

A Study on Utilisation of Credit by Marginal Farmers in Nadia District of West Bengal

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ABSTRACT

The study has been conducted in Nadia district of West Bengal. Two villages have been purposively selected for the study. Out of 50 marginal farmers 17 (34% of the total) have reported to have taken loan from various sources like nationalised banks, moneylenders and churches. The marginal farmers have been grouped into three on the basis of level of annual income. Tabular method of analysis has been extensively employed in this study. Simple correlation analysis has been exercised between use of credit in productive purpose and each of the variables like size of operational holding, income from off farm sources, gross cropped area under non-cereal crops, per capita income and number of crops grown. No significant correlation has been found in any case. The study also reveals that the highest percentage of the borrowing households exist in medium income group. As a whole percentage of borrowing marginal agricultural households (farm) taking loan from non-institutional sources is considerably higher than the percentage of households taking loan from institutional sources. Nationalised banks are the only institutional source of credit. No wide difference has been found in the amount of loan taking from institutional and non-institutional sources. No agricultural household in high income group has taken loan from non-institutional sources. Amount of credit per household is the largest in high income group and smallest in low income group. In low and high income groups of borrowing marginal households, amounts of loan in productive purposes are higher than those used in non-productive purposes. But use of higher amount of loan has been recorded for non-productive purposes in medium income group. Irrespective of income groups amount of loan used in non-productive purposes has been recorded to be higher than in productive purposes. Concerned to the productive activities, loan has been used only in crop production across all the income groups of borrowing agricultural households. In case of non-productive activities majority of loan has been used in building houses. The other uses of loan in non-productive purposes are related to ceremony, consumption and health.

Keywords: Institutional and non-Institutional credit, productive and non-productive use of credit.

Agriculture plays an important role in economic development of our country. Above 70 per cent of the total population in the country are directly or indirectly involved in it. Objective of agricultural planning in India is to raise the standard of living of agrarian community through increase in agricultural production. Any production activity requires various factors of production like land, labour, capital and entrepreneurship. With limited capital farmers cannot properly utilise the other factors of production. Today agricultural development largely depends upon penetration of technology in agricultural fields.

Adoption of technology necessitates strengthening of the base of capital of the cultivators. They cannot undertake high value crops which generally require relatively large amount of fund. This is a major problem among the marginal and small farmers who account for about 80 per cent of total cultivators of West Bengal. They do not possess sufficient fund to carry out their cultivation practices smoothly. Agricultural development requires adoption of high yielding varieties of seeds, fertilizers, plant protection chemicals, modernized equipments and machineries. Application of modern inputs in agriculture calls for

availability of adequate fund with the cultivators. So far conditions of marginal farmers of the farming community are concerned investment capability lies far below the average levels. Their access to credit particularly to the institutional sources is not rosy one. The marginal farmers are the helpless victim of the private money lenders. It is a general opinion of the cultivators in our country that agricultural credit is not available to them in adequate amount at reasonable rate of interest in due time. Though it is a cross sectional study it will reveal various important aspects of use of credit by the marginal farmers in the district.

In view of the above, the specific objectives of the study are (1) to find various sources of credit of marginal farmers in the district, (2) to estimate relative contribution of various sources and agencies in advancing credit to the marginal farmers and (3) to find use of credit by the marginal farmers in different activities/purposes.

Materials and methods

For conducting this study two villages namely Muragacha and Birpara of Haringhata and Chakdah blocks respectively in Nadia district of West Bengal have been selected purposively. Rural households in two villages have been completely enumerated in respect of operational holdings. Out of 122 marginal agricultural households 50 (fifty) have been selected by the technique of Simple Random Sampling Without Replacement. The study is based on primary data. Data have been collected by survey method on size of operational holding, area of land under various crop, annual income, size of family, source wise amount of credit taken, amount of credit used for various purposes, etc from all the borrowing marginal farmers. Besides tabular method of analysis which has been extensively employed, simple correlation

analysis has been exercised in this study. Some variables like size of operational holding, annual income earned from off farm sources, gross cropped area under non-cereal crops, per capita income of the households and number of crops have been taken into consideration for finding their effect, if any, on use of credit in productive purposes by agricultural households. In the tabular method of analysis the sample agricultural households have been categorised into three different groups on the basis of annual income of the households. These groups are termed as group I (low income group), group II (medium income group) and group III (high income group) having level of annual income below ₹ 25000, ₹ 25000 to ₹ 50000 and ₹ 50000 and above respectively. The reference year of the study is 2011-2012 agricultural year.

Results and Discussion

It has already been mentioned that agricultural households have been grouped on the basis of annual income. Table 1 displays distribution of borrowing marginal agricultural households along with size of operational holding to different groups of income. It is noted that out of the total borrowing households, about 29.41 per cent belongs to the first group having the low level of income. Borrowing households in second and third groups are found to account for about 64.70 per cent and 5.88 per cent respectively of the total borrowing agricultural households. In respect of individual groups it is observed that existences of borrowing households are almost same in terms of percentage in first and second groups. However, in third group percentage of borrowing agricultural households is found to be lower than those of first and second groups. As a whole, i.e., irrespective of the groups, it is noted that 34 per cent of the total agricultural households have taken

Table 1. Distribution of borrowing marginal agricultural households to different groups and their operational holdings

Group	Number of agricultural households	Number of borrowing households	Percentage of borrowing agricultural households	Average size of operational holding (ha)
Below ₹ 25000	14	5 (29.41)	35.71	0.164
₹ 25000 to ₹ 50000	29	11 (64.70)	37.93	0.399
₹ 50000 and above	7	1 (5.88)	14.28	0.80
Combined	50 (100)	17 (100)	34.00	0.354

N.B: Figures in parentheses indicate percentages to total in the concerned column

loan. Irrespective of the income groups, average size of operational holding of borrowing marginal agricultural households is observed to be 0.354 hectare. Size of operational holding is noted to be a positive function of income levels of households.

Distribution of borrowing agricultural households according to various sources of credit is presented in Table 2. It is observed from the table that in group I

and II the agricultural households borrow their fund both from institutional and non-institutional sources but in group III the agricultural households are observed to take their loans only from institutional sources. It is also noted that the borrowing agricultural households in all the groups take loan only from nationalised banks among institutional sources. Among the non-institutional sources, moneylenders and churches are found to play

Table 2: Distribution of borrowing agricultural households according to sources of credit

Groups	Number of Borrowing households	Source of credit									Grand Total
		Institutional				Non-institutional					
		Nationalised banks	RRBs	Co-operative	Total	Money-lenders	Church loan	Others	Neighbours	Total	
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12
I	5 (29.41)	2 (100)	-	-	2 (40.00)	-	3 (100)	-	-	3 (60.00)	5 (100)
II	11 (64.71)	2 (100)	-	-	2 (18.18)	5 (55.56)	4 (44.44)	-	-	9 (81.82)	11 (100)
III	1 (5.88)	1 (100)	-	-	1 (100)	-	-	-	-	-	1 (100)
Combined	17 (100.00)	5 (100)	-	-	5 (29.42)	5 (41.67)	7 (58.33)	-	-	12 (70.58)	17 (100)

N.B.: (i) RRB is Regional Rural Bank (ii) figures in parentheses in column 2 indicate percentages to total of the column. (iii) Figures in parentheses in columns 3 indicate percentages to total of column 6. (iv) Figures in parentheses in column 7 and 8 indicate percentages to total of column 11. (v) Figures in parentheses in columns 6 and 11 indicate percentages to grand total of column 12

Table 3: Credit advanced by various lending agencies to the borrowing marginal households in 2011-2012

Groups	Number of Loanee households	Amount of credit advanced by different lending agencies						Grand total	Amount of credit per household (Rs)
		Institutional		Non-institutional					
		Nationalised banks	Total	Money lenders	Church loan	Others	Total		
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10
I	5	92000 (100.00)	92000 (53.49)	-	80000 (100.00)	-	80000 (46.51)	172000 (100.00)	34400
II	11	160000 (100.00)	160000 (41.02)	160000 (69.57)	70000 (30.43)	-	230000 (58.98)	390000 (100.00)	35455
III	1	50000 (100.00)	50000 (100.00)	-	-	-	-	50000 (100.00)	50000
Combined	17	302000 (100.00)	302000 (49.35)	160000 (51.61)	150000 (48.39)	-	310000 (50.65)	612000 (100.00)	36000

N.B.: (i) Figures in parentheses in columns 3 indicate percentage to total of column 4 (ii) Figures in parentheses in column 5 and 6 indicate percentages to total of column 8 (iii) Figures in parentheses in columns 4 and 8 indicate percentages to grand total of column 9

major roles in the area under study. The agricultural households in low income group are found to borrow fund only from church among non-institutional sources. The borrowing households in medium income group are noted to receive their loan both from churches and money lenders. Irrespective of income groups agricultural households are found

to take loan from nationalised banks, churches and money lenders.

It is also noted that 29.41 per cent of the borrowing households belong to group I. In group II and III borrowing agricultural households are noted to account for 64.71 per cent and 5.88 per cent respectively of the total. The borrowing households

Table 4: Distribution of borrowing marginal agricultural households according to various uses of credit

Group	Number of borrowing households	Productive activities				Non-productive activities					Both productive and non-productive activities
		Crop production	Livestock rearing	Business	Total	Cere-mony	Consumption	Health	Housing	Total	
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12
I	5	2 (100.00)	-	-	2(40.00)	-	1 (50.00)	1 (50.00)	-	2 (40.00)	1 (20.00)
II	11	6 (100.00)	-	-	6 (54.55)	2 (40.00)	1 (20.00)	1 (20.00)	1 (20.00)	5 (45.45)	-
III	1	-	-	-	-	-	-	-	-	-	1 (100.00)
Combined	17	8 (100.00)	-	-	8 (47.05)	2 (28.57)	2 (28.57)	2 (28.57)	1 (14.28)	7 (41.17)	2 (11.76)

N.B.: i) Figures in parentheses under different activities of productive and non-productive nature indicate percentages to total in each of productive and non-productive activity in each group.ii) Figures in parentheses under column 6, 11 and 12 indicate percentages to total number of borrowing households under column 2.

Table 5: Use of loan by borrowing marginal agricultural households

Income group	Number of borrowing households	Productive activities				Non-productive activities					Grand total
		Crop production	Livestock rearing	Business	Total	Ceremony	Consumption	Health	Housing	Total	
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12
I	5	97000 (100.00)	-	-	97000 (56.40)	30000 (40.00)	30000 (40.00)	15000 (20.00)	-	75000 (43.60)	172000 (100.00)
II	11	105000 (100.00)	-	-	1 0 5 0 0 0 (26.92)	40000 (14.03)	15000 (5.26)	30000 (10.53)	2 0 0 0 0 0 (70.18)	285000 (73.08)	390000 (100.00)
III	1	30000 (100.00)	-	-	30000 (60.00)	-	-	20000 (100.00)	-	20000 (40.00)	50000 (100.00)
Combined	17	232000 (100.00)	-	-	2 3 2 0 0 0 (37.91)	70000 (18.42)	45000 (11.84)	65000 (17.11)	2 0 0 0 0 0 (52.63)	380000 (62.09)	612000 (100.00)

N.B.: (i) Figures in parentheses in column 3 indicate percentages to total of column 6 (ii) Figures in parentheses in columns 7, 8, 9 and 10 indicate percentages to total of column 11 (ii) Figures in parentheses in column 6 & 11 indicate percentages to grand total of column 12

taking loan from institutional and non-institutional sources are observed to account for 40 per cent and 60 per cent respectively of the total in group I. In group II the corresponding percentage figures are 18.18 and 81.82 respectively. As a whole, 29.42 per cent of the borrowing households are found to receive loan from institutional sources. The borrowing households taking loan from non-institutional sources are noted to account for 70.58 per cent of the total. In case of non-institutional sources 41.67 per cent of the total borrowing households receive loan from money lenders and 58.33 per cent of the households borrow money from churches.

Table 3 exhibits percentage contribution of various lending agencies in advancing credit to marginal agricultural households under different income groups. It is observed from the table that amounts of credit taken from institutional sources and non-institutional sources account for 53.49 per cent and 46.51 per cent of the total credit in group I. In group II the corresponding figures for institutional and non-institutional sources are 41.02 per cent and 58.98 per cent respectively. In high income group no fund is taken from non-institutional sources. Irrespective of the income groups, amounts of loan taken from institutional and non-institutional sources are noted to be 49.35 per cent and 50.65 per cent respectively of the total.

In case of institutional sources entire amount of loan is noted to be borrowed from nationalised banks in all the groups. So far non-institutional sources are concerned; entire amount of loan is taken by the borrowing households from churches in group I. In group II 30.43 per cent of the credit is borrowed from churches and 69.57 per cent of the credit is borrowed from money lenders. As a whole 48.39 per cent and 51.61 per cent of the credit are taken by the borrowing agricultural households from churches and money lenders respectively. It is also noted that amount of credit per household is the highest in group III i.e. high income group. In descending order the remaining two groups are medium and low income groups.

Distributions of borrowing marginal agricultural households according to various uses of credit are displayed in Table 4. It is observed that credit taken by agricultural households is used for productive and non-productive purposes. It is also found that 40 per cent of total borrowing households use credit for productive purposes in low income group. The borrowing households using credit for non-productive purposes are noted to account for 40 per cent of total borrowing agricultural households in the same group. Twenty percent of the borrowing agricultural households are found to make use of credit both for productive and non-productive purposes. In this group all the borrowing households use credit in crop production. So far non-productive uses are concerned, 50 per cent are found to use credit for consumption purpose. Another 50 per cent are observed to use credit for taking health care measures. In medium income group it is noted that about 55 per cent of the total borrowing households use credit for productive purposes and a roundabout 45 per cent of the total borrowing households use their credit for non-productive purposes. Crop production is the only productive activity in which all the borrowing households use their credit in this group. In case of non-productive activities 40 per cent of the borrowing households use credit for making expenditure in ceremonies. In this category of activities the borrowing households using their credit for consumption, health and housing purposes are found to account for 20 per cent each. In high income group also all the borrowing households use credit both for productive and non-productive purposes. As a whole that is irrespective of income groups it

is observed that 47 per cent of the total borrowing households use their credit for productive purposes. The borrowing agricultural households using credit in non-productive purposes is found to account for 41 per cent of the total. About 12 per cent of the total borrowing households are found to make use of their credit both for productive and non-productive purposes. So far productive activities are concerned the whole of borrowing households use their credit in crop production. In non-productive activities the borrowing households use their credit for making expenditure for ceremony, consumption, health and housing. The borrowing household using their credit for these purposes are observed to account for 28.57 per cent, 28.57 per cent, 28.57 per cent and 14.28 per cent respectively.

Use of loan by borrowing marginal agricultural households is presented in Table 5. The borrowing agricultural households are found to use their credit in productive and non-productive activities. The credit used for productive purposes is noted to account for 56.40 per cent of the total credit in low income group. About 44 per cent of the total credit is found to be used for non-productive purposes in this group. In productive activities, it is observed that the entire amount of credit is used in crop production in group I. So far non-productive activities are concerned; borrowing agricultural households are noted to use their loan for making expenditure on ceremonies, consumption and health purposes. It is also observed that 40 per cent of total credit under non-productive activities is used for making expenditure in ceremonial purpose. The credits used in consumption and health purposes are found to account for 40 per cent and 30 per cent respectively in this group. In medium income group it is observed that loan used in productive activities account for 26.92 per cent and loan used in non-productive activities is noted to account for 73.08 per cent. In this group also the entire loan under productive activities is found to be used in crop production. In this group, the credits under non-productive activities are noted to be used for various purposes like ceremonies, consumption, health and housing. The credit used for these purposes are found to account for 14.03 per cent, 5.26 per cent, 10.53 per cent and 70.18 per cent respectively. In high income group it is noted that credit used for productive and non-productive purposes account for 60 per cent and

40 per cent respectively. In this group the loan under productive purposes is observed to be entirely used in crop production. In this group the loan under non-productive purposes is found to be entirely used taking health care measures. Irrespective of income group it is noted that the loan utilised in productive and non-productive activities account for 37.91 per cent and 62.09 per cent respectively. In case of productive activities the loan is found to be entirely utilised in crop production. In case of non-productive activities the loan is found to be used for meeting expenditure on ceremonies, consumption, health and housing purposes account for 18.42 per cent, 11.84 per cent, 17.11 per cent and 52.63 per cent respectively. Result of correlation analysis is displayed in Table 6.

Table 6. Results of correlation analysis

Variables	Correlation coefficient (r)
Size of operational holding	0.049509
Income earned from off farm sources	0.192107
Gross cropped area under non cereal crops	-0.03886
Per capita income	0.112797
Number of crops grown	-0.01145

It is found that there is positive correlation between use of credit in productive purpose by the agricultural households and each of the variables like size of operational holding, income earned from off farm sources, per capita income of the households. Negative correlation is noted between use of credit in productive purposes and each of the variables like gross cropped area under non-cereal crops and number of crops grown. Positive and negative correlations in no case are found to be statistically significant.

Conclusion

There is no considerable difference in the proportion of borrowing agricultural households in utilising

credit for productive and non productive purposes. But there is a wide variation in the proportion of amount used in productive and non-productive purposes. In productive purposes the agricultural households utilise their borrowed fund entirely in crop production. Concerned to the use of credit for non-productive purposes, the agricultural households utilise more than half of the borrowed fund in building their houses. Level of household income is not related to the use of borrowed fund for productive purposes. Though several studies conducted at different point in time have shown that activities of moneylenders have vanished to a great extent, a large amount of debt is still owned to them in this study.

References

- Dandekar, MN. 1988. Farm credit in India. *J Rural Develop, India*. 7(2): 137-170.
- Deorukhakar, AC., Talathi, JM., Nikam, MB., and Patil, HK. 2007. Impact of institutional finance on farmers economy in North Konkan region of Maharashtra, India. *Int J Agricul Science*. 3(2): 96-100.
- Gupta *et al.* Study on flow of credit to small and marginal farmers in Mandsaur district of Madhya Pradesh. *Savings and Development*. 27(4):361-375.
- Gopal, KK. 100 Statistical Tests. SAGE publication, New Delhi: 1999
- Ghose, BK. and Patel, KV. 1991. Institutional credit for farm sector in India with particular reference to marginal and small farmers. *Rural credit: issues for the nineties*. 91-125.
- Katchova, AL. 2005. Factors affecting farm credit use. *Agricultural Finance Review*. 65(1): 17-29.
- Karwasra *et al.* 2007. Source wise regional distribution of agricultural credit in India. *J Agricultural and Applied Economics*. 35(1): 127-142.
- Mishra. 2005. The impact of institutional finance of farm income and productivity a case study of Orissa. *J Agribusiness*, 8(2): 85-95.
- Misra and Maurya. 2007. Role of institutional finance in development of agriculture with special reference to Uttar Pradesh. *J Agricultural Economics*. 51(3): 405-418.
- Patel, RH., Patel, GN., Desai, MM. and Patel, RM. A study of utilization of farm credit. *Indian Cooperative Review*. 25(1): 93-10.