

Determinants of Dropout of Members from Thrift and Credit Groups: An Empirical Examination in India

Debadutta Kumar Panda*

Abstract: This quantitative study is conducted in the state of Orissa in India to understand the determinants of dropout of members from women self-help groups. Stratified random sampling method was employed to select 40 sample SHG members from 16 self-help groups from 6 villages. Descriptive statistics and t-significance test was used to understand the difference between active borrowers and dropout members across a set of selected variables. The logit regression model was used to analyze the possible predictors of dropout of members from self-help groups. The hypothesis testing was done through the logit regression. From the analysis, the possible determinants of members' dropout from their respective self-help groups were observed to be loan size, group size, group meeting, group savings, total loans received, number of loans received, literacy position of the members and interest rates on the loans.

Keywords: development, India, microfinance

* Debadutta Kumar Panda is an Assistant Professor of Economics and Strategy at the Institute of Management Technology, Hyderabad. He had worked as Assistant Professor at Xavier Institute of Social Service (XISS), Ranchi. He worked on consulting & research assignments for agencies like UNDP, WFP, WWF, UNIDO, World Bank, Asian Development Bank (ADB), GVT, PPL-MART, CFMR-Harvard University, Govt. of Orissa, Govt. of India and other agencies. E-mail: debadutta@imthyderabad.edu.in.

Manuscript received May 16, 2012; out for review May 18, 2012; May 31, 2012.

Introduction

In the recent years self-help group-based microfinance programmes were highlighted in India. Microfinance intermediaries and apex microfinance wholesalers have attempted to scale up self-help group (SHG) based microfinance programmes. In this direction the role of National Bank of Agriculture and Rural Development (NABARD) was instrumental, especially by the launching of the SHG-Bank Linkage Programme (SBLP) where the SHGs were linked up with banks to avail various financial services (Panda, 2009a). The role of Rashtriya Mahila Kosh (RMK), Rashtriya Gramin Vikas Nidhi (RGVN), Friends for Women World Banking (FWWB) etc. are praiseworthy in the Indian microfinance programmes where they had undertaken active step to develop village based thrift and credits by women self-help groups.

There are number of definitions of self-help group. Many definitions says that the self-help group is an organization of few women villagers, preferably not more than 20, from the village with same socio-economic position with a motive of practicing thrift and credit through mutual help. An accepted definition of Reserve Bank of India (RBI) spells out that “Self-help group is a registered or unregistered group of micro-entrepreneurs having homogenous social and economic background voluntarily coming together to save small amount regularly, to mutually agree to contribute to a common fund and to meet their emergency needs on mutually help basis. The group member use collective wisdom and peer pressure to ensure proper end-use of credit and timely repayment thereof” (Panda, 2009a). In practice the self-help groups are the self-selected groups of 15 to 20 villagers, mostly women with same socio-psycho-economic condition and share common problem, who contribute regular monthly savings to the common group fund and from the pool of group fund, the members are provided with interest bearing loans on a pre-defined criteria. The members themselves decide the interest rate on loans, size of monthly savings, criteria for loan disbursals, fine against defaulting etc. Apart from saving and credit, the

self-help group develops village-based micro-entrepreneurship, women empowerment, literacy, and external linkage buildings (Panda, 2008). Even though the members the self-help groups take decision about the operation and management of their own group, still experiences shows that few members dropout either voluntarily or in voluntarily from their group in due course of time. The process of addition of members in the group and dropout of members from the group is continuous. So this study attempted to understand what makes a member to dropout from the group and how the dropout member is different from the active members. Moreover there were very less number of studies in India conducted on the members' dropouts from self-help groups. The existing literature could not map the determinants of dropout of Self-help group members. So this study particularly focused to capture the possible reasons behind the members' dropout from self-help groups.

Literature

There were a number of studies conducted on the impact assessment of group-based microfinance programmes in all the states of India but almost all studies had focused on the key factor to success of the microfinance interventions or the self-help groups (Panda, 2009b). A relook to this sector probably triggered by the Harper (2007) in his study "what's wrong with groups". In his article, Harper (2007) made a critical review of past researches and reported that in four countries of Africa in post-conflict microfinance the groups were unpopular and clients preferred individual microfinance to group-based microfinance. The same article pointed out that one third of clients dislike microfinance group from a study in Uganda; and from another study in Vietnam a Grameen replicator experienced a dropout in group meeting attendance from 100% to 20%. Finally, Harper (2007) courted a statement, 'perhaps group-based microfinance systems are actually nurturing within

themselves the seeds of their own destruction’.

In the Indian sub-continent very few academic studies on the failure of the microfinance or microfinance groups were carried out. In a country level study on surveyed data in India, Parida and Sinha (2010) found out the dropout percentage from inception of SHGs were 25.3% for male SHGs, 43.3% for female SHGs, 60% for mixed SHGs and 42.5% for all type.

A joint action research conducted by EDA Rural Systems and APMAS (two microfinance consulting organizations) based on a sample of 214 SHGs in 108 villages of 9 districts in 4 states of India. This study revealed that about 50% SHG had no drop out of members, but 33% SHG had 2 or fewer dropouts. The same study reported dropouts in wealth ranks where the rate of dropouts for very poor was 11.1% and that of the non-poor was 7.3%. However, it was found out that the overall dropout from the sample SHGs merely 10%.

Karim and Osada (1998) studied the Grameen Bank microcredit programmes in Bangladesh and concluded that the microcredits with reasonable terms and conditions provided to the poor with a motive to use it successfully in self-employed microenterprises to generate income does not always work well with all the poor. Their study provides a broader insight on the dropout of members from microcredit programme, especially in the Grameen model. They noticed various factors which were responsible for the dropouts. The conflicting individual and family role of the members where the credit is used by the family on an investment decision where as the repayment responsibility lies with the members many a times pushes the members in dilemmas. Again balancing between self-employed microenterprises (with support from microcredit) and household responsibilities like housekeeping, child rearing was a difficult task for members. The missing links between women-led microenterprises and markets as a social cause (women were not allowed to frequent market visits) was a barrier. Many times the microcredit members had to rule out the orthodox community norms which in a way acted as a barrier to continue their membership. Also the

group conflicts (among members) noticed as a major factor for dropouts. The inability of the institution to address the urgent credit needs and priorities sometimes discouraged the members hence led to dropouts.

In another study, McIntosh, Janvry and Sadoulet (2003) in village banks and solidarity groups in Uganda, and observed that the competition among the microfinance groups leads to dropouts. The dropout rate varied between 0 to 33% with an average of 5.6%. The probabilities of dropouts are more for the clients managing large business (under the competition) where these businesses require larger loans and flexible repayments.

Parveen, S. et al (1996) had made a study in under the microcredit programme of ASA (a microfinance institution), Bangladesh and reported varied reasons behind cliental dropouts from microcredit programmes. Cliental dropouts were geared by misutilization of microcredits, inability in the regular loan repayments which were often resulted by wrong selection of investment projects. Thakur and Tiwari (2010) in their research reported varied factors of dropouts i.e. economic, environmental, social, cultural and religious factors. In another study by Hossian and Diaz (1999) in Philippines found that the cliental dropouts from Grameen Model-based microcredit programmes was about 22%. In their observation, they noticed that the dropouts of clients was as high as 53% (in the year 1995) and 42% (in the year 1991). However their study did not focus on the justification of the reasons behind the dropouts.

The cliental dropouts from microcredit programmes could be due to the inability of the programme to satisfy the clients. Khandker (2005) in Bangladesh reported that the microcredit delivered to clients used in informal activities, hence earned low returns and insignificant profits. The smaller loan size and short repayment period leads to yield lesser returns and profits among the microcredit clients (Khawari, 2004). Diagne (1999) in the empirical study Malawi reported that a microcredit client is likely to dropout from the microcredit group if the clients do not get the desired credit and/or by defaulting the credit. Under the same study it was found out that as many as 36% clients dropout by voluntary

and/or defaulting.

Objectives

This study is conducted with a distinct objective i.e. to understand the determinants of dropouts of members from self-help groups.

Methodology

Orissa state was purposively selected for this empirical study. In the beginning it was decided that the sample size will be stratified into 2 groups, i.e. active SHG member and dropout SHG members. A list of SHG members who are active members till May-June 2010, and another list of SHG members who are dropout from SHGs from December 2009-January 2010, are prepared. For each group, 20 members were selected randomly. Finally the study included a sample size of 40 SHG members from 16 SHGs from 6 villages in Pipli block of Puri district of Orissa. The active members were those members who are active participants in SHGs in last 6 months, and drop out members were those members who have restrained themselves from SHGs in last 6 months only i.e. did not participated in any activity (including the savings, credits and group meetings) in the group (Panda, 2009a). Data collection was made through a structured pre-tested interview schedule. The study was commissioned in the month of May-June 2010, and information were collected for the period of Jan-Dec 2009. Since the decision on dropout from the membership will include at least 6 months, so no information were collected from the samples for the period of Jan-June 2010.

To analyze the data and to test the hypothesis, descriptive statistics and econometric models are engaged. The t-statistics was engaged to understand the significant difference between active members and

dropouts across a set of selected variables.

Under the econometric model, a logit model was designed. Apart from the variables meant to test the hypotheses, other possible endogenous variables also included as predictors of dropouts in the model (Maria et al, 2001). The model was transformed into the following equation form,

$$D_i = C + \beta_{1i}L_{si} + \beta_{2i}G_{si} + \beta_{3i}G_{mi} + \beta_{4i}G_{sai} + \beta_{5i}L_{ai} + \beta_{6i}L_{ni} + \beta_{7i}E_i + \beta_{8i}A_i + \beta_{9i}F_{wei} + \beta_{10i}I_i$$

Where, i varies from 1 - 40,

D_i = Dropouts (dummy variable, 1 if remains in SHG, 0 if dropout)

C = Constant

L_{si} = Loan size of i^{th} member (dummy variable, 1 if satisfied, 0 otherwise)

G_{si} = Group size of the i^{th} member

G_{mi} = Group meeting of the i^{th} member (Numbers)

G_{sai} = Group saving of the i^{th} member

Endogenous Variables:

L_{ai} = Total loan received by the i^{th} member

L_{ni} = Total number of loans received by the i^{th} member

E_i = education of the i^{th} member (dummy variable, 1 if literate, 0 otherwise)

A_i = Assets position of the i^{th} member (Rs.)

F_{wei} = Number of family wage earners of the i^{th} member (nos.)

I_i = Interest rate for i^{th} member (dummy variable, 1 if satisfied, 0 otherwise)

β_{1i} to β_{10i} are the coefficient of the corresponding variables

Findings

This study clearly reveals that the dropout members were not satisfied with the size of the loan provided from their respective SHGs. The active members were found with a very high level of satisfaction (statistically significant) than the dropout members. However the study did not find the reason behind dissatisfaction but the focus group discussion revealed that the sizes of the loan were too small against the requirement. From Table 1, row 5, it can be seen that the amount of loan received by the active members was 89.19% higher (significant at 1%) than that of the dropout members. At the same time the number of loan received by the active borrowers was significantly higher by 68.18% than that of the dropouts. From this analysis it can be assumed that the dropouts received less number of loans and fewer amounts of loans than that of the active borrowers between the periods of January-December 2009. The fewer amounts of loan, less number of loans and the dissatisfaction with the loan size might disinterest the SHG members to continue their members with their respective SHGs, particularly in relations to credit. Diagne (1999), from the study in Malawi, also reported that the client desert the microcredit group because of not having desired credit. The outcome from this study corroborates with the results of the study conducted in Malawi (Diagne, 1999).

The group size of the active members was significantly lesser by 17.25% than that of the dropouts. The larger group size of the dropout members might have diluted the cohesion among the group members and the loose bond among the members might be failed to retain the dropouts in their respective SHGs. The monthly group savings of the active members was 59.44% higher (statistically significant at 1%) than that of the dropouts. The number of group meetings attended by active members was 34.11% higher (significant at 1%) than that of the dropouts. The lesser participation of dropouts might be due their less interest in the group which can be again due to one or multiple reasons i.e. dissatisfaction in the credit, less cohesion among members, inability in

the contribution in the monthly group saving, opportunity cost against the group meetings (time) and inability to attend the group for any other reason.

It has been observed that more number of literates in the sample group of active members than the group of dropouts. A focus group discussion among the dropout members revealed that the literate members derive much benefit from the SHGs than the illiterate members hence the illiteracy of the group member acts as deterrent to continue participation in the SHG. However this conclusion is a qualitative one and not quantitatively verified. There was less difference in assets position between the active members and dropouts (2.19%). This

Table 1. Descriptive statistics

Sl. No	Variables	Active Microcredit Clients	Dropout Members	%age Difference over Dropout Members	t-value
	1	2	3	4	5
1	Loan Size (dummy Variable, 1 if satisfied, 0 otherwise)	0.85 (0.43)	0.15 (244.23)	466	6.04***
2	Group Size (Nos)	15.35 (0.09)	18.55 (8.29)	-17.25	-6.66***
3	Annual Group Meetings (Nos)	11.4 (0.07)	8.5 (15.96)	34.11	8.17***
4	Annum Group Saving (Rs.)	114 (0.07)	71.5 (20.92)	59.44	11.13***
5	Total Loan Received (Rs./Annum)	1707.5 (0.20)	902.5 (56.58)	89.19	5.78***
6	Total Number of Loans Received (Nos/Annum)	1.85 (0.31)	1.1 (65.28)	68.18	3.61***
7	Literacy Position (1 if literate, 0 if illiterate)	0.85 (0.43)	0.45 (113.42)	88.89	2.84***
8	Assets Position (Rs.)	146500 (0.20)	143350 (24.70)	2.19	0.30
9	Number of wage earners in the households	2.05 (0.40)	1.55 (32.93)	32.26	2.30**

***significant at 1% level, **significant at 5% level

(Figure in the parenthesis represents the coefficient of variation)

reason could be subjected to the selection mechanism. The intermediary microfinance institutions (initiator and nurturer of the SHGs) might have persuaded villagers of same economic status to form SHGs. Again the membership is self-selection in SHGs, so the better-off and worse-off villagers may not participate in the thrift and credit groups. It was also found that the number of household wage earners of active members was significantly 32.26% higher than that of the dropouts. The less number of household wage earners did not have allow the dropouts to sacrifice enough time for the group activities (other than group meetings) like involvement in social and village issues like rally, trainings, health camps etc. (the fact was derived from the focus group meeting).

The descriptive statistics is further refined by the econometric test. The logit regression results with 87% prediction capacity are presented in Table 2. From the logit estimate it was found out that the important determinants of active participation/dropout in SHGs were (i) loan size, (ii) group size, (iii) group meetings, (iv) group savings, (v) total amount of loan received, (vi) total number of loan received, (vii) literacy, and (viii) interest rate. From Table 2, it can be observed that the probability of active participation is positively and significantly determined, and the probability of dropout inversely and significantly determined by loan size. So the null hypothesis 'loan size does not influence the dropouts' is rejected and the alternate hypothesis 'loan size is a determinant of dropout' is accepted. From the same Table (Table 2, row 3), it can be seen that the group size is negatively and significantly related with the probability of active membership. This means that the probability of active membership is high when the group size is less. In other words, the probability of dropouts is more when the group size is more. So the null hypothesis 'group size does not influence the dropouts' is rejected and the alternate hypothesis 'group size influence the member dropouts' is accepted. Group meeting significantly predicted the dropout of membership. Higher is the group meetings higher is the active membership, and lower is the group meetings higher is the dropouts. From this outcome the null hypothesis 'group meeting is not a

determinant in drop out of the members' is rejected and accepted the alternate hypothesis 'group meeting is a determinant in drop out of the members'. If a member is not adequately participating in group meeting then it would lead the dropout of the member from her/his self-help group. Again group saving significantly and positively related to the active membership. Lower the group saving of the member, higher the dropout of members from SHGs. So we accept the alternate hypothesis 'group saving is a determinant in drop out of the members' by rejecting the null hypothesis 'group saving is not a determinant in drop out of the members'.

Apart from the above predictors, the logit estimate shows that other endogenous variables also impacted the dropouts from self-help groups. The total amount of loan received also significantly and positively impacted the active participation of members in self-help groups. Members received less loan amount are prone to dropouts from their SHGs. Similarly literacy position of members found to be significant

Table 2. Logit regression results

Dependent Variable = Dropout i.e. 1 if remains in SHG, 0 if dropout

Sl. No.	Variables	Coefficient	t-ratio
	1	2	3
1	Constant	-0.129568	-0.2095
2	Loan Size	0.362023***	4.810
3	Group Size	-0.0719169***	-2.939
4	Group Meeting	0.0784645*	1.832
5	Group Saving	0.0849540*	1.78
6	Total Loan Received	0.000477981***	3.473
7	Number of Loan Received	0.134039*	1.741
8	Literacy	0.206984*	1.955
9	Number of wage earner in the household	-0.0839252	-1.675
10	Interest Rate	-2.74550e-06**	-2.755
11	Assets Position	-1.10018	-0.9765

R²=90

Adjusted R²= 87

determinants of continuing participation in SHGs. Illiterate members are more likely drop out from SHGs than the literate members. Interest rate of group loans being a significant determinant of active participation in SHGs shows that higher the interest rate, higher is the dropouts. However, numbers of wage earner in the household and household assets position are positively related to dropouts (inversely related to active participation) but found to be insignificant determinants.

Conclusions

This study with the help of quantitative techniques accepted four hypotheses (i) loan size is a determinant of dropout, (ii) group size influence the member dropouts, (iii) group meeting is a determinant in drop out of the members, and (iv) group saving is a determinant in drop out of the members. So it is clearly proved that the loan size, group size, group meetings and group savings are the determinants of either active participate or dropout of members from their respective self-help groups. It was found that the active members had received significantly more number and higher amount of loans than the dropout members. The average group size of the active members was significantly lesser than that of the dropout members. Among the various reasons behind the members' dropouts from self-help groups were dissatisfaction with loan size, lack of cohesiveness among the members due to higher group size, unable to participate in the group meetings due to personal reasons or higher opportunity cost, inability to contribute monthly group savings, dissatisfactions in the total loans and number of loans received from the group, higher interest rate on the group loan provided by the self-help group, and illiteracy of the members which acted as barriers in understanding the micro-banking of the self-help groups.

References

- Diagne, A. (1999). "Determinants of household Access to and Participation in Formal and Informal Credit Market in Malawi", DCND Discussion Paper No. 67, International Food Policy Research Institute, Washington D.C.
- Harper, M. (2007). "What's Wrong with Groups" in Dichter, T. and Harper, M. (eds.), *Whats Wrong with Microfinance*, Practical Action Publishing, Warwickshire, UK.
- Hossain, M. and Diaz, C.P. (1999). "Reaching the Poor with Effective Microcredit: Evaluation of A Grameen Bank Replication in Philippines", Paper Presentation in the International Workshop on Assessing the Impact of Agricultural Research on Poverty Alleviation, International Center for Tropical Agriculture, CIAT, Cali, Colombia, September 14-16, 1999.
- Karim, M.R. and Osada, M. (1998). "Dropping Out: An Emerging Factor in the Success of Microcredit-based Poverty Alleviation Programmes", *The Developing Economies*, Vol. XXXVI, No. 3, pp. 257-288.
- Khandker, S. R. (2005). "Microfinance and Poverty: Evidence Using Panel Data from Bangladesh", *World Bank Economic Review*, Vol. 19, No. 2, pp. 263-86.
- Khawari, A. (2004). "Microfinance: Does it Hold Its Promise? A Survey of Recent Literature", HWWA Discussion Paper No. 276.
- Maria, E.P. and Douglas, H.G. and Meyer, R.L. (2001). "Determinants of Borrowing Dropouts in Microfinance: An Empirical Investigation in Mali", Paper Presented AAEA and CAES Annual meetings, Chicago, USA.
- McIntosh, C., Janvry, A. and Sadoulet, E. (2003). "How Rising Competition among Microfinance Lenders Affects Incumbent Village Banks", CUDARE Working Paper -987, Department of Agricultural & Research Economics, University of California, Berkeley.
- Panda, D.K. (2009a). "Understanding Microfinance", Wiley India Pvt. Ltd., New Delhi.
- Panda, D.K. (2009). "Participation in Group based Microfinance and its Impact on Rural Households: A Quasi-experimental Evidence from an India State", *Global Journal of Finance and Management*, Vol. 1, No. 2, pp.

171-183.

- Panda, D.K. (2008). "Performance of Self Help Groups under Microfinance Programmes: Evidence from a Tribal District of Orissa" *VikasVani Journal*, Vol. 2, Issue 3, pp. 51-60.
- Parida, P.C. and Sinha, A. (2010). "Performance and Sustainability of Self-help Groups in India: A Gender Perspective", *Asian Development Review*, Vol. 27, No. 1, pp. 80-103.
- Paveen, S., Aktar, S., De-Costa, N. and Kamal, M.M. (2006). "Dropouts in Microcredit Operations", Document of Association for Social Advancement (ASA), Bangladesh, Dhaka.
- Thakur, S.G. and Tiwari, A.M. (2010), "Whether SHG- based Microcredit Programmes Can Remove Poverty? A Case Study of SHG-based Programme in Patan District of Gujarat", http://www.wiego.org/ahmedabad/papers/Tiwari_Can_SHGs_remove_poverty.doc. Accessed on 21/07/2010.