



ORIGINAL RESEARCH PAPER

Economics

ECONOMIC ANALYSIS OF FINANCIAL INCLUSION THROUGH SHGS - AN APPROACH OF INCLUSION OF THE EXCLUDED IN KARNATAKA

KEY WORDS: Financial Inclusion, Average Annual Growth, SHGs, Savings, Refinance and Karnataka

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ABSTRACT

The financial inclusion and its implementation in Karnataka have come a long way since the twenty years and the results are also quite fair. Achieving financial inclusive growth of the excluded segment is not only important but also has the biggest challenging task for Karnataka. In such a way, the role of SHGs in improving the status of financial inclusion and the socio-economic condition of the marginalized section is immense and crucial. Hence, in this paper, an attempt is made to analyze the growth of SHGs in terms of numbers, savings, and refinance, and also measure the impact of SHGs on financial inclusion with the help of secondary data. The exponential growth model and Multiple Regression Models have used to measure the average annual growth and the relationship between the SHGs and Financial Inclusion in Karnataka. The results revealed that there is a significant growth in SHGs and also it has a positive relationship with the variables which determine financial inclusion. Further, financial inclusion ensures the accessibility of financial services to the excluded segment of the society, especially among rural people. Therefore, the role of SHGs is really notable.

1. INTRODUCTION

The financial inclusion and its implementation in Karnataka have come a long way since the twenty years and the results are also quite fair. Despite witnessing considerable progress in financial sector reforms in Karnataka, it is overwhelming to note that nearly half of the rural population even today does not have any access to any source of funds institutionally. Hardly 1/4th of the rural households are assisted by the banks. Hence, the major task before banks is to bring most of those financially excluded, i.e. 75% of the rural households, under the banking fold. But this is not so easy since most of them are illiterate, poor, and unorganized. They are also spread widely. In addition, there is a growing divide, with an increased range of personal finance options for a segment of the high and upper-middle-income population and a significantly large section of the population who lack access to even the most basic banking services. This is termed as "Financial exclusion". Financial exclusion can be geographical exclusion, exclusion on the grounds of charges, exclusion due to ignorance & also self-exclusion. What is considered necessary is to improve their standard of living by initiating new/increased economic activities in rural as well as urban areas with the help of banks, NGO's and local developmental agencies. Most importantly, it is necessary to develop a fair understanding of their profile.

In addition, their perception of the bank and its services needs to be understood first. So there is a need for the formal financial system to look at the increasing financial literacy and financial counseling to focus on financial inclusion and distress amongst rural households especially farmers. In Karnataka, banks, financial institutions, and financial market players should actively look at promoting such programs as a part of their corporate social responsibility. Banks should conduct full-day programs for their customers including farmers for counseling small borrowers for making aware of implications of the loan, how interest is calculated, and so on so that they are totally aware of the term financial inclusion and its features. There is clearly a lot that requires to be done in this particular area. In such a way, SHGs play a vital role in involving the financially excluded population in inclusion. Keeping the above background this paper studies the role of SHGs in financial inclusion in Karnataka.

2. The Need for Financial Inclusion

Presently, Karnataka needs inclusive growth in order to accomplish rapid and disciplined growth of the economy. Inclusive growth is necessary for sustainable development as well as the equitable distribution of wealth and prosperity.

Achieving inclusive growth of the excluded segment is not only important but also has the biggest challenging task for Karnataka. The challenge is to take the levels of growth to all sections of the society and to all parts of the country. Rapid growth in the rural economy, sustainable urban growth, infrastructure development, reforms in education, health, ensuring future energy needs, a healthy public-private partnership, intent to secure inclusivity, making all sections of society equal stakeholders in growth, and above all good governance will make sure that Karnataka achieves what it deserves. The main thrust areas for the need for inclusive growth can be considered as removal of poverty and unemployment, income inequalities, agricultural development, reduction in regional disparity, development of the social sector, and protecting the environment.

However, for attaining the main objectives of inclusive growth there is a need for resources, and for resource generation and mobilization financial inclusion is much required. It plays a very crucial role in the process of economic growth of the country. Financial inclusion through appropriate financial services can solve the problem of resource availability, mobilization, and allocation particularly for those who do not have any access to such resources especially marginalized sections of the society. In addition, the significant growth and development of self-help groups in the process of availing of financial services through the SHG Bank Linkage Programme are drawing the attention of many academicians and policymakers. Thus in the current paper, an effort is made to study the role of SHG in financial inclusion in Karnataka coherently.

3. OBJECTIVES

Important objectives of the study are;

- To examine the growth of SHGs in Karnataka.
- To study the relationship between SHGs and financial inclusion in Karnataka.

4. Hypothesis

The following hypothesis is formulated on the basis of the above objectives.

- H₁: There is a positive relationship between financial inclusion and the growth of SHGs in Karnataka.

5. METHODOLOGY

The study is both descriptive and analytical in nature and it has prepared purely on the basis of secondary data collected from NABARD Reports 2000-01 to 2017-18. The study has used the exponential growth model to analyze the growth of the

number of SHGs credit linked, bank loans, and refinance. The Multiple Regression Model is used to measure the impact of SHGs on financial inclusion in Karnataka.

The exponential growth rate is obtained with the help of estimated regression coefficient, subtracting 1 from it and multiplying the difference by 100, as under.

$$Y_t = \beta_0 + \beta_1 t + U_t \text{-----(1)}$$

$$Gre = (A.L. \beta_1 - 1) \times 100 \text{-----(2)}$$

Where Gre is exponential growth, A.L is anti-log, β_1 is an estimate for all the significance of growth rates and is tested by applying appropriate regression analysis.

In addition, the study empirically examines the various determinants of financial inclusion in Karnataka. The study has used time series data collected from various RBI reports from the year 2010 to 2019. To analyze the impact of SHGs on the determinants of financial inclusion like savings and bank branches by employing the following multiple regression model.

The model has been built as follows;

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + U_t \text{-----(1)}$$

$$BB = \beta_1 + \beta_2 SA + \beta_3 SHG + U_t \text{-----(2)}$$

Where BB is bank branches is the dependent variable, β_1 to β_3 are the parameters to be estimated i.e., SA is savings amount, SHG is self help groups and the U is the disturbance term which is as usual statistical properties.

6. Growth and Development of SHGs in Karnataka

The growth of SHGs is very considerable in Karnataka since its origin. The role of SHGs in improving the status of financial inclusion and the socio-economic condition of the marginalized section is immense and crucial. The increasing trends in the growth of the number of SHGs which are credit-linked, sanctioned bank loans, saving amounts, and the refinance capacity have witnessed the vital role of SHGs in the process of financial inclusion especially towards the rural segment of the economy. Hence, in this section, the study tries to analyze the role of SHGs in improving the socio-economic status of the marginalized segments of the State. Here the study has used the data of the number of SHGs, bank loans, saving amount and the refinance from the year 2000-01 to 2017-18 and also used the exponential growth model to assess the annual growth of the said data.

Table 1: Growth and Performance of SHGs in Karnataka

Year	No. of SHGs credit linked	Bank Loan (Rs. In lakhs)	Refinance (Rs. in lakhs)
2007-08	94280	100446.47	12699.52
2008-09	60319	120702.37	19219.00
2009-10	66351	132772.607	21140.9
2010-11	72986	146049.868	23254.99
2011-12	80285	160654.856	25580.489
2012-13	88313	176720.34	28138.538
2013-14	175778	296402.33	31166.78
2014-15	225031	480337.12	37456.98
2015-16	281389	625908.11	42899.56
2016-17	343173	761181.48	48976.01
2017-18	425560	920088.34	52132.33

Source: Compiled from various issues of Status of Microfinance in India, NABARD

The growth and performance of SHGs in terms of number of SHGs, bank loans and refinance in Karnataka for the year from 2007-08 to 2017-18 is displayed in table 1. As shown in the table, in the year 2007-08 there were 94280 SHGs which have increased to 425560 in the year 2017-18. Whereas, the bank loan was 100446.47 lakh in 2007-08 which has increased

tremendously to 920088.34 lakh in 2017-18. Likewise, in the year 2007-08, the amount of refinancing was 12699.52 lakh which has increased to 52132.33 lakh in the year 2017-18. On the whole, there is a considerable growth is registered in the growth of SHGs in terms of numbers, bank loans and refinance in Karnataka during the reference period.

The study has also made an attempt to examine the average annual growth of the above indicators with the help of the exponential growth model to know the growth of the said indicators which is an important and considerable phenomenon for financial inclusion and the results are reported in the below table.

Table 2: Results of the Exponential Growth Model

Variables	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Number of SHG	.841	47.488	1	9	.000	4.156E4	.199
Bank Loan	.941	143.575	1	9	.000	6.339E4	.237
Refinance	.969	286.036	1	9	.000	1.334E4	.128

Source: Computed by the authors

According to the above reported results of the exponential growth model, it is revealed that the average annual growth of the number of SHGs is 19.9 percent which is also statistically significant at 1 percent level with the R squared value of 0.841. And the F value of the model is 47.488. It means that on an average the number of SHGs increased by almost 20% in the study period. Similarly, the average annual growth of bank loans is 23.7 percent which is also statistically significant at the 1 percent level with the R square value of 0.941. The F value is 143.575 which indicates that the amount of bank loan increased by almost 24% in the reference period. Lastly, the average annual growth of refinance is 12.8 percent which is also statistically significant at the 1 percent level with the R squared value of 0.969. The F value is 286.036 which indicates that the refinance also increased by almost 13% during the said period. In sum, the average annual growth of the number of SHGs with credit linked, bank loan outstanding, and the refinance is tremendously increased annually which means that there is positive growth in SHGs and its supportive indicator.

7. The Relationship between SHGs and Financial Inclusion in Karnataka

SHGs have been playing a significant role in achieving financial inclusion in India as well as Karnataka. Self-Help groups have helped in accumulating member savings, internal loans to group members, and access to bank loans. Through micro-finance, these have been linked with many banks which prove cost-effective for banks and better finance for the members of the SHGs. Some Microfinance institutions are now stand alone and have become giant players in the process. SHGs have often resulted in low delinquencies through group enforcement, which has been a major concern of bank lending in rural areas of the State. Moreover, it results in a multiplier effect, the bank does not link just one entity to the formal financial sector but all of its members. Hence, opening one savings account means linking all its members to the bank accounts. Consequently, branch penetration, deposit penetration, and a credit will be increased proportionately. Therefore, there is a positive relationship between the growth of SHGs and financial inclusion.

To examine the direct relationship between the growth of SHGs and financial inclusion, the study has made an effort to analyze the same with the help of a regression model. Here, the study has selected three important variables to measure the relationship. First, the study has considered the bank branches as a dependent variable, and the remaining two variables i.e., savings amount and the number of SHGs with credit linked determine the trends of bank branches which

lead to financial inclusion. The study tries to examine how the growth of SHGs and saving amounts has an influence on the growth of bank branches. In the following section, the study tries to measure the relationship between the growth of SHGs with credit linked and savings and bank branches in Karnataka during the year from 2010-2019.

Table 3: Results of Relationship between SHGs and Financial Inclusion in Karnataka

Dependent Variable: Bank Branches				
Method: Least Squares				
Sample: 2010 2019				
Included observations: 10				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Savings	0.026609	0.014035	1.895886	0.0998
SHGs	0.077660	0.017301	4.488757	0.0028
C	6993.246	1022.981	6.836144	0.0002
R-squared	0.788945	Mean dependent var		9595.500
Adjusted R-squared	0.728644	S.D. dependent var		2018.830
S.E. of regression	1051.647	Akaike info criterion		16.99743
Sum squared resid	7741728.	Schwarz criterion		17.08820
Log likelihood	-81.98714	Hannan-Quinn criter.		16.89785
F-statistic	13.08335	Durbin-Watson stat		0.936588
Prob(F-statistic)	0.004319			

The result of the Multiple Regression Model is reported in table 3. As shown in the above table, both saving amount and the number of SHGs with credit linked has statistically significant and the R Squared value is 0.788 and 78% of the variations is explained by the explanatory variables of the model. As per the co-efficient values shows, there is a positive relationship between bank branches and the saving amount and it is statistically significant at the 10 percent level which means that one percent increase in the level of the saving amount leads to an increase in bank branches by 0.0266% with the 't' value of 1.895. Similarly, the number of SHGs with credit linked also having a positive relationship with bank branches and it is also statistically significant at 1 percent level. It means that a one percent increase in the number of SHGs with credit linked leads to an increase in bank branches by 0.0776% with the 't' value of 4.488. Therefore the hypothesis i.e., there is a positive relationship between financial inclusion and the growth of SHGs in Karnataka is accepted.

From the above analysis, it is quite clear that financial inclusion has influenced by many factors like saving amount and the number of SHGs with credit linked. And the results reveal that the variables like savings amount and the number of SHGs with credit linked have a positive influence on financial inclusion which means on bank branches as per study expectations.

In sum, in recent years financial inclusion has been given top priority as financial development and economic growth are interdependent. Inclusion of the people who are excluded from access to financial services is a challenging task for a developing economy like India as well as Karnataka. Many of the schemes, policies, and programs, as well as technological interventions, ensure financial literacy in the State but still, it has several constraints when it takes into account rural and urban disparities. In spite of the notable progress made by the state in improving financial literacy, the growth of SHGs and their performance have also been playing a vital role in accomplishing financial inclusion through SHG bank linkage programs. Rural women are well aware of the significance of the SHGs and their benefits in providing institutional credit for their productive activities which ensure their livelihood. Consequently, the majority of them have intended to save some portions of their income in the form of savings at banks.

So, they lead to an increase in their numbers in terms of SHGs, savings, loan outstanding as well as refinance. This phenomenon results in a tremendous influence in the increase of bank branches in both rural as well as urban areas. Keeping in view of all the above discussion, the present paper has made an attempt to evaluate the growth of SHGs and their impact on financial inclusion in Karnataka. The results revealed that notable progress is made in SHGs, bank loan outstanding, and refinance which leads to influence positively on financial literacy. In addition, it is very clear from the regression results that, there is a positive relationship between bank branches and the remaining saving amount and the SHGs growth in Karnataka during the reference period.

Moreover, financial inclusion ensures the accessibility of financial services to the excluded segment of the society, especially among rural people. In such a way the role of SHGs is really tremendous. Hence, the government needs to concentrate more on this program to make a positive change in financial literacy in the state.

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