



Agricultural Credit Utilization and Repayment by Farm Households in Tripura

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ABSTRACT

The study was conducted in West Tripura district of Tripura to examine the utilization and repayment of farm loans obtained by borrowers based on a survey done in 2020. The development of agriculture depends on farmers receiving adequate and timely loans. Purposive multi-stage random sampling was used to pick 120 farmers and 20 lenders for a comprehensive investigation. The majority of the sample beneficiaries availed of crop loans (82.5%) as compared to allied activities loans (17.5%) and it was observed that marginal and small farmers diverted a portion of the loan as compared to medium farmers. The extent of repayment of loans by the medium farmers was higher than the small and marginal farmers. To improve the utilization and repayment pattern of credit by farm households, the Bank Field Officers need to conduct post-credit supervision to reduce credit diversion to unproductive uses and disbursement of the majority of the loan in kind form may be used.

INTRODUCTION

In an emerging market economy, debt has a significant impact on rural households in a variety of ways. It is a crucial tool for regulating consumption in a setting where seasonal income swings are common (Narayanan et al., 2016). However, developing countries' credit markets, particularly rural households, don't always act like fully competitive markets. Their dual structure allows for the coexistence of formal and informal financial systems (Kumar et al., 2015). The majority of households borrow money from informal sources of finance because there isn't a well-developed loan market in the rural sections of the country (Kumar et al., 2017; Chakraborty & Gupta, 2017). Governments frequently interfere in the functioning of the credit market in several different ways to facilitate easier access to borrowing (Gulati et al., 2002).

The transition to commercialization in the agricultural sector increases the need for capital (Kambale et al., 2015). Agricultural credit is important for the growth of the Indian economy and agricultural modernization. However, loan non-recovery is a growing issue (Pradhan, 2013). Prompt and timely repayment is crucial for

public sector credit institutions to recycle funds for development and build confidence among clients and credit users (Adhikary et al., 2013). India's credit usage scenario is distinct from other countries. Farmers' lack of financial resources limits their ability to use credit for beneficial purposes. They use agricultural loans for non-agricultural purposes like home consumption, weddings, and other prestige events, which increase their debt load and finally leave them unable to repay the loan, leading to their designation as loan defaulters (Gulati et al., 2002). As a result, the agricultural lending industry depends not only on farmers taking out loans but also on them making regular repayments.

Tripura is a northeastern hilly state located between 22°7' and 24°2' North latitudes and 91°0' and 92°0' East longitudes, with the Tropic of Cancer passing through it. The state has a large number of small and marginal farmers, who face challenges such as limited access to credit and technology, as well as inadequate infrastructure for storage and transportation of their produce (Ray et al., 2020). Despite these challenges, the farmers of Tripura have been able to increase their productivity and income, and such continued agricultural growth requires substantial financial backing. However,

one of the biggest barriers to the ongoing development and expansion of agriculture is the lack of bank financing in the form of loans and advances in the state (Ray et al., 2020). According to data from the Census of 2015–16, just 26.50 per cent of households in the state used banking services, which is low when compared to the national average of 35.50 percent (Economic Review of Tripura, 2021). Though financial intermediation is prevalent in Tripura, but detailed research on farmers' engagement in agricultural growth through institutional financing is lacking. As a result, the current study was conceived to examine the use of agricultural credit acquired by the farming community.

METHODOLOGY

The research was conducted in the west Tripura district of Tripura using multistage random sampling method. A list of farmers receiving bank loans from various financial institutions was compiled in consultation with the district's lead bank manager. The farmers were dispersed across all the blocks in three subdivisions. For the in-depth investigation, one development block from each subdivision was chosen based on the higher concentration of farmers who had taken out bank loans. Accordingly Dukli, Old Agartala, and Mohanpur blocks were chosen. Two villages were randomly selected from each block: Maheshkhala and Bikramnagar from the Dukli block, Khayerpur and D.C. Para from the Old Agartala block, and Bijoynagar and Kalagachiya from the Mohanpur block. Within the constraints of time as well as other resources, a random sampling technique was ultimately used to select 20 farmers from each selected village. Based on the size of their operational holdings, the selected households were again stratified into marginal (0-1 ha), small (1.01-2 ha), and medium (2.01-4 ha) households. The stratification resulted in 56 (46.66%) marginal farmers, 38 (31.66%) small farmers and 26 (21.66%) medium farmers into the total sample of 120 farmers.

Primary data were obtained from the sample households using a specially created and tested schedule. Secondary data were gathered from the selected district's lead bank. Finally, tabular analysis and compounding technique was used to analyze the data.

RESULTS AND DISCUSSION

The farmers availed loans for different purposes, and utilization patterns varied from one group of farmers to another according to the activities they were engaged in. Crop loans or short-term loans were utilized for seed, fertilizers, chemicals, labour, irrigational purpose and other miscellaneous productive purposes. A part of the loan, which was utilized for payment of old debts, social and religious ceremonies etc., was considered unproductive in this analysis. On the other hand, allied agricultural loans or

medium-term loans were utilized for the purchase of animals, medicine, repairing of the animal shed and other miscellaneous productive purposes. A part of the loan, which was utilized for crop production, payment of old debts etc., was considered unproductive in this analysis.

Credit utilization by the beneficiaries

Classification of beneficiaries according to use of loan revealed that out of 120 beneficiaries, 91 beneficiaries had fully utilized the loan amount and there were only 29 beneficiaries who utilized the loan partly (Table 1). No beneficiary was found to divert the entire loan amount. Among different size groups, the percent of beneficiaries diverting loan were 28.57 per cent in case of marginal farmers, 23.68 per cent in case of small farmers and 15.38 percent in case of medium farmers. Therefore, a general trend was thus observed that the diversion of loans decreased with the increase in the size of the holding which is in line with the findings of Papias and Ganesan (2009).

The total amount of loan for all farms together was Rs. 34,69,057. The distribution of total loans among various size groups of farms revealed that Rs. 11,58,330, Rs. 10,68,021 and Rs. 12,42,706 were taken by marginal, small and medium farmers, respectively. It was observed that crop loan constituted the major portion of the total loan (90.25%) while allied activities loan shared only 9.75 per cent of the total loan. Among the size groups, the share of crop loan in the total loan was found highest in marginal farms (91.02%) and lowest in small farms (89.58%). Similarly, the share of medium farms in total allied activities loan (Rs. 338254) was found to be highest (36.37%) and lowest for marginal farmers (30.74). Thus, in both cases, the amount of loan disbursed for medium farmers was highest due to large-scale holding. According to the scale of finance, followed by NABARD, disbursement of the loan takes place according to the operational holding of the farmers (Gulati, 2002).

The magnitude of utilization and diversion of loan for crop and allied agricultural activities is presented in Table 2. From the table, it is evident that in case of crop loan, on an average each farm utilized Rs. 26466.53 out of the total loan amount of Rs. 31624.27 for productive purposes. Amongst the farm size, the per farm utilization of loans was Rs. 17497.81, Rs. 26297.65 and Rs. 46788.67 out of total loan amount of Rs. 22432.70, Rs. 30864.00 and Rs. 53318.19 respectively in marginal, small and medium sample borrower farmer. Similarly, in allied agricultural activities loan, on an average, each farm utilized Rs. 12989.29, out of a total loan amount of Rs. 16107.33 for productive purposes. It was observed that in case of crop loan, the marginal farmers had diverted a maximum proportion of the loan (21.99%) followed by

Table 1. Distribution of sample beneficiaries according to the use of loan

Size group of farmers	Total beneficiaries	No. of beneficiaries utilizing the loan		Incidence of diversification of loan (%)
		Fully	Partly	
Marginal	56	40	16	28.57
Small	38	29	9	23.68
Medium	26	22	4	15.38
All groups	120	91	29	24.17

Table 2. Magnitude of utilization and diversion of loan by the beneficiaries

Size group of farmers	No. of beneficiaries		Total loan received (Rs.)		Amount of loan utilized (Rs.)		Amount of loan diverted (Rs.)	
	Crop loan	Allied agril. loan	Crop loan	Allied agril. loan	Crop loan	Allied agril. loan	Crop loan	Allied agril. loan
Marginal	47	9	1054337 (100) [22432.70]	103993 (100) [11554.77]	822397 (78.01) [17497.81]	77649 (74.67) [8627.67]	231940 (21.99) [4934.89]	26344 (25.33) [2927.11]
Small	31	7	956784 (100) [30864.00]	111237 (100) [15891.00]	815227 (85.20) [26297.65]	91674 (82.41) [13096.29]	141557 (14.80) [4566.36]	19563 (17.59) [2794.71]
Medium	21	5	1119682 (100) [53318.19]	123024 (100) [24604.80]	982562 (87.75) [46788.67]	103452 (84.09) [20690.40]	137120 (12.25) [6529.52]	19572 (15.91) [3914.40]
All groups	99	21	3130803 (100) [31624.27]	338254 (100) [16107.33]	2620186 (83.69) [26466.53]	272775 (80.64) [12989.29]	510617 (16.31) [5157.75]	65479 (19.36) [3118.04]

Figures in parentheses indicate percent to total, Figures in [] indicate the average amount per farm

small farmers (14.80%) and medium farmers (12.25%) out of the total loan amount. The diversion was mostly due to the bank's mode of disbursement of the loan. Earlier, most of the institutional agencies used to disburse loan both in cash and in-kind but in recent years they started to disburse the loan in cash only. This made the farmers misutilize the amount of loan they used to get. A similar result was also observed for loans available for allied agricultural activities. It was observed that marginal farmers diverted a major portion of the loan (25.33%) followed by small farmers (17.59%) and medium farmers (15.91%). Thus, in both cases, maximum diversion of the loan was evidenced by the marginal farmers for some unproductive purposes. The extent of diversion was found to decrease with the increase in the size of the holding. Sharma and co-authors (2014) observed a similar credit diversion trend while studying the utilization of short-term term loan in Rajasthan.

From Table 2, it could also be seen that percent of the utilization of crop and allied agricultural loan was highest in the medium-size group and lowest in the marginal-size group. It could be seen that the percent of diversion of crop loan was highest in the marginal size group of farmers (21.99%) and lowest in the medium size group of farmers (12.25%). The same pattern can be seen in allied agricultural activities.

Table 3 explains the details of crop loan utilized by different size groups of farm. A major proportion of the loan (43.53%) was utilized for payment of labour charges in all size groups of farmer. While the marginal farmers utilized 39.22 per cent of the total loan for the purpose and the small and medium farmers' utilization for the same were 42.66 and 48.33 per cent respectively. The other productive uses were irrigational charges, purchase of seeds and manures and fertilizers which accounted for 29.11, 4.01 and 5.40 per cent respectively for all groups of farms. Maximum diversion towards unproductive use was observed in the case of payment of old debts. Diversion, in this case, was 10.13 per cent for all the farms taken together. On average 51.50 percent of the loan was utilized for the purchase of animals. Utilization of loans for this purpose in the case of marginal, small and medium farmers was

48.98, 51.21 and 53.88 percent of total loan respectively. Maximum diversion towards unproductive use was observed in case of payment of old debts (9.32%). The marginal farmers diverted the highest amount (11.34%) contrary to the medium farmers who diverted only 7.61 percent towards payment of old debts. Through diversion, it was confirmed that the farmers showed a keen interest in farming rather than opening up other enterprises. This was the main reason for many beneficiaries availing crop loans in the study area and similar findings were reported by Bhatia et al. (2011) who studied the extent of financial inclusion of rural households. Moreover, the lack of enterprising ability of the marginal, small and medium farmers was one of the major constraints, for which allied agricultural activities were not implemented fruitfully.

The analysis of the loan utilization pattern of the farmers emerged two important issues for detailed investigations. First, the farmers with smaller holdings need greater post-credit supervision so that the diversion by them towards unproductive and unauthorized purposes may be minimized. Second, a greater linkage has to be established between the amount of loan advanced and the level as well as the pattern of inputs used which was also highlighted by Kumar et al., (2015). This requires appropriate guidance by lending institutions regarding the correct choices of inputs to be used and activities to which they have to be applied to obtain an optimum result (Sonia et al., 2022).

Extent of repayment of crop and allied agricultural loan by the beneficiaries

The percentage of repayment among the beneficiaries in case of crop loan was satisfactory but low in allied agricultural activities loan and it varied considerably in all the three size group of farm (Table 4). The repayment was 88.43 per cent for crop loan and 85.13 per cent for allied agricultural loan. The repayment percentage of crop loan was highest among medium farmers (93.29%) and least among marginal farmers (83.11%). On average, the total crop loan due for repayment was Rs. 33,837.97 for all the farms taken together. Per farm total allied agricultural loan due for repayment was Rs. 17,234.85, of which the total loan repaid was Rs. 14,672.60

Table 3. Pattern of the utilization of crop and allied agricultural loan by the beneficiaries

Purpose	Pattern of the utilization of crop loan by the beneficiaries				Pattern of the utilization of allied agricultural activities loan by the beneficiaries			
	Size group of farmers				Size group of farmers			
	Marginal	Small	Medium	All groups	Marginal	Small	Medium	All Groups
Productive use (Rs.)								
Seed	40170.24 (3.81)	30330.05 (3.17)	55088.35 (4.92)	125588.6 (4.01)	50935.77 (48.98)	56964.47 (51.21)	66285.33 (53.88)	174185.6 (51.50)
Manures & fertilizers	56090.728 (5.32)	46116.99 (42.66)	66733.05 (5.96)	168940.8 (5.40)	12229.58 (11.76)	16930.27 (15.22)	9460.546 (7.69)	38620.39 (11.42)
Labour charges	413510.97 (39.22)	408164.1 (42.66)	541142.3 (48.33)	1362817 (43.53)	9224.179 (8.87)	10589.76 (9.52)	20274.36 (16.48)	40088.3 (11.85)
Irrigational charges	301224.08 (28.57)	310093.7 (32.41)	299962.8 (26.79)	911280.6 (29.11)	3556.561 (3.42)	1127.082 (1.01)	2129.434 (1.73)	6813.077 (2.01)
Other misc.	11400.98 (1.08)	20522.21 (2.14)	19635.48 (1.75)	51558.67 (1.65)	1702.912 (1.64)	6062.417 (5.45)	5302.334 (4.31)	13067.66 (3.86)
Subtotal (A)	822397 (78.00)	815227 (85.20)	982562 (87.75)	2620186 (83.69)	77649 (74.67)	91674 (82.41)	103452 (84.09)	272775 (80.64)
Unproductive use (Rs.)								
Social & religious ceremonies	12546.61 (1.19)	29755.98 (3.11)	27320.24 (2.44)	69622.83 (2.22)	9057.79 (8.71)	1601.813 (1.44)	2743.435 (2.23)	13403.04 (3.96)
Payment of old debts	169748.26 (16.10)	84675.38 (8.85)	62814.16 (5.61)	317237.8 (10.13)	11792.81 (11.34)	10367.29 (9.32)	9362.126 (7.61)	31522.22 (9.32)
Household consumption	20463.21 (1.94)	8988.3 (0.93)	14321.8 (1.27)	43773.31 (1.39)	3559.134 (3.42)	5817.695 (5.23)	1869.965 (1.52)	11246.79 (3.32)
Other unproductive use	29181.92 (2.76)	18137.33 (1.89)	32663.8 (2.91)	79983.05 (2.55)	1934.27 (1.86)	1776.204 (1.60)	5596.474 (4.55)	9306.948 (8.01)
Subtotal (B)	231940 (21.99)	141557 (14.80)	137120 (12.25)	510617 (16.31)	26344 (25.33)	19563 (17.59)	19572 (15.91)	65479 (19.36)
Total (A+B)	1054337 (100)	956784 (100)	1119682 (100)	3130803 (100)	103993 (100)	111237 (100)	123024 (100).	338254 (100)

Table 4. Extent of repayment of the loan by the beneficiaries

Size group of farmers	Total loan due for repayment (Rs.)		Total loan repaid (Rs.)		Total loan outstanding (Rs.)	
	Crop loan	Allied agril. loan	Crop loan	Allied agril. Loan	Crop loan	Allied agril. Loan
Marginal	1128140.59 (100) [24002.99]	111273 (100) [12363.6]	937555.7 (83.11) [19947.99]	91381.5 (82.12) [10153.5]	190584.89 (16.89) [4054.99]	19891 (17.88) [2210.11]
Small	1023759 (100) [33024.48]	119023.59 (100) [17003.37]	907075 (88.60) [29260.47]	101177.8 (85.01) [14453.97]	116684 (11.40) [3764.01]	17845.8 (14.99) [2549.40]
Medium	1198060 (100) [57050.46]	131635.68 (100) [26327.14]	1117701 (93.29) [53223.86]	115565.24 (87.79) [23113.05]	80358.7 (6.71) [3826.60]	16070.44 (12.21) [3214.09]
All groups	3349959 (100) [33837.97]	361931.8 (100) [17234.85]	2962331 (88.43) [29922.54]	308124.5 (85.13) [14672.6]	387627.9 (11.57) [3915.43]	53807.24 (14.87) [2562.25]

Figures in parentheses indicate percent to total, Figures in [] indicate the average amount per farm

Table 5. Distribution of beneficiaries according to repayment pattern and reasons for non-repayment

Size group of farmers	Repayment pattern (%)			Reasons for non-repayment (%)					
	Regular	Irregular	Defaulter	Low annual income	High domestic expense	Crop failure	Death of animal	Stocking for higher price	Others
Marginal (56)	62.50	17.86	21.43	40.91	31.82	13.63	9.09	4.55	-
Small (38)	68.42	13.15	18.42	16.67	33.33	16.67	8.33	16.67	8.33
Medium (26)	73.08	15.38	11.54	-	57.14	42.86	-	-	-
All group	65.83	15.00	18.33	28.83	36.59	19.51	7.32	7.32	2.44

and the total loan outstanding was Rs. 2562.25. It was observed that the percentage share of the total loan repaid to the total loan due for repayment increased with the increase in the size of the holding while that of the outstanding loan amount increased with the decrease in farm size.

The distribution of beneficiaries according to repayment pattern as shown in Table 5 indicates that out of a total of 120 beneficiaries, 79 beneficiaries were regulars (65.83%) who repaid the loan amount fully, 19 beneficiaries were irregulars (15%) who repaid only a part of the loan amount and 22 beneficiaries were defaulters (18.33%) who had not repaid their outstanding amount at all. The incidence of defaulters and regulars varied differently in different size group of farms. The constituent of defaulters was 21.43 percent in the marginal size group, 18.42 per cent the in small size group and 11.54 per cent in the medium size group. On the other hand, the percentage of regulars was 62.50, 68.42 and 73.08 per cent in the case of marginal, small and medium farmers, respectively. Thus, the analysis revealed that while the number of defaulters increased with the decrease in the farm size, the number of regulars increased with the increase in farm size. Likewise Alexpandi (2014) while appraising the repayment capacity concluded that larger the size of the holding, the greater the repaying capacity and vice versa.

To ascertain the causes of non-repayment, certain questions were asked to the respondents and the summary of this analysis is presented in Table 5. Poor repayment performance of Tripura farmers due to small size holding, more particularly marginal farmers, was found by Ghosal (2011) who pointed out that gross output from such holding was even not sufficient to meet the

consumption needs of the farmers. Thus the problem of overdue could be minimized provided the utilization of loans is supervised effectively and the farmers are approached at the right time for repayment. The bank should take responsibility for supplying the loans according to farmers' needs and at the beginning of the crop season to improve the chances of recovery (Prakash et al., 2022). Competent management is also required to organize the recovery drive more efficiently.

CONCLUSION

The practice of diversion had been observed in all sizes of farmer groups. Due to the farmers' lack of enterprising capacity, it was discovered that the number of farmers availing crop loan was larger than the number of farmers availing allied agricultural activities loan under farm sector in the research area. As a result, the loan was used for both productive and non-productive reasons by farmers of all sizes. Loan diversion was shown to be higher in the case of marginal farmers due to smaller land holdings than in the case of medium farmers. Loan recovery increased in line with the size of the holding. Therefore, post-credit supervision by the bank official is being recommended.

REFERENCES

- Adhikary, M. L., Bagli, S., & Dutta, P. (2013). An insight into the financial inclusion of the states in India. *Journal of Social and Economic Development*, 15(1), 50-66.
- Alexpandi, M., & Rameshkumar, S. (2014). Utilisation and repayment of agricultural credit-the case of Madurai district, Tamil Nadu. *Journal of Rural Development (Hyderabad)*, 33(2), 147-159.

- Bhatia, A., & Saraswat, N. (2011). Financial inclusion of rural households-a case study from Hanumangarh district, Rajasthan. *Indian Journal of Extension Education*, 47(3&4), 128-131.
- Chakraborty, T., & Gupta, A. (2017). Loan repayment behaviour of farmers: Analysing Indian households. Indian Institute of Technology: Kanpur, India. <https://home.iitk.ac.in/~tanika/files/research/BorrowingBehaviorAT.pdf>
- Ghoshal, P. K. (2011). Problems of agricultural financing in Tripura. *Indian Journal of Humanities*, 4(1), 23-36.
- Gulati, A., & Bathla, S. (2002). Institutional credit to Indian agriculture: defaults and policy options. Occasional paper no. 23, National Bank for Agriculture and Rural Development. <https://www.nabard.org/demo/auth/writereaddata/File/OC%2023.pdf>
- Kambale, P. S., Lagare, M. G., & Deorukhakar, A. C. (2015). Credit disbursement scenario of lead bank (Bank of India) scheme in Ratnagiri district of Maharashtra. *International Research Journal of Agricultural Economics and Statistics*, 6(1), 78-82.
- Kumar, A., Mishra, A. K., Saroj, S., & Joshi, P. K. (2017). Institutional versus non-institutional credit to agricultural households in India: Evidence on impact from a national farmers' survey. *Economic Systems*, 41(3), 420-432.
- Kumar, A., Singh, R. K. P., Jee, S., Chand, S., & Tripathi, G. (2015). Dynamics of access to rural credit in India: Patterns and determinants. *Agricultural Economics Research Review*, 28, 151-166.
- Narayanan, S. (2016). The productivity of agricultural credit in India. *Agricultural Economics*, 47(4), 399-409.
- Papias, M. M., & Ganesan, P. (2009). Repayment behaviour in credit and savings cooperative societies: Empirical and theoretical evidence from rural Rwanda. *International Journal of Social Economics*, 36(5), 608-625.
- Pradhan, N. (2013). Persistence of informal credit in rural India: Evidence from 'All-India debt and investment survey and beyond. Reserve Bank of India (RBI) working paper, 5, 2013.
- Prakash, P., Kumar, P., Kishore, P., Jaganathan, D., Immanuel, S., & Raj, S. V. (2022). Determinant of access to credit and availing subsidies for protected cultivation in Maharashtra. *Indian Journal of Extension Education*, 58(2), 167-172.
- Ray, P., & Das, B. (2022). Determining the socio-economic characteristics of farmers on access to agricultural credit in Tripura, India. *New Innovations in Economics, Business and Management*, 5, 109-116. <https://doi.org/10.9734/bpi/niebm/v5/4984F>
- Ray, P., Hazarika, J. P., & Das, B. (2020). Performance of financial sectors for agricultural development in west Tripura District of Tripura. *Indian Journal of Economics and Development*, 16(2s), 384-389.
- Sharma, B. K., & Kumawat, R. C. (2014). Purpose-wise utilization pattern of agricultural credit in Rajasthan. *Agro-Economist*, 1(1), 29-37.
- Sonia, Malik, D. P., & Malik, J. S. (2022). Assessment on the progress of KCC scheme in India. *Indian Journal of Extension Education*, 58(3), 33-37.
- The Government of Tripura (2021). The economic review of Tripura. Directorate of Economics and Statistics. <https://ecostat.tripura.gov.in/eco-review-2020-21.pdf>