. N and Singh.R.H. (2012) and Chen, M.A And Dunn, E. (1996), four research hypothesis have been formulated for the purpose of the study.

Research Hypothesis

Hypothesis 1 (H₁): There is a significant impact of individual social indicators on economic development of rural women under self-help group.

Hypothesis 2 (H₂): There is a significant impact of community social indicators on economic development of rural women under self-help group.

Hypothesis 3 (H₃): There is a significant impact of individual economic indicators on economic development of rural women under self-help group.

Hypothesis 4 (H₄): There is a significant impact of community economic indicators on economic development of rural women under self-help group.

IV. Data Analysis And Interpretation

Reliability & Validity of Measures (Social Indicators)

Research Hypothesis

Hypothesis 1 (H₁): There is a significant impact of individual social indicators on social development of rural women under self-help group.

Hypothesis 2 (H₂): There is a significant impact of community social indicators on social development of rural women under self-help group.

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 24 items of the instrument developed inclusive of 6 items of Social Development as dependent variable and 18 items for two independent variables i.e. Individual Social Indicators and Community Social 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 0.845, which is considered as great 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 3

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.845
Bartlett's Test of Sphericity	Approx. Chi-Square	3417.424
	df	210
	Sig.	0.000

EFA resulted into the convergence of four factors as shown in table 4 along with their respective total percentages of variance explained. The cumulative percentage sum of square loadings is 64.998%, 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 4 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 D5, D6 and D7 due to low and scattered loading values. All items of Social Respect (C1) i.e. C11, C12, C13 and C14 will be retained due to high loading values of 0.544, 0.648, 0.861 and 0.729 respectively. All the items of Communication (C2) i.e. C21, C22 and C23 will be retained due to high loading values of 0.807, 0.835 and 0.903 respectively. All the 4 items of Mental Ability (C3) variable of Individual Social Indicators i.e. C31, C32, C33 and C34 will be retained with high loading values of 0.824, 0.676, 0.910 and 0.541 respectively. 4 items of Community Social Indicators (D) i.e. D1, D2, D3 and D4 will be retained due to high loading values of 0.688, 0.967, 0.960 and 0.654 respectively, whereas D5, D6 and D7 will be eliminated due to scattered loading values. All the 6 items of dependent variable i.e. Social Development (Y) i.e. Y1, Y2, Y3, Y4, Y5 and Y6 will be retained due to high loading values of 0.502, 0.618, 0.736, 0.905, 0.935 and 0.969 respectively. Hence, total 21 items will be considered for further multivariate analysis to test the hypothesis formulated under study.

% of variance explained after eliminating other factors after rotation	23.299	13.492	16.519	7.775	3.914	h² (communality coefficient)
	Factors					
Items	1	2	3	4	5	
C11				0.544		0.405
C12				0.648		0.442
C13				0.861		0.723
C14				0.729		0.527
C21					0.807	0.662
C22					0.835	0.705
C23					0.903	0.815
C31			0.824			0.635
C32			0.676			0.725
C33			0.910			0.765
C34			0.541			0.389
D1		0.688				0.481
D2		0.967				0.902
D3		0.960				0.921
D4		0.654				0.530
Y1	0.502					0.386

Y2	0.618					0.562
Y3	0.736					.599
Y4	0.905					.770
Y5	0.935					.819
Y6	0.969					.888
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 5

Factor	C1	C2	C3	D	Y
C1	1.000				
C2	0.329	1.000			
C3	-0.027	-0.131	1.000		
D	0.069	-0.136	0.598	1.000	
Y	0.292	0.189	-0.313	-0.190	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 6 indicates that total 21 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 values of Individual Social Indicators i.e. Social Respect (C1), Communication (C2) and Mental Ability (C3) are 2.9, 3.6 and 2.7, which depicts that the women’s of self-help group are not satisfied with the respect they get within the family, the communication system within the family and the individual confidence in women’s. The second independent variable i.e. Community Social Indicator (D) has mean value of 5.4 (i.e. more than average), which depicts that women’s are satisfied with the social activities happening in the community. The mean value of dependent variable i.e. Social Development (Y) has mean value of 5.7 (i.e. more than average), which depicts that the women’s develop socially after associating with the Self Help Group. It can be understood that community social indicators has larger affect on social development. Standard deviation depicts that the data are not very much deviated from the mean.

Variables	Sample Size	Items	Mean	SD	α
C1	250	4	2.99	0.84	0.800
C2	250	3	3.59	0.81	0.885
C3	250	4	2.77	0.90	0.857
D	250	4	5.44	1.19	0.890
Y	250	6	5.73	0.91	0.908
SD - Standard Deviation					
α - 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 0.000 (<0.05) which is significant, hence the model is fit for the data collected as shown in table 7

Chi-Square	DF	Sig.
205.078	115	0.000

Hypothesis Testing - Impact of Independent and Community Social Indicator on Social 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 of Individual and Community Social Indicator on Social Development.

Regression statistics in table 8 shows that correlation value R is 0.438, which depicts that there is moderate relationship between Individual and Community Social Indicator and Social Development. The value of R Square is 0.192 i.e. the model explains only 19% of variables and there may be other indicators of social development. The value of Durbin Watson test (1.997) depicts that the model is good as the value is near to 2.

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0.438	0.192	0.178	0.822460946187677	2.089
Predictors: D, C2, C3, C1 and Dependent Variable: Y				

Table 9 reveals that Social Indicators has significant impact on Social Development as F (calculated value) (14.518) 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 H₁ and H₂ are accepted.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	39.282	4	9.821	14.518	0.000
Residual	165.728	245	0.676		
Total	205.011	249			
Predictors: D, C2, C3, C1 and Dependent Variable: Y					

Among all the three antecedents of Individual Social Indicators, only one antecedent i.e. Communication (C2) has significant impact on Social Development with p value of 0.000, whereas community social indicator also has significant impact on social development with p value of 0.000 as shown in table 10

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.892	0.433		6.686	0.000
C1	0.119	0.075	0.110	1.587	0.114
C2	0.266	0.068	0.236	3.890	0.000
C3	0.034	0.073	0.033	0.466	0.642
D	0.264	0.045	0.345	5.877	0.000
Predictors: D, C2, C3, C1 and Dependent Variable: Y					

The beta coefficients for significant antecedent of Individual Social Indicators i.e. Communication (C2) is 0.266 and for community social indicator is 0.264. It depicts that if Communication is increased by 0.240 units, women’s will develop socially by 1 unit and if community social indicators are increased by 0.264 units, the women’s will develop socially by 1 unit.

V. Data Analysis And Interpretation

Reliability & Validity of Measures (Economic Indicators)

Research Hypothesis

Hypothesis 3 (H₃): There is a significant impact of individual economic indicators on economic development of rural women under self-help group.

Hypothesis 4 (H₄): There is a significant impact of community economic indicators on economic development of rural women under self-help group.

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 0.891, 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 11

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.891
Bartlett's Test of Sphericity	Approx. Chi-Square	3296.193
	df	190
	Sig.	0.000

EFA resulted into the convergence of four factors as hypothesized 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 66.461%, 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 12 yielded five factor corresponding to the five variables including independent and dependent variables. The result of factor analysis shows that all the items of both dependent and independent variables will be retained except X3 and X4 due to low and scattered loading values. All the 5 items of Income (A1) variables of Individual Economic Indicators i.e. A11, A12, A13, A14 and A15 will be retained due to high loading values of 0.849, 0.487, 0.885, 0.730 and 0.873 respectively. 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 0.954, 0.959, 0.700 and 0.649 respectively. All the 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 0.918, 0.750 and 0.903 respectively. 4 items of Community Economic Indicators (B) i.e. B1, B2, B3 and B4 will be retained due to high loading values of 0.586, 0.652, 0.888 and 0.733 respectively. 4 items of dependent variable Economic Development (X) i.e. X1, X2, X5 and X6 will be retained due to high loading values of 0.796, 0.514, 0.955 and 0.939 respectively. Hence, total 20 items will be considered for further multivariate analysis to test the hypothesis formulated under study.

% of variance explained after eliminating other factors after rotation	36.797	12.672	7.345	5.129	4.519	h^2 (communality coefficient)
	Factor					
Items	1	2	3	4	5	
A11	0.849					0.667
A12	0.487					0.366
A13	0.885					0.731
A14	0.730					0.662
A15	0.873					0.757
A21		0.954				0.819
A22		0.959				0.820
A23		0.700				0.663
A24		0.649				0.589
A31					0.918	0.787
A32					0.750	0.721

A33					0.903	.799
B1				0.586		0.399
B2				0.652		.448
B3				0.888		0.695
B4				0.733		0.528
X1			0.796			0.670
X2			0.514			0.536
X5			0.955			0.846
X6			0.939			0.789
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 13

Factor	A1	A2	A3	B	X
A1	1.000				
A2	0.539	1.000			
A3	0.484	0.246	1.000		
B	0.525	0.273	0.561	1.000	
X	-0.494	-0.555	-0.384	-0.210	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 14 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 2.5 (i.e. below average), which depicts that the women’s of self-help group are not 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 3.4 (i.e. below average), which depicts that the women’s does not develop economically after associating with the Self Help Group. Standard deviation depicts that the data are not very much deviated from the mean.

Variables	Sample Size	Items	Mean	SD	α
A1	250	5	2.49	1.00	0.889
A2	250	4	3.40	0.88	0.905
A3	250	3	3.11	0.95	0.902
B	250	4	2.99	0.84	0.799
X	250	4	3.37	1.42	0.895
SD - Standard Deviation					
α – 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 15

Chi-Square	df	Sig.
181.654	100	0.000

Hypothesis Testing - Impact of Individual & Community Economic Indicators 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 of antecedents of individual economic indicators on economic development.

Regression statistics in table 16 shows that correlation value R is 0.595, which depicts that there is moderate relationship between Economic Indicators and Economic Development. The value of R Square is 0.354 i.e. the model explains 35% of variables and there may be other indicators of economic development. The value of Durbin Watson test (2.000) depicts that the model is good as the value is 2.

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0.595	0.354	0.343	1.1488	2.000
Independent Variable: B, A3, A2, A1 & Dependent Variable: X				

Table 17 reveals that Individual Economic Indicators has significant impact on Economic Development as F (calculated value) (33.541) 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 H₃ and H₄ are accepted.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	177.063	4	44.266	33.541	0.000
Residual	323.341	245	1.320		
Total	500.404	249			
Independent Variable: B, A3, A2, A1 & Dependent Variable: X					

Among all the three antecedents of Individual Economic Indicators and community economic indicator, two antecedents i.e. Income (A1) and Resource Asset (A3) have significant impact on Economic Development with p values of 0.001 and 0.000 respectively, whereas community economic indicator (B) has also significant impact on economic development with p value of 0.000 as shown in table 18

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.191	0.592		3.703	0.000
A1	0.338	0.096	0.238	3.527	0.001
A2	-0.127	0.104	-0.079	-1.221	0.223
A3	0.346	0.094	0.231	3.661	0.000
B	0.618	0.098	0.364	6.295	0.000
Independent Variable: B, A3, A2, A1 & Dependent Variable: X					

The beta coefficients for significant antecedent of Economic Indicators i.e. Income (A1), Resource Asset (A3) and community economic indicator (B) are 0.338, 0.346 and 0.618 respectively. It depicts that if Income of women’s under Self Help Group is increased by 0.338 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 and if community is developed economically by 0.618 unit, women’s will develop by 1 unit.

VI. Results And Discussion

The result of the study is in accordance with various studies conducted on Self Help Groups within India and at international level like Zoë Oxaal (1997); Anju Malhotra (2002); Singh.D. N and Singh.R.H. (2012). It is found from the study that that Individual Economic Indicators, Community Economic Indicators, Individual Social Indicators and Community Social Indicators have significant impact on Socio-Economic Development of rural women’s through SHG. Hence, hypothesis H₁, H₂ H₃ and H₄ are accepted. As far as Individual Economic Indicator is concerned, Income and Asset Resource has significant impact on Economic Development with p values of 0.001 and 0.000, whereas community economic indicator (B) has also significant impact on economic development with p value of 0.000. The study reveals only one antecedent i.e. Communication (C2) has significant impact on Social Development with p value of 0.000, whereas community social indicator also has significant impact on social development with p value of 0.000.

It is found that the women’s of self-help group are not satisfied with the Income (Mean 2.5) 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 3.4 (i.e. below average), which depicts that the women's of Rajnandgaon district does not develop economically after associating with the Self Help Group.

The mean values of Individual Social Indicators i.e. Social Respect (C1), Communication (C2) and Mental Ability (C3) are 2.9, 3.6 and 2.7, which depicts that the women's of self-help group are not satisfied with the respect they get within the family, the communication system within the family and the individual confidence in women's

The Community Social Indicator (D) has mean value of 5.4, which depicts that women's are satisfied with the social activities happening in the community. Social Development (Y) has mean value of 5.7, which depicts that the women's develop socially after associating with the Self Help Group. It can be understood that community social indicators has larger affect on social development. It is found from the study that members are more socially developed as compared to economic development. . It because women are only engaged in inter group lending of thrift amount instead of utilizing their funds in small business or any other income and employment generating activities.

The study reveals that there is lack of awareness of savings among SHG members, due to which they are; unable to start their own venture. They use their entire credit amount for household or personal purpose. It is also found that women lack desires for self-employment activities, they are only engaged in inter-lending loan among group members. They are not getting proper training and guidance that how to best utilize the resources that are available to them.

VII. Suggestions

There are many financial institutions and government and NGO institutions are working in the State which provides micro credit to the people with minimum interest rates, though people are not much aware about it because of lack of ignorance and illiteracy. It is important to create awareness about the various schemes of government to the people of remote area so that they can get benefit of it. Government should take initiatives to start some income generating activities for self employment, provide training to the members. Government and NGOs should motivate the SHG member for self employment. The socio-economic development of rural women's of Rajnandgaon district of Chhattisgarh can be enhanced through focusing on the significant social and economic indicators proved in this study. The objective of SHG can only be fulfilled if those indicators are implemented and achieved.

VIII. Conclusion

The study was undertaken by the fact that in spite of eminent importance of SHG-based approaches in micro-finance, distinct evaluations of the impact of such intervention are still exiguous and that even studies pointing to clear social, empowerment, and economical gains were unable to ascertain the economic and social outcomes, as far as Chhattisgarh state is concerned.

SHG proves to be a powerful tool for the socio-economic development of women, it provides a platform to the women to discuss their problem enhance their skills and to improve their living standard. This study shows that there is positive impact on income level of the women, their assets and resources have been increased. It also bring changes in the decision making power of the women, now their suggestions and views are considered while making any decisions related to households. Their positions within the family and outside the family have become stronger. The communication skills of the women have been developed, they can communicate freely with outsiders without any hesitations. SHG women's are getting both socially and economically developed, their living standard has been improvised. The only thing they require they need is support from their family members, society and government. Government should provide timely training to the rural women.

The results of this study suggests that a program that not only facilitates group formation but also enlighten the provisions for more mature groups through association and one-to-one support, moreover credit access can have significant economic benefits in the long term.

Reference

- [1]. (Chatterjee), t. B. (2010). Economic impact of self-help groups - a case study. Journal of rural development, vol. 28, no. (4) , 451 - 467.
- [2]. Anju malhotra, s. R. (2002). Measuring women's empowerment as a variable in international development. World bank workshop on poverty and gender: new perspectives, (pp. 1-59).
- [3]. B.V. Anantha Ramu, D. B. (2012). SHG – BANK LINKAGE PROGRAMME. Shiv Shakti International Journal in Multidisciplinary and Academic Research (SSIJMAR) , 1-10.
- [4]. Babbie, e. R. (1992). The practice of social research. California: belmont, calif. : wadsworth pub. Co.
- [5]. Barrientos, M. (2015, june 30). India Economy Profile 2014. Retrieved oct 5, 2015, from [www.indexmundi.com: http://www.indexmundi.com/india/economy_profile.html](http://www.indexmundi.com/india/economy_profile.html)

- [6]. Boruah, S. D. (2013). Micro Finance Through Self Help Groups (shgs): A Tool For Socio-Economic Development of Rural Assam (A Case Study of Lakhimpur and Dhemaji District). DELHI SCHOOL OF PROFESSIONAL STUDIES AND RESEARCH (DPSR), NEW DELHI, IND (pp. 1-17). New delhi: Delhi School of Professional Studies and Research (DPSR).
- [7]. Bukhari, w. (2012, april 5). Phoolbasan Bai Yadav, a social entrepreneur leading the women brigade in Chhattisgarh - See more at: <http://www.merineews.com/article/phoolbasan-bai-yadav-a-social-entrepreneur-leading-the-women-brigade-in-chhattisgarh>. Rajnandgaon, chhattisgarh, india.
- [8]. C., m. G. (2013). Impact of microfinance on women empowerment: an economic analysis from eastern india. *African journal of agricultural research* , 5673-5684.
- [9]. Census of India : Population Enumeration Data (Final Population). (2011). Retrieved october 06, 2015, from census of india: http://www.censusindia.gov.in/2011census/population_enumeration.html?
- [10]. Chambers, r. (2005). Capacity building of self help groups. Tamilnadu: myrada.
- [11]. Deshpande, a. (2006). An evaluation of impact of shg on the social empowerment of women in maharashtra. New delhi: national commission for women new delhi.
- [12]. Dr. K. Kanniammal, d. J. (2011). Impact of micro finance through shg-bank linkage programme on women of rural priority communities in coimbatore district. *International journal of micro finance*, 34 - 42.
- [13]. Dr. Sushil kumar mehta, d. H. (2011). Role of self help groups in socio-economic change of vulnerable poor of jammu region. 2011 international conference on economics and finance research (pp. 519-523). Singapore: ipedr vol.4, iacsit press.
- [14]. Fernandez, a. P. (1996). Paper 19:credit management groups - guidelines for linking banks with cmgs | myrada. Retrieved from <http://www.myrada.org> : <http://myrada.org/myrada/rms19>
- [15]. Field, a. (2000). *Discovering statistics using spss for windows: advanced techniques for beginners (introducing statistical methods series)* . Paperback.
- [16]. Garikipati, s. (2008). The impact of lending to women on household vulnerability and women's empowerment: evidence from india. *World development*, 2620-2642.
- [17]. http://www.ifad.org/evaluation/public_html/eksyst/doc/insight/pi/india-13.htm assessed on:
- [18]. Hutcheson, graeme and nick sofroniou (1999). *The multivariate social scientist: introductory statistics using generalized linear models*. Thousand oaks, ca: sage publications.
- [19]. Lalneihzovi. (2007). *Women's development in india*. New delhi: mittal publication.
- [20]. Loveridge, s., & morse, g. W. (1997). Implementing local business retention and expansion visitation programs (nercrd no. 72). University park, pa: northeast regional center for rural development
- [21]. Manimekalai, k. (2004). Economic empowerment of women through self-help groups. Third concept.
- [22]. Midgley, j. (1995). *Social development: the developmental perspective in social welfare*. Louisiana: sage publication.
- [23]. Monique cohen, p. A. (1996). *Household economic portfolios*. Washington, d.c.: the microenterprise impact project.
- [24]. Narasiah, m. (2004). *Women and microcredit*. New delhi: sonali publications.
- [25]. P, v. (2009). Evaluation, problems and challenges of shg linked microenterprise development in india with special reference to kudumbashree in kerala. *The microfinance review - journal of the centre for microfinance research* , 32-53.
- [26]. P.umamaheswari, m.gurusamy, & jayakumar, d. A. (2013). A study on social impact of women self help groups in mettur taluk, salem district, tamilnadu. *International journal of social science & interdisciplinary research* , 1-16.
- [27]. Panda, d.k. (2009). "understanding microfinance", wiley india, new delhi.
- [28]. Pattanaik, s. (2003). *Empowerment through shg: a case study of gajapati district*. Smaranika.
- [29]. Raipur : chhattisgarh mahila kosh . (2015, may). Retrieved september 3, 2015, from chhattisgarh jansampark: <http://www.dprcg.gov.in/>
- [30]. Reji, d. (2013). Economic empowerment of women throuh self help groups in kerala. *International journal of marketing, financial services & management research*, 97-113.
- [31]. Reserve bank of India. 2008. "Report on trend and progress of banking in India, 2007-08." . Mumbai: reserve bank of India.
- [32]. S.k.mitra. (2012). SHG2: Revisiting the SHG Bank Linkage Programme. Mumbai: National Bank for Agriculture and Rural Development micro Credit innovation Department.
- [33]. Sana, s. (2015, august 26). Raipur : Women of Chhattisgarh taking development of state to another level . Chhattisgarh Department of Public Relations. Retrieved october 07, 2015, from Chhattisgarh Department of Public Relations: <http://dprcg.gov.in/2476e-26.8.15>
- [34]. Sana, s. (2015, may). Raipur : chhattisgarh mahila kosh. Retrieved september 3, 2015, from chhattisgarh jansampark: <http://www.dprcg.gov.in/>
- [35]. Sidbi (2008). *Assessing development impact of micro finance programmes*. Lucknow.
- [36]. Singh, d. H. (2014). An impact assessment of microfinance: a case study of socio-economic empowerment of shg members in manipur (india). *Paripex - indian journal of research*, 141-147.
- [37]. Singh.d. N and singh.r.h. (2012). Social impact of microfinance on SHG members: a case study of manipur, prabhandhan: indian journal of management.
- [38]. Sudhakar. (1993). *A handbook on forming self-help groups*. Mumbai: national bank for agriculture and rural development.
- [39]. Tamilnadu corporation for development of women - shgs. (2013). Retrieved august 28, 2015, from [www.tamilnadumahalir.org](http://www.tamilnadumahalir.org/sample-sites/mahalir/shgs.html): <http://www.tamilnadumahalir.org/sample-sites/mahalir/shgs.html>
- [40]. Thanigavel. (n.d.). Swarnjayanti Gram Swarozgar Yojana :: Ministry of Rural Development (Govt. Of India). Retrieved october 5, 2015, from Ministry of Rural Development (Govt. Of India): <http://rural.nic.in/sites/programmes-schemes-sgsy.asp>
- [41]. Tncdw. (2013). Tamilnadu corporation for development of women - shgs. Retrieved august 28, 2015, from www.tamilnadumahalir.org: <http://www.tamilnadumahalir.org/sample-sites/mahalir/shgs.html>
- [42]. United nations report: 'women in india - how free? How equal?' data on population and literacy are based on india census 2001.
- [43]. Van horn, m. (2003). Assessing the unit of measurement for school climate through psychometric and outcome analyses of the school climate survey. *Educational and psychological measurement*, 1002-1019.
- [44]. Venkatesh, s. A. (2015). Analysis of economic transformation of shg members in south thane district. *Tactful management research journal*, 180-184.
- [45]. www.self-help-approach/doc/trainingmanual
- [46]. Zoë oxaal, s. B. (1997). *Gender and empowerment: definitions, approaches and implications for policy*. Brighton: institute of development studies, brighton.