



AGRICULTURAL CREDIT AND CUSTOMER SATISFACTION: A CASE STUDY ON *DACOPE* BRANCH OF BANGLADESH KRISHI BANK

Md. Anisur Rahman¹, Nurun Naher Moni^{2*} and Farjana Jerin²

¹ *Hua Xiang Jute Products Co. Ltd., Mongla Export Processing Zone, Bagerhat 9351, Bangladesh*

² *Economics Discipline, Khulna University, Khulna 9208, Bangladesh*

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Abstract: This study measures performance of agricultural credit of Bangladesh Krishi Bank (Bangladesh Agricultural Bank) at *Dacope* upazila based on credit data for two years and measures customers' satisfaction. Credit target, disbursement, recovery and outstanding loans have been examined to determine bank's credit performance. Customer's opinion and rating values are analyzed to depict their satisfaction by randomly selecting 40 customers of the branch. Overall credit performance such as credit disbursement, recovery and outstanding loan of the bank is poor during financial year 2013-2014 compared to financial year 2012-2013. The customers are all male, about half of them are doing banking for only five to ten years. The most important barrier for getting bank credit has been revealed as the availability of supporting documents for granting loans. The overall customer satisfaction is 3.36 on Likert scale which is closer to neutral level. The study concludes that the bank should improve the system of loan processing and relaxing collateral requirement as well as providing better services with target of new prospective customers.

Keywords: Agricultural credit, credit performance, customer, satisfaction.

Introduction

Agricultural credit is a necessity in increasing agricultural production. Timely and easy access to credit enables farmers to purchase the required inputs and machinery for carrying out farm operations and increase production (Abedullah *et al.*, 2009 in Rahman *et al.*, 2011).

Bangladesh Krishi Bank (BKB), designed for extending agricultural credit, is a 100% government owned specialized bank in Bangladesh and offers a wide range of quality financial services and products for the last four decades. The major objective of BKB is to provide agricultural credit, commercial and corporate service to the customers. The agricultural credit programs offered by BKB are i) crop loan, ii) fisheries loan, iii) livestock loan, iv) agro equipment and farm machinery loan (BKB, 2013).

Like many developing countries, the government of Bangladesh provides subsidized agricultural credit through specialized banks (Bangladesh Agricultural Bank and Rajshahi Agricultural Development Bank) on grounds that lending to agriculture sector expedites agricultural production. Unfortunately, the outcomes were not satisfactory and

*Corresponding author: <nnmoniku@yahoo.com>

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unsustainable with huge default rates, poor performance of specialized banks, and credit being allocated to wealthiest borrowers (Rahman *et al.*, 2011).

During financial year 2011-2012, BDT 126.17 billion was disbursed as agricultural credit which is 3.56% higher than the disbursement during the preceding financial year and BKB disbursed BDT 52.34 billion (56.82%) of the total disbursement. BKB recovered BDT 50.18 billion (56.26%) of the total recovered amount (Afroz, 2012). Generally inadequate rural branches, collateral requirements, farmer selection bias, credit recovery, balancing farmer preferences, political interferences, interest rate, repayment methods and uneven distribution of agricultural credit are identified as the major challenges of agricultural credit (Rahman *et al.*, 2011).

This study analyzed disbursement and recovery of agricultural credit and customer satisfaction of BKB at *Dacope*, Southwest Bangladesh. 'Agricultural credit' is designated here as credit that is disbursed to the rural farmers for agricultural production and 'satisfaction' is designated as positive appraisal of bank by the customers.

Customer satisfaction in banking. Banking is one of the most rising and competitive industries in Bangladesh that has a huge growth during last two decades. A large number of new banks have made their places in the industry. In such a highly competitive service industry, the importance of customer satisfaction cannot be de-emphasized. Improved customer satisfaction and loyalty gives a firm a better base than its rivals and allows it to flourish in the industry. BKB is one of the few specialized banks in Bangladesh and currently operating at all parts of Bangladesh. With its strong capital reserve, and wide spread branch network, it can make better position in the mind of customers.

In the banking industry, bank and corporate customers relationship remains a key issue as businesses devote to keeping a higher competitive advantage in the market (Kamdampully and Duddy, 1999). The relationship between bank and corporate customers is the most important factor in the success of new financial services (Easingwood and Storey, 1993).

Customer satisfaction is positively related to customer loyalty in the retail banking settings in Bangladesh. All service quality attributes are positively related to customer satisfaction, and customer satisfaction is positively related to customer loyalty in the retail banking settings in Bangladesh (Khondaker and Zaman, 2011). Jahiruddin and Haque (2009) surveyed 198 bank customers in Khulna, the third largest city in Bangladesh to explore the pattern of preferences and relative importance of different factors to customers when selecting their preferred banks.

As far as the mean values are concerned, customers are fairly satisfied on reliability, responsiveness, assurance and empathy. This satisfaction comes from quick services, affordable service charge, easiness of depositing and withdrawing money, discontinuous function of server, ATM booths, and A/C statement over SMS/e-mail services, error free records. The customers are less satisfied on equipment, physical facilities, appealing materials etc. (Nupur, 2010).

A study was conducted by Islam and Ahmed (2005) on 404 sample private, public and foreign commercial bank clients in the capital city, Dhaka, using the SERVQUAL

model. The findings of the study supported the notion that the banks' most important service quality factors are: personal attention to the clients, error free records, safety in transactions, and tangible physical facilities. Khondaker and Zaman (2011) concluded the key factors in influencing customer satisfaction according to their importance are responsiveness, physical comfort, assurance, appropriate behavior and variety of services.

Materials and methods

The study was conducted during July-September, 2014 on 40 randomly selected male customers of the bank considering their banking during financial year 2012-2013 and 2013-2014. During the research period, total number of loan client was 488. They took different types of loan namely crop loan, livestock loan, fisheries loan and farm and irrigation loan in varying amounts. Their banking relations with BKB started from one year to more than ten years. The socio-demographic information of customers was recorded through face to face interview. Information regarding their opinion and utilization of credit were collected and their level of satisfaction was measured. The Likert scale has five level grades such as 'Strongly dissatisfied (SD)=1, Dissatisfied (D) =2, Neutral (N) =3, Satisfied (S) =4, Strongly satisfied (SS) =5'. Information on credit performance (i.e. target, disbursement, recovery and outstanding) was collected from documents presented at the bank. This study used face to face and semi-structured interview schedule with both open and close-ended questions were followed for collection of information.

Four criteria such as credit disbursement target, actual disbursement, recovery and outstanding loan were considered to decipher agricultural credit performance. The documented amount and their percentage changes (both positive and negative) have been used for analysis. The customer satisfaction was revealed through analysis of the following indicators pertaining to a customer.

- Duration of banking relationship with the bank
- Credit type and problems faced in getting credit
- Documents, collateral evidence and time required for a credit
- Rate of interest and service charges
- Quality of service
- Employee attitudes and bank environment
- Facilities and support
- Suggestions for improving the situation

Likert scale has been used for calculating the level of satisfaction and the formula is given below with a hypothetical example:

$$\text{Mean value} = \frac{\sum fX}{N}$$

where N = Total number of respondents; f = Frequency; X = Weighted value to each category

Options	Value(X)	Frequency(f)	f*X
Strongly satisfied (SS)	5	4	20
Satisfied (S)	4	11	44
Neutral (N)	3	15	45
Dissatisfied (D)	2	8	16
Strongly dissatisfied (SD)	1	2	2
Total		N= 40	
			$\sum fX= 127$
Mean Value			3.18

Results

Agricultural credit performance of Dacope branch: The credit performance of Bangladesh Krishi Bank (BKB) at *Dacope* is presented in Table 1.

Table 1: Agricultural credit performance Bangladesh Krishi Bank at *Dacope* branch
(In BDT)

Period Indicators Credit type	2013-2014				2012-2013			
	Target	Disbursement	Recovery	Outstanding	Target	Disbursement	Recovery	Outstanding
Crop loan	1,10,00,000 (100%)	98,00,000 (89.10%)	86,21,512 (87.98%)	11,78,488 (12.02%)	92,00,000 (100%)	96,25,000 (104.62%)	81,10,528 (84.27%)	15,14,472 (15.73%)
Fisheries loan	1,65,00,000 (100%)	1,50,00,000 (90.91%)	1,08,00,210 (72.00%)	41,99,790 (28.00%)	1,20,00,000 (100%)	1,03,50,000 (86.25%)	90,52,705 (87.47%)	12,97,295 (12.53%)
Livestock loan	78,00,000 (100%)	62,00,000 (79.49%)	44,14,150 (71.20%)	17,85,850 (28.80%)	65,00,000 (100%)	56,00,000 (86.15%)	38,00,452 (67.87%)	17,99,548 (32.13%)
Farm & irrigation equipment loan	46,00,000 (100%)	34,25,000 (74.46%)	26,48,902 (77.34%)	7,76,098 (22.66%)	32,00,000 (100%)	28,70,000 (89.67%)	21,40,500 (74.58%)	7,29,500 (25.42%)
<i>Overall</i>	<i>3,99,00,000</i> <i>(100%)</i>	<i>3,44,25,000</i> <i>(86.28%)</i>	<i>2,64,84,774</i> <i>(76.93%)</i>	<i>79,40,226</i> <i>(23.01%)</i>	<i>3,09,00,000</i> <i>(100%)</i>	<i>2,84,45,000</i> <i>(92.05%)</i>	<i>2,31,041,85</i> <i>(81.22%)</i>	<i>53,40,815</i> <i>(18.78%)</i>

The credit is considered as credit for crop, fisheries, live stock, farm and irrigation (as agricultural credit) and the performance is measured on four criteria such as target, disbursement, recovery and outstanding loan on yearly basis but divided into monthly form. The BKB of *Dacope* branch operates manually. The credit data of the year 2012-2013 and 2013-2014 have been considered for analysis. Disbursement performance is estimated by considering the target as base (100%) while loan recovery performance is estimated by considering the credit disbursement amount as base (100%). Table 1 suggests that credit performance is poor during 2013-2014, with respect to disbursement, recovery and outstanding loan. Both credit disbursements and credit recovery decreased by 5.77% and

4.29% respectively; hence the outstanding loan increased by 4.23% compared to 2012-2013. The loan for fish culture disbursed during 2013-2014 shows 4.65% increment to that during 2012-2013, the outstanding loan has increased by 15.47%, from 12.53% to 28.00% as well. However, during both of the financial years, the outstanding livestock loan is the highest. Loan disbursement for other activities has decreased during 2012-2013. Table 1 shows that loan for farm and irrigation equipment is less attractive among the customers.

Demographic characteristics of the respondents: The socio-demographic characteristics of the customers are presented in Table 2. The network for navigation is not well developed in *Dacope*. Male dominated agrarian households are common. More than 80% of bank customers are aged between 30-50 years while 87.5% of them are directly and/or indirectly engaged with agriculture. Eighty five percent of them have income within the range of BDT 10,000-40,000 per month. The customers of BKB *Dacope* branch are literate.

Table 2: Demographic characteristics of customers of Bangladesh Krishi Bank at *Dacope* branch

Variables	Frequency (Percentage)	Variables	Frequency (Percentage)
Gender		Year of Schooling	
Male	40 (100%)	6-10 years	10 (25%)
Female	0 (0%)	10 years	15 (37.5%)
Age		12 years	11 (27.5%)
20-30	7 (17.5%)	12+ years	4 (10%)
30-40	18 (45%)	Monthly Income	
40-50	15 (37.5%)	BDT 5000-10000	2 (5%)
Occupation		BDT 10000-20000	7 (17.5%)
Farmer	24 (60%)	BDT 20000-30000	22 (55%)
Businessman (Agro based)	11 (27.5%)	BDT 30000-40000	5 (12.5%)
Others	5 (12.5%)	BDT 40000 & above	4 (10%)

Banking behavior of the customers: Survey result regarding duration of banking and credit adjustment shows that about 62.5% of the customers are doing banking for 6 to 10 years and 32.5% are doing banking for less than three to five years. About half of the customers (47.5%) adjusted credit for three or more times indicating that customers are interested to short term credit facilities only (Table 3). The analysis suggests that loan for crop and fisheries are the main preference which is usually short term in nature. About 35% of the customers take crop loan and 52.5% take fisheries loan. About 80% of the customers receive the credit that they had applied for (Table 4). In addition to this, about 85% of the customers suggest the paper requirement and documentation as the most important barrier in receiving bank credit (Table 5). Collateral security is also a barrier as opined by 65% of the respondents. However, lack of banking knowledge and complexity in loan processing has also been discussed as other barriers by 22.5% and 17.5% of the respondents respectively.

Table 3: Duration of banking and credit adjustment of Bangladesh Krishi Bank at *Dacope* branch

Variable	Frequency (Percentage)	Variable	Frequency (Percentage)
Duration of Banking		No. of Credit Adjustment	
Less than 3 years	3 (7.5%)	1 time	16 (40%)
3-5 years	10 (25%)	2 times	5 (12.5%)
6-8 years	16 (40%)	3 times	6 (15%)
9-10 years	9 (22.5%)	4 times	8 (20%)
10+ years	2 (5%)	5 times	5 (12.5%)

Table 4: Credit type and fulfillment of credit amount of Bangladesh Krishi Bank at *Dacope* branch

Variable	Frequency (Percentage)	Variable	Frequency (Percentage)
Credit Type		Fulfillment of Credit	
Crop loan	14 (35%)	Yes	32 (80%)
Fisheries loan	21 (52.5%)	No	8 (20%)
Livestock loan	4 (10%)		
Farm & Irrigation loan	1 (2.5%)		

Table 5: Barriers to receiving bank credit of Bangladesh Krishi Bank at *Dacope* branch

Barriers/Problems	Frequency	Percentage
Required papers and documentation	34	85%
Collateral/Security requirement	26	65%
Lack of banking knowledge & experience	9	22.5%
Time required & complex process	7	17.5%

Table 6 summarizes customers' credit utilization and perception on loan monitoring system. About 80% customer uses the approved credit completely for the purpose they have received the loan. The rest diverts the loan into other uses such as adjusting the previous credit, borrowings, family crisis, livestock purchase and home renovation. About 67.5% customers perceive that the bank monitors the loan adequately. About one-third (32.5%) customers perceive loan monitoring system as inadequate (Table 6).

Table 6: Use of credit from Bangladesh Krishi Bank at *Dacope* branch and bank loan monitoring

Variable	Frequency (Percentage)	Variable	Frequency (Percentage)
100% Use of Credit		Bank Loan Monitoring	
Yes	32 (80%)	Yes	27 (67.5%)
No	8 (20%)	No	13 (32.5%)

Ensuring credit adjustment (recovery) is the highest priority after credit disbursement for the customers. Most customers (92.5%) repay credit regularly (Table 7).

Rest 7.5% customers fail to repay on time due to loss in business and crop failure due to natural disaster and pest attack in crop or virus attack in fish farming.

Table 7: Repayment of credit at *Dacope* branch of Bangladesh Krishi Bank

Regular Repayment	Frequency	Percentage
Yes	37	92.5%
No	3	7.5%

Customers' satisfaction in banking: Table 8 shows customers' satisfaction level measured by 10 indicators. The employee's attitudes towards customers have been scored as 3.18 suggest a neutral to satisfied level of attitude. Regarding bank's atmosphere, calculated mean score is 3.05 which indicate that the customers are neutral to the bank's internal environment. In case of easiness of getting credit, calculated mean score is 3.00 indicating the neutral level. Customers are in between neutral and satisfied while expressing their opinion on loan processing and calculated mean score is 3.43. Mean score of customer satisfaction on collateral requirement for credit is 3.58 indicates perception in between neutral and satisfied level. In the cases of time required for credit approval (mean score is 3.30), interest rate and service charge on credit (mean score is 3.48 for each), customers' satisfaction levels lie in between neutral and satisfied. Customers' rating on disbursement of credit has mean score of 3.93 indicating satisfactory rating. The bank disburses the highest amount of credit in fisheries sector. In addition to this, customers evaluate the speed and quality of services, which shows mean score of 3.15 indicates that the customers' perception on this indicator is almost neutral. Overall customers' satisfaction level on ten (10) statements is calculated, which gives average mean score as 3.36. This score indicates that the customers are not fully satisfied by the bank services.

Table 8 : Indicators and Customers' Satisfaction

SL	Customer Satisfaction Indicators	Frequency and Score					Total	Mean	
		Level	HS (5)	S (4)	N (3)	D (2)			HD (1)
1	Attitudes of Bank Employees	Freq.	4	11	15	8	2	40	3.18
		Score	20	44	45	16	2	127	
2	Bank Atmosphere	Freq.	6	9	12	7	6	40	3.05
		Score	30	36	36	14	6	122	
3	Ease of Credit	Freq.	3	11	14	7	5	40	3.00
		Score	15	44	42	14	5	120	
4	Requirements for Credit	Freq.	8	13	11	4	4	40	3.43
		Score	40	52	33	8	4	137	
5	Collateral Requirements for Credit	Freq.	8	12	16	3	1	40	3.58
		Score	40	48	48	6	1	143	
6	Time Required for Credit Approval	Freq.	4	16	11	6	3	40	3.30
		Score	20	64	33	12	3	132	
7	Interest Rate on Credit	Freq.	6	15	13	4	2	40	3.48
		Score	30	60	39	8	2	139	
8	Service Charges	Freq.	8	14	10	5	3	40	3.48
		Score	40	56	30	10	3	139	
9	Disbursement of Credit	Freq.	11	20	5	3	1	40	3.93
		Score	55	80	15	6	1	157	
10	Quality of Service	Freq.	4	14	10	8	4	40	3.15
		Score	20	56	30	16	4	126	

Discussion

Agricultural activities are the major source of income for 66.07% people of *Dacope* upazila. Shrimp culture is also practiced in an extended form in this area (Banglapedia, 2012). Agricultural credit plays an important role in fisheries and cropping sub-sector in the area. BKB provides regular small scale agricultural credit, ranges from BDT 50,000 to BDT 5,00,000 in each financial year. The performance of agricultural credit is satisfactory in case of loan for fisheries and crop in terms of disbursement, recovery and outstanding amount. The bank has relatively poor performance in recovering the credit during financial year 2013-2014, which is 23.01% compared to 18.78% in 2012-2013. The bank was able to reduce the outstanding credit during 2013-2014 except in case of fisheries loan compared to 2012-2013. Overall performance is poor in 2013-2014 than 2012-2013 in terms of credit disbursement, recovery and outstanding loan. About 87.5% of the respondents prefer crop and fisheries loan while the rest demand livestock and farm and irrigation equipment loan. This implies that fisheries and crop sector is rising compared to other sectors. Also the activities relating to land renovation and agricultural modernization are less addressed that narrows down the scope for sustainable development in agricultural sector.

The female have restricted access to formal credit institutions in this area. The reason behind this situation might be either the bank doesn't offer credit facilities to female or pay less focus on female. Other case may be females are not interested to apply for credit due to socio-political circumstances prevailing in the study area. About 87.5% of the respondents are directly or indirectly dependent on agriculture or agro based business. Almost 75% have passed at least Secondary School Certificate examination. In case of financial condition, almost 68% belong to the monthly income range of BDT 20,000 to BDT 40,000 implying that majority of the respondents lie in a moderate position in income ladder.

About 62.5% of the customers prefer short term loan ranging between 6-10 years. Such loan is effective to fulfill credit requirement of the respondents. Collection of required documents is one of the barriers to receive agriculture credit, according to 85% of the respondents. Meeting collateral or security requirement is another barrier for 65% of the respondents. Lack of banking knowledge and experience and complexity of loan processes are noted as other barriers by 22.5% and 17.5% of the respondents respectively. However, 20% of the respondents in the study area are not being able to ensure full utilization of credit for the predefined purposes. Adjusting previous bank loans, personal borrowings, family crisis, livestock purchase and home renovation are the factors which influence the borrowers to utilize the credit in other purposes.

Customers' suggestion regarding improvement of credit recovery situation shed lights on few important issues to be addressed by the bank (Table 9). Most of the respondents (92.5%) think that bank should extend credit to those borrowers who have adequate amount of collateral. A significant proportion of respondents (52.5%) suggest for more intensive loan monitoring system by the bank. Again 47.5% opined that bank officials should have regular visit to customers' working place in order to ensure appropriate utilization of credit. Other than this, 30% of the respondents think that selection bias should be avoided while choosing borrowers and 17.5% opined that bank's support should be extended for better utilization of credit.

Table 9: Improving credit recovery situation at *Dacope* branch of Bangladesh Krishi Bank

Suggested Actions	Frequency	Percentage
Bank close monitoring	21	52.5%
Having adequate collateral for loan	37	92.5%
Regular visit to customers by bank people	19	47.5%
Selection of right and experienced borrower	12	30.0%
Bank's advice and support for use of credit	7	17.5%

Mean scores calculated on Likert scale suggests that customers are in between neutral and satisfied in assessing the satisfaction in terms of behavior and attitudes of employees, bank's atmosphere, ease of obtaining credit, document and collateral requirement for credit, time requirement for credit approval, interest rate on credit and bank service charges, disbursement of credit, and speed and quality of services. The highest mean score is 3.93 for 'disbursement of agriculture credit' suggesting that allocation of agricultural credit fairly matches with customers' demand. The lowest mean score is 3.00 for 'ease of obtaining agricultural credit' suggests that the customers face barriers to receive credit. Customers rated both 'interest rate on credit' and 'bank service charges' at 3.48 as their satisfaction level, which suggest that bank has to assess customers' evaluation. The overall customer satisfaction level is measured at 3.36. Therefore, BKB has to develop the satisfaction measurement parameters to ensure customers' satisfaction more.

Conclusion

BKB has been working for agricultural development in *Dacope* upazila. The bank's agricultural credit performance is poor in 2013-2014 compared to 2012-2013 in terms of credit disbursement, recovery and outstanding. Though documents and collateral requirements are treated as important barriers for bank credit, almost all customers (92%) suggested 'having adequate collateral for loan' is the best way of improving the credit recovery situation followed by close monitoring of loan as opined by 52.5% respondents and regular visit to customers by bank people according to 47.5% respondents. The overall customer satisfaction level is measured at 3.36 on Likert scale, which implies that customers are neither satisfied nor dissatisfied with the bank's services. This finding leaves the room for policy makers of BKB to rationalize their services and attention towards customer oriented. The bank will be able to overcome its weaknesses and will bring enormous success by taking some major initiatives in the field of ease of loan processing, collateral requirement and better services with target of new prospective customers.

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