

SHG-BANK LINKAGE PROGRAMME AND FINANCIAL INCLUSION: Rural Household Study in Davangere District of Karnataka.

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1. Introduction

The Indian banking sector today is grappling with the issue of financial inclusion. Financial inclusion is defined as the process of ensuring access to timely and adequate credit and financial services by vulnerable groups at an affordable cost (Kamath, 2007). Financial inclusion was envisaged and embedded in Indian credit policies in the earlier decades also, though in a disguised form and without the same nomenclature (Rao, 2007) and emphasis. Increasing access to credit for the poor has always remained at the core of Indian planning in fighting against the poverty. Starting in the late 1960s, India was home to one of the largest state intervention in the rural credit market (Khandelwal, 2007).

The ‘social banking’ policies being followed by the country resulted in widening the ‘geographical spread and functional reach’ of commercial banks in rural area in the period that followed the nationalisation of banks (Shetty, 1997). Despite having a wide network of rural bank branches in India which implemented specific poverty alleviation programmes that sought creation of self employment opportunities through bank credit, a very large number of the poorest of the poor continued to remain outside the fold of the formal banking systems (NABARD, 1999). Social banking policies made appreciable achievement in shifting the commercial banks’ focus from ‘class banking’ to ‘mass banking’ but their achievement is very poor in taking the commercial banks’ focus to the ‘poorest of the poor’.

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The problems in the beginning of 1990s were two fold i.e. institutional structure was neither profitable in rural lending nor serving the needs of the poorest. In short, it had created a structure which was 'quantitatively impressive but qualitatively weak' (Mishra, 2006). Reaching the poorest, whose credit requirements were very small, frequent and unpredictable, was found to be difficult. Further, the emphasis was on providing credit rather than financial products and services including savings, insurance, etc. to the poor to meet their simple requirements (Ansari, 2007). Therefore, need was felt for alternative policies, systems and procedures, savings and loans products, other complementary services and new delivery mechanisms, which would fulfill the requirements of the poorest. As a result National Bank for Agriculture and Rural Development (NABARD), in India, launched its pilot phase of the Self Help Group (SHG) Bank Linkage programme in February 1992. SHGs are small informal associations created for the purpose of enabling members to reap economic benefit out of mutual help, solidarity and joint responsibility. These small and homogeneous groups involved in savings and credit activities are capable of taking care of the risks through peer monitoring. The main advantage to the banks of their links with the SHGs is the externalisation of a part of the work items of the credit cycle, viz, assessment of credit needs, appraisal, disbursal supervision and repayment, reduction in the formal paper work involved and a consequent reduction in the transaction costs (Rangarajan, 1996).

Since 1992, SHG-bank linkage programme has been promoting micro finance facilities to the poor. Almost since the same period, financial sector has been witnessing the market oriented reforms. The focus in the period of reforms was on enhancing the efficiency and profitability of banking system that had allegedly got neglected on account of the objective of social banking in the earlier decades. Exclusion of the disadvantaged and dispossessed is intrinsic to the functioning of markets in the dawn of market oriented reforms in the financial sector. It widens the rich-poor divide in availing institutional borrowing. In the rural areas 70 per cent of borrowings of the richest households were institutional in nature while this share was 18 per cent for the poorest households (NSSO, 2006). Indeed, in the era of financial liberalisation, the pursuit of financial inclusion appears to be an arduous task (Chavan, 2007). But the country cannot afford to have an

elite minority enjoying services offered by banks and a large unorganised majority in the cash and barter mode. This divide, apart from undermining economic growth, could engender social tensions. Sustained growth of the nation and its continued prosperity depend critically on universal financial services coverage of all people (Srinivasan, 2007). Further, empirical evidence shows that inclusive financial system significantly raise growth, alleviate poverty and expand economic opportunity (More and Ananth, 2007).

The SHG-Bank linkage programme in which SHGs are linked to banks in a gradual way-initially through savings and later through loan products- is considered to be an effective strategy to ensure financial inclusion. In this backdrop, this study has been undertaken with the specific objective of analysing the impact of SHG-Bank linkage programme on the financial inclusion. The hypotheses formulated for the empirical verification through this study are;

- i) SHG-Bank linkage programme increased the flow of institutional credit to the vulnerable section,
- ii) There is association between the degree of financial inclusion and the participation in SHGs.

2. Methodology

2.1 The Study Area: The study is based on the primary data collected in Davangere district of Karnataka state. The district covers a total geographical area of 5975.97 Sq km spreading over 6 taluks. The total population of the district, as per 2001 census, is 17,90,952. The district is primarily agrarian in character consisting of 243747 farm households. Majority of the farm households belong to marginal (43%) and small size (30%) category. The normal rainfall of the district is 644mm. Canals accounting for 53 per cent of total net area irrigated created regional disparity within the district. It is one of the districts of the state where large number of farmers' suicide have been reported in recent years. Though the district is being served by 87 branches of commercial banks and 42 branches of regional rural banks besides a large number of credit cooperative societies financial inclusion continued to be a major challenge. Government agencies and many

NGOs are promoting SHGs to face this challenge. The socio-economic environment of the district provides strong case for the purposeful selection of the district for this study.

2.2 Sampling Design and Data Collection: In the first step four taluks of the district were randomly selected. Four villages which are not connected with canal irrigation were randomly selected from each taluks. Households of each village were stratified into landless, marginal (less than 2.5 acres), small (2.5 to 5 acres), medium (5 to 10 acres) and large (more than 10 acres) farm category. From each village, considering the land holding distribution in the study area, 2 landless, 4 marginal, 4 small, 3 medium and 2 large farm households were randomly selected from each village. Thus, totally 240 rural households were selected by using multistage stratified random sampling method. Primary data on the demographic profile of the family, borrowing and saving details, involvement in SHG were elicited from these households by using pre-tested, well structured schedule.

2.3 Concepts and Analytical Framework: Financial Inclusion covers a wide array of services by banking sector. According to Mor and Ananth (2007) financial inclusion, at a minimum, may be interpreted to mean the ability of every individual to access basic financial services which include savings, loans and insurance in a manner that is reasonably convenient and flexible in terms of access and design and reliable in the sense that savings are safe and that insurance claim will be paid with certainty. Rao (2007) was of the opinion that though the financial inclusion covers a wide array of services by the banking sector, one crucial area relate to borrowings from banks by the lower strata of the unorganized segment of the economy. Further, debt owed to institutional and non-institutional source could be used as barometer of degree of financial inclusion in the two sectors. Thorat (2007) used the percentage of adult population having bank accounts as a measure of financial inclusion in the payment system. Similarly he used the percentage of adult population having loan account as a measure of financial inclusion in formal credit market.

In this study arithmetic mean values of borrowing during 1-7-2006 to 1-6-2007 from institutional and non-institutional sources were computed separately for the households 'without SHG' and households 'with SHG'. Former are those which have not

even a single family member involved in SHG either as an ordinary member or as a leader of the group and the latter are those which have at least one member of the family who is involved in SHG either as an ordinary member or as a leader of the group. Significance of the difference in the mean values of borrowing between the households without SHG and with SHG was tested by using the 't' test. The relative share of institutional and non-institutional sources in total borrowing were also computed and used as one of the indicators of the degree of financial inclusion. Further, seven important financial services which are given in table 3 were selected and the extent of households' inclusion into these services was estimated in terms of percentages.

Financial inclusion index, which measures the degree of financial inclusion, has been developed by giving appropriate weights to the selected financial services. Bank officials and knowledgeable farmers were consulted in order to understand the farmers' financial needs. In the light of the experience gained through consultation, some important financial services were selected and the weights were assigned for computing the financial inclusion index. Details of financial services selected for developing the financial inclusion index and their corresponding weight are given in table 1: Highest weight has assigned to borrowing from institutional sources (50) followed by savings with institutional agencies (25) and other financial services (25). A rural farm household, which is best in its transactions with banks and cooperatives, borrows the crop loan every year. Though relatively higher weight (30) has been given to current borrowing (2006-07) from institutional sources and/or SHGs, additional weights have been assigned to institutional and/or SHGs borrowing during 2005-06 (10) and 2004-05 (10).

Small and frequent borrowing from the internal resources of the SHGs may overweigh households with SHGs. Therefore, borrowings from the SHGs which are from the institutional resources were considered for giving weight. Since saving is compulsory for the SHG members, relatively lower weight (5) has been assigned to saving in SHG to avoid the possible overweight to Households with SHG. Other weights given in the table are self explanatory. The household which availed all the financial services will get 100 weights whereas the one which did not avail any of these services will get 0 weights. The total weights of an individual household show its degree of financial inclusion.

Households with as well as without SHGs were further classified based on the degree of financial inclusion. Chi-square test (χ^2) was applied to test the significance of the association between the membership in SHGs and the degree of financial inclusion.

Table 1: Financial Services and Corresponding Weights

Financial Services	Weight if Answer is		Maximum Weight
	No	Yes	
Borrowing from Institutional Sources			50
i) Has the household borrowed directly from institutional agencies and/or through SHG during 06-07?	0	30	
ii) Has the household borrowed directly from institutional agencies and/or through SHG during 05-06?	0	10	
iii) Has the household borrowed directly from institutional agencies and/or through SHG during 04-05?	0	10	
Saving in Institutional Agencies			25
i) Is the household having at least one SB account in bank or post office?	0	10	
ii) Is the household having at least one recurring and/or fixed deposit in bank or post office?	0	10	
iii) Is the household saving in SHG?	0	5	
Other Financial Services			25
i) Is any adult member/s of your family covered under life insurance?	0	10	
ii) Is any asset/s of your family covered under insurance?	0	5	
iii) Is your family having at least one ATM card?	0	5	
iv) Is your family having at least one credit card?	0	5	
Total	0	100	100

3. Results and discussion

Primary data collected from 240 randomly selected rural households were analysed and the results are interpreted in this section. Post enumerative classification of the households into the households ‘without SHG’ and ‘with SHG’ was made. Distribution of the sample respondents across the different groups is summarised in table 2. Out of 240 randomly selected sample households 140 were with SHG and the remaining 100 were without SHG. Percentage of Households with SHG decreases with the Size of the farm.

Arithmetic mean values of borrowing by the households without SHG and with SHG are given in table 3. Percentage share of institutional and non-institutional sources in the total borrowing of the respective farm size group was computed for both the groups

of households. Percentage share of institutional sources in the total borrowing is more among the households with SHG compared to the households without SHG in all the farm size group but the difference is more among the land-less and marginal farm size group. It is generally believed that the flow of institutional credit to vulnerable groups will increase with the SHG-Bank linkage programme. For the empirical verification of this hypothesis ‘t’ test was applied.

Table 2: Distribution of Sample Respondents

Farm Size Category	Membership in SHG		Total
	Without SHG	With SHG	
Land Less Families	12 (37.5)	20 (62.5)	32 (100)
Marginal Farmers	26 (40.6)	38 (59.4)	64 (100)
Small Farmers	14 (21.9)	50 (78.1)	64 (100)
Medium Farmers	28 (58.3)	20 (41.7)	48 (100)
Large Farmers	20 (62.5)	12 (37.5)	32 (100)
Total	100 (41.7)	140 (58.3)	240 (100)

Note: Figures in parenthesis indicate percentage to row total

Among marginal farmers, the mean value of institutional borrowing by the families with SHG (Rs.8800) was found to be considerably more compared to the households without SHG (Rs.4769). The calculated ‘t’ value between these two means was found to be greater than the critical value at 5 percent probability level. Therefore, the difference is statistically significant. In case of landless households, institutional credit is available only through the SHGs. Though there is difference between the households without SHGs and with SHGs in the mean values of institutional borrowing by the small, medium and large farm size group, they are not statistically significant. Another important finding of this study is that all the size groups of households with SHG, excepting the landless borrow considerably lower amount from non-institutional sources compared to their counterparts without SHG. This difference was found to be statistically significant for pooled as well as marginal size group. It might be because SHGs, besides creating thrift culture, discourage their members to borrow from non-institutional sources. Thus SHGs have definitely increased the flow of institutional credit to credit-thirsty landless and marginal farm households and discouraged non-institutional borrowing through the thrift creation.

Percentage of households included in seven important financial services is consolidated in table 4. Percentage of households which borrowed from institutional sources during 2006-07 increases with farm size. Among landless and marginal farm size category, it was considerably more in the households with SHG compared to their counterparts without SHG. Such difference is not considerable among small, medium and large size groups. Since the saving is compulsory for the SHG members, the percentage of households which saved with the formal institutions is cent percent in the households with the SHG irrespective of their farm size group whereas for the households without SHG it ranges from 0 per cent in case of landless to 50 percent in case of large farm households. Percentage of households included in the financial services like SB accounts, recurring and/or fixed deposits and life insurance increases with the increase in farm size. The percentage of inclusion is relatively more among the households with SHG. It is particularly true in the case of landless and marginal farm size group. SHGs have not made any impact on the financial services like asset insurance, ATM and credit card services. These services have not reached rural areas in general and landless and marginal farm households in particular.

The degree of financial inclusion of each household was computed by using the method explained in the section 2.3. The two way classification of the respondents based on their degree of financial inclusion and the membership in the SHG was made and the results are given in table 5. The Chi-square test (χ^2) was made to verify the significance of the association between the degree of financial inclusion and the membership in the SHG. Percentage of household reached the medium and high degree of financial inclusion increases with the size of the land holding. No household belonging to landless and marginal farm size category reached the high degree of financial inclusion whereas 62.5 per cent of large farmers reached the high degree of financial inclusion. In the overall farm size category 18.6, 50 and 31.4 percentage of households with SHG were in low, medium and high degree of financial inclusion while the corresponding values for the households without SHG were 40 and 30 each. The calculated chi-square (χ^2) value (15.378) was found to be statistically significant at 1 percent probability level.

Table 3: Arithmetic Mean Values of Borrowings During 1-7-2006 to 30-6-2007

(Values in Rupees)

Sources of Borrowing	Farm Size Group	Without SHG	With SHG	Total	't' Value
Institutional	Landless (32)	0 (0.0)	4000 (80.8)	2500 (77.7)	3.750*
	Marginal (64)	4769 (49.6)	8800 (91.3)	7163 (74.4)	1.684**
	Small (64)	19142 (58.8)	18824 (71.8)	18894 (68.4)	0.063
	Medium (48)	37428 (64.8)	26900 (57.1)	33042 (62.0)	1.477
	Large (32)	29000 (58.0)	41416 (71.9)	33656 (63.7)	1.079
	Pooled (240)	20200 (60.7)	17076 (70.1)	18377 (65.5)	1.070
Non-Institutional	Landless (32)	333 (100.0)	950 (19.2)	719 (22.3)	.885
	Marginal (64)	4846 (50.4)	842 (8.7)	2469 (25.6)	3.219*
	Small (64)	13428 (41.2)	7400 (28.2)	8719 (31.6)	1.564
	Medium (48)	20357 (35.2)	20200 (42.9)	20292 (38.0)	0.021
	Large (32)	21000 (42.0)	16166 (28.1)	19188 (36.3)	0.542
	Pooled (240)	13080 (39.3)	7278 (29.9)	9696 (34.5)	2.586*
Total	Landless (32)	333 (100.0)	4950 (100.0)	3219 (100.0)	4.045*
	Marginal (64)	9615 (100.0)	9642 (100.0)	9631 (100.0)	0.010
	Small (64)	32571 (100.0)	26224 (100.0)	27613 (100.0)	1.043
	Medium (48)	57785 (100.0)	47100 (100.0)	53333 (100.0)	1.193
	Large (32)	50000 (100.0)	57583 (100.0)	52844 (100.0)	0.534
	Pooled (240)	33280 (100.0)	24354 (100.0)	28073 (100.0)	2.296**

Note: Figures in parentheses are percentage to the total borrowing of the respective farm size group

* and ** indicate the significance of the difference at 1 and 5 per cent probability level.

Table 4: Percentage of Households Included in Important Financial Services

Financial Services	Farm Size	Without SHG	With SHG	Total
Percentage of Households Borrowed from Institutional Sources during 06-07	Landless (32)	0.0	60.0	37.5
	Marginal (64)	38.5	63.2	53.1
	Small (64)	71.4	80.0	78.1
	Medium (48)	78.6	80.0	79.2
	Large (32)	85.0	100.0	90.6
	Pooled (240)	59.0	74.3	67.9
Percentage of Households Saved in Formal Institutions	Landless (32)	0.0	100.0	62.5
	Marginal (64)	7.7	100.0	62.5
	Small (64)	42.9	100.0	87.5
	Medium (48)	42.9	100.0	66.7
	Large (32)	50.0	100.0	68.7
	Pooled (240)	30.0	100.0	70.8
Percentage of Households Having at Least One SB Account in Bank or Post Office	Landless (32)	0.0	10.0	6.3
	Marginal (64)	7.7	26.3	18.8
	Small (64)	42.9	48.0	46.9
	Medium (48)	42.9	40.0	41.6
	Large (32)	40.0	50.0	43.8
	Pooled (240)	28.0	35.7	32.5
Percentage of Households Having at Least One Recurring and/or Fixed Deposit in Bank or Post Office	Landless (32)	0.0	20.0	12.5
	Marginal (64)	7.7	31.6	21.9
	Small (64)	14.3	40.0	34.4
	Medium (48)	35.7	60.0	45.8
	Large (32)	30.0	66.6	43.8
	Pooled (240)	20.0	40.0	31.7
Percentage of Households Having at Least One Member Covered Under Life Insurance	Landless (32)	16.7	20.0	18.8
	Marginal (64)	19.2	21.1	20.3
	Small (64)	28.6	76.0	65.6
	Medium (48)	64.3	70.0	66.7
	Large (32)	70.0	83.3	75.0
	Pooled (240)	45.0	52.9	49.6
Percentage of Households Having at Least One Asset Covered Under Insurance	Landless (32)	0.0	0.0	0.0
	Marginal (64)	0.0	0.0	0.0
	Small (64)	28.6	12.0	15.6
	Medium (48)	35.7	10.0	25.0
	Large (32)	60.0	83.3	68.8
	Pooled (240)	26.0	12.9	18.3
Percentage of Households Operating ATM and/or Credit Card	Landless (32)	0.0	0.0	0.0
	Marginal (64)	0.0	0.0	0.0
	Small (64)	14.3	8.0	9.4
	Medium (48)	28.6	0.0	16.7
	Large (32)	10.0	50.0	25.0
	Pooled (240)	12.0	7.1	9.2

The association between membership in the SHG and the degree of financial inclusion is statistically significant. Therefore, it could be inferred that the degree of financial inclusion could be increased with implementation of SHG-Bank linkage programme. Though the percentage of household reached the medium and high degree of financial inclusion is relatively more among the SHG member households compared to non-member households in all the farm size groups, the chi-square value (χ^2) was found to be statistically significant only for landless, marginal and small farm size category. Therefore it could be inferred that SHG-Bank linkage programme increased the degree of financial inclusion among landless, marginal and small farm size category. But no such inference could be drawn with respect to the medium and large farm group.

Table 5: Association between Degree of Financial Inclusion and Membership in SHGs

Farm Size Group	Degree of Financial Inclusion				χ^2
	Low 0-30	Medium 30-60	High 60-90	Total 0-90	
Land Less Families					
Without SHG	12(100.0)	0(0.0)	0(0.0)	12(100)	9.102*
With SHG	8(40.0)	12(60.0)	0(0.0)	20(100)	
Total	20(62.5)	12(37.5)	0(0.0)	32(100)	
Marginal Farmers					
Without SHG	16(61.5)	10(38.5)	0(0.0)	26(100)	8.788*
With SHG	14(36.8)	24(63.2)	0(0.0)	38(100)	
Total	30(46.9)	34(53.1)	0(0.0)	64(100)	
Small Farmers					
Without SHG	4(28.6)	4(28.6)	6(42.8)	14(100)	7.867**
With SHG	2(4.0)	22(44.0)	26(52.0)	50(100)	
Total	6(9.4)	26(40.6)	32(50.0)	64(100)	
Medium Farmers					
Without SHG	6(21.4)	8(28.6)	14(50.0)	28(100)	2.597
With SHG	2(10.0)	10(50.0)	8(40.0)	20(100)	
Total	8(16.7)	18(37.5)	22(45.8)	48(100)	
Large Farmers					
Without SHG	2(10.0)	8(40.0)	10(50.0)	20(100)	3.840
With SHG	0(0.0)	2(16.7)	10(83.3)	12(100)	
Total	2(6.2)	10(31.2)	20(62.5)	32(100)	
Pooled					
Without SHG	40(40.0)	30(30.0)	30(30)	100(100)	15.378*
With SHG	26(18.6)	70(50.0)	44(31.4)	140(100)	
Total	66(27.5)	100(41.7)	74(30.8)	240(100)	

Note: Figures in parentheses are percentage to the respective row total.

* and ** indicate significance at 1 and 5 percent probability level respectively

4 Conclusions

Results of this study clearly show that the SHG-Bank linkage programme has increased the flow of institutional credit to landless and marginal farm households and discouraged non-institutional borrowing through the thrift creation. Financial inclusion index, which measures the degree of financial inclusion, has been computed for each household by giving appropriate weight to the selected financial services. Based on the index value, households were classified into the households with low, medium and high degree of financial inclusion. Percentage of household which reached the medium and high degree of financial inclusion, increased with the size of the land holding. The percentage of households, which reached the higher degree of financial inclusion, is relatively more among SHG member households compared to non-member households. The chi-square (χ^2) results lead to the conclusion that the SHG-Bank linkage programme increased the degree of financial inclusion among landless, marginal and small farm size category.

REFERENCES

- Ansari Saghir Ahmad (2007), "Micro Finance in India", *Asian Economic Review*, August, Vol. 49 (2), pp 327-336.
- Chavan Pallavi (2007), "Access to Bank Credit: Implications for Dalit Rural Households", *Economic and Political Weekly*, August, Vol. XLII (31), pp 3219-3224.
- Kamath Rajalaxmi (2007), "Financial Inclusion vis-à-vis Social Banking", *Economic and Political Weekly*, April, Vol. XLII (15), pp 1334-1335.
- Khandelwal Anil. K, (2007), "Microfinance Development Strategy for India", *Economic and Political Weekly*, March, Vol. XLII (13) pp 1121-1126.
- Misra, Alok, (2006), "Micro Finance in India and Millennium Development Goals: Maximizing Impact on Poverty", *Discussion Paper for Workshop on World Bank*, Singapore, Sep.18
- Mor Nachiket and Bindu Ananth, (2007), "Inclusive Financial Systems: Some Design Principles and a Case Study", *Economic and Political Weekly*, March, Vol. XLII (13) pp 1121-1126.
- National Bank for Agriculture and Rural Development (1999), "Task Force Report on Supportive Policy and Regulatory Framework for Micro Finance, Mumbai, India.
- NSSO, (2006), "Household Borrowing and Repayment in India During 1-7-02 to 30-6-2003", All India Debt and Investment Survey, NSS 59th Round, Ministry of Statistics and Programme Implementation, Government of India.
- Rangarajan, C (1996), "Rural India, the Role of Credit", *Reserve Bank of India Bulletin*, Reserve Bank of India, Mumbai.
- Rao Subba K.G.K. (2007), "Financial Inclusion: An Introspection", *Economic and Political Weekly*, February, Vol. XLII (5), pp 355-360.

- Shetty, S.L. (1997), "Financial Sector Reforms in India: An Evaluation", *Prajnan*, 25 (3-4), pp 253-287.
- Srinivasan, N (2007), "Policy Issues and Role of Banking System in Financial Inclusion", *Economic and Political Weekly*, July, Vol. XLII (30), pp 3091-3095.
- Thorat Usha (2007), "Financial Inclusion-the Indian Experience", *Reserve Bank of India, Bulletin*, July, Vol LXI (7)