

Credit Accessibility Granted by Rural Banks in Rural Community: Evidence from Ghana

Frederick Binfor

Marketing Department, Oil Palm Research Institute, Kade, Ghana Email: frederickbinfor@yahoo.com

Samuel Antwi

Koforidua Polytechnic, P.O.Box kf 981, Koforidua, Ghana, School of Finance and Economics,
Jiangsu University, China
Email-samyantwi@yahoo.com

Abstract

The main objective of the rural banks was to improve the standard of the living in the rural community they operate. This is done by encouraging the rural indigenes to save with them, and assist them by granting credit facilities to them. It is obvious that in spite of the existence of the bank in the community, people still take loans from friends and relatives (moneylenders), when in comparably have higher interest rate than that of the bank. Some take 100% interest within the shortest time with properties used as collateral until the money are paid back before the properties are released to them. The researcher found out that the public lack information about the rural bank in their community, which leads to their access of credit from friends and relatives known as Money Lenders instead of the bank. The concern in this study is, therefore, the lack of information between banks and the public. Even though the display of information by banks is supposed to provide vital information to customers, a number of concerns are raised. They are directed at how the rural banks can bring about effective banking services to the rural community. Given the low level of literacy, how many customers can read the information displayed in the banks if they are available? How many can understand what they read if they are able to read? In addition, to what extent does this information assist customers in their demand for credits? With what strategies do the banks reach out to the public? If not all, most of these concerns have informed the focus of discussion in this paper.

Keywords: Access to Credit, Information gap, Rural Banks, Ghana

1.0 Introduction

It is a fact that the majority of the countries in West Africa depend in large part on the rural sector. Future development of these countries or the lack of it will depend in part on the successes or failures in nurturing, supporting and developing the rural areas and the rural economy, particularly in improving the dilemma of rural households including support for their activities. After all, the majorities of the population in these countries live and work in the rural areas (rural community). The rural sector is serviced primarily by the rural financial markets



(RFMs), a market often described as inadequate, poorly developed, small and shallow. Regrettably, the lack of access to financial services is considered one of the major constraints to rural development in West Africa, particularly to increasing investments and productive activities in the rural sector. It comes as no surprise, therefore, that the observed heightened interest and efforts on the governments of West Africa countries and Development Assistance Agencies (DAAs) alike to explore avenues to strengthen and expand the rural financial markets. Access to bank credit by poor, the Small and Medium Scale Enterprises continue to play a significant role in current debates in rural financial market. The poor has been understood as the physiological, social and economic deprivation, which involves the inability to satisfy the basic material or social and economic needs of the individual. The definition of small and medium scale enterprises follow the categorization of enterprises by the National Board for Small Scale Industries (NBSSI) based on the number of employees of an enterprise or its annual turnover ¢ 250,000,000. The medium scale businesses employ between 9 and 35 people with more than \$250,000,000 turnovers annually. The level of deprivation among these enterprises in terms of satisfying basic business needs have forced them to belong to the economically poor entities and as such encounter problems accessing bank credit. For these reasons, the poor comprises both the individual as well as the small and medium scale businesses. Debates on rural credit and lending operations in Ghana have failed to address the issue of information and how it is linked to credit accessibility. With the restructuring of the financial system in 1988, the need to consider information as the critical variable in accessing bank credit in Ghana has become more important that before. The operational definition of information employed here constitutes the messages and vital data required to facilitate the access to credit by the poor. Information, however, cannot be relevant if it is not communicated. Basically, communication occurs either top-down, horizontally or bottom up through the defined channels of communication.

2.0 Literature Review

According to Haag et al (2000) not all countries see information as the property of the collector in 1993, the European parliament announced the directive stipulating that individuals use of the information, the purpose for the collection, to whom the information may be disclosed, right of access, collection and so on. Holland, Germany and many other countries have similar legislation, which view personal information as the property of the individual, but New Zealand has the most stringent rules. New Zealand privacy Act require that information a company collect must be relevant and essential for the business purpose of the company. Going even further, the law demands that personal information be collected directly from the individual and the individual authorization must be given first. Companies in New Zealand are also require to take reasonable steps to inform the purpose of the collection and the storing it; companies must also allow individual's to access and collect any personal information.

2.1 Information Gap

According to Ekumah and Essel (2000) information gaps exist due to lack of transparency by banks and low level of education makes the available information incomprehensible to a



number of customers. Customers can be empowered with the right information through sensitization and education from the banks. Also, rural banks may have to update records of customers to reduce the levels of non-performing loans accumulation. Kumah and Agbogah (2000) came out with similar findings in their study, about 85% of rural banks savers from ten rural banks in Ghana did not know or have an idea of levels of interest rates that should accrue to their savings pre annum. Of the 15% who knew, some could only mention the rate in monetary terms. But it was also most probable due to the low education levels to most customers that contribute to their inability to seek the right information. Ekumah and Essel, 2001, the general assumption is that high literacy levels facilitate obtaining vital information on credit and on other banking services than when there is no education because banks are regarded as 'modern' institutions for the literate people. In this regard, low education level tends to be a pull out factor for poor and SMEs seeking credit from the banks. Information with regard to access to credit is thus a scarce resource to both the rural and urban poor, as well as the deprived Small and Medium scale Enterprises (SMEs). Evidence from Ekumah and Essel (2001) indicated that the poor has little access to credit no because of socio-cultural barriers only but also because of the inadequacy of information about the services and facilities offered by the banks.

2.2 Information Theory and Communication

A fundamental problem with communication between the sender and the receiver, however, is the errors or distortions that can arise during transport through the communication channel as a result of objects, which act upon the channel and distort the flow of information. The transport of information according to Lubbe (1997a) must be error-free to a certain degree, depending on the requirements imposed by the receiver. It must, therefore, be possible to correct errors or the transport must be good enough such that certain errors, which are considered to be less serious, can be tolerated. Basically, there are three ways to communication in any set up: the downward, horizontal and upward or vertical communication. The downward communication is where information in the form of directives, policy statements and guidelines are transmitted top-down. The horizontal communication occurs laterally at the same level among people belonging together managerially or socially. Upward communication takes place up the horizontal structure. With this type of communication, opinions, ideas, complaints and other kinds of information get to the highest ranked official from subordinates. Relevant to the rural financial sector, information tends to be communicated downward either from the financial institutions to customers and the general public or from the source of credit facility to the recipients/customers to prevent missinformation about access to credit and ease accessibility problems. It can also be communicated horizontally among customers and the people and well between the financial institutions. As well shall observe, upward communication in rural banking is either limited to receive very little attention. According to Ghana (2003), it is not enough to have detailed information. It is also necessary to have some understanding of the background against which the information should be assessed. This includes not only the legal position on registration, disclosure, access to information etc, but also the extent to which the legal position is enforced. And, in addition, to the basic need for good and accurate and up to data and audited



information, the background legal requirements and the way in which these are applied in practice, it is also necessary to consider the confidence which can be placed in the possibility of collecting and enforcing debts in a timely and effective way.

2.3 Relationship between Information and Credit

Information and credit can be linked through a number of factors. Of these, we emphasize on the concerns of information asymmetry, the transparency and cultural factors and discuss their relevance for credit in the rural financial market. Information asymmetry describes the condition in which all parties involved in an undertaking do not know relevant information. Information asymmetry models have been used widely to explain a variety of concepts including those in different market situations (Mishkin, 1991; Constantiou, 2002). The central concerns underlying these models are that information asymmetry causes markets to become inefficient and forces market participants to take risks because it is assumed that information is always inadequate. Furthermore, it is also due to the fact that all relevant stakeholders in the market do not have access to the relevant information for their decision making process. In the financial market, the banks earn profit to sustain their operations by lending to borrowers. But, banks have to deal with some amount of risk because inadequate information on borrowers raises and reduce problems associated with information asymmetry banks enter into contractual agreements with borrowers. Moreover, there may be an increase in advance selection by banks in the situation when interest rates rise. This is because only worse quality borrowers will still be willing to borrow, and this could lead to a decline in the supply of credit by banks. Information asymmetry will, therefore, not only raise uncertainty, but it also makes screening of borrowers by lenders more difficult and increases administrative cost. In this way, adverse selection will certainly increase due to uncertainty about borrowers. In the rural financial market, how information asymmetry impinges on the activities of rural banks, as financial intermediaries can be enormous.

2.4 Access to Credit by Small and Medium Scale Enterprises (SMEs)

According to Dalitso and Peter (200) Access to finance remained a dominant constraint to small scale enterprises in Ghana and Malawi. Credit constraints pertaining to working capital and raw materials were cited by respondents (between 24% and 52% in Parker et al, 1995). Aryetey et al (1994) reported that 38% of the SMEs survey mention credit as a constraint, in the case of Malawi, it accounted for 17.5% of the total sample. This stems from the fact that SMEs have limited access to capital markets both, locally and internationally, in part because of the perception of higher risk, information barriers, and the higher cost of intermediation for smaller firms. As a result, SMEs often cannot obtain long-term finance in the form of debt and equity.

2.5 Credit Information Systems for Africa

Graham (2003) Information is of vital importance. Readily available and reliable information is critical for credit risk assessors. Limited/restricted availability and poor reliability are endemic problems in many developing countries. The inevitable result: international commercial trade



and investment activities are seriously inhibited. There is an information deficit of significant proportions in many developing countries. Such information as is available does not give adequate value for money. There is no easy, simple, cheap or quick-fix solution. Host countries need to exhibit political will to address the issue. The barrier is limited financial resource. The International Financial Institutions (IFI's) have a pivotal position. The problem is enlisting their interest and attention if the first place to the information deficit situation. They cannot be entirely ignorant of the problem: they are information users themselves. They should be charged to set down standards for the extent, nature and timeliness of information on individual companies and individual banks.

3.0 Methodology

Methods considered for collection of data include personal interviews; key respondents were interviewed to ascertain issues pertaining to traditional sources of revenue and the District Assembly Common Fund. Other sources include distribution of questionnaire. The population was then divided according to status or rank in office, type of business, educational background, etc. It was also portray the use of charts and tables. The chapter was put into the following categories of headings, exposition of the study area, population and sample size, data collecting analysis and limitations. Due to the topic and the research objective, the research was focused on Bank and both its customers and non-customers in the densely populated area of Kade in the Eastern Region of Ghana.

3.1 Sample Size and Sample Procedure

A number of factors were taken into consideration in selecting a sample. The feasible sample size for the survey will take care of one hundred and forty-six. The breakdown of the sample size is one hundred and twenty customers, twenty non-customers and six from the Banks. Customers were selected randomly using the simple random sampling technique based on sampling frames provided by the bank. Non-customers were sampled by convenience while interviews were conducted on the credit unit.

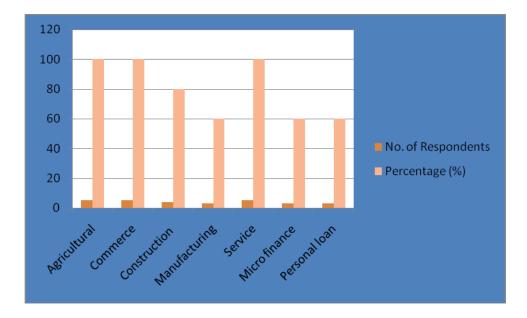
3.2 Research Instrument

Questionnaires were designed as a basis of getting the information (data) needed. In designing the questionnaires, much care was taken to avoid difficult questions. The questionnaires are in two forms (open-ended and close-ended). The respondents were asked to tick (V) the applicable answer to the close-ended questions while space was provided for the open-ended questions. However, interview schedule was used to solicit information from the credit unit (department) precisely, the project officer. The structured interview was containing questions that are not difficult but to add credibility to the questionnaires and to capture information that are not taken care in the questionnaires. The office of the **Kwaebibirem Rural Bank Ltd-Kade** was visited for the personal interview as well as customers and other respondents whose activities are in line with the Bank.



4.0 Empirical Results and Discussion

The analysis contains responses from questionnaires distributed to bank staff in Kwaebibirem Rural Bank Ltd., customers, and non-customer respondents in Kade. The bank derives it major policies from Bank of Ghana. The manager responding to a question which sought to find out about the banks policy on information said their information must follow a laid down procedure and lines of authority on information disseminations. According to the Project officer bank information could be either classified (i.e. must be secrete) and/or open (i.e. be known to the public). According to the fields monitor, personal information about customer must be kept secret. The clerk also believes that it the bank's prerogative to internalized information from customers or otherwise for the benefit of management.



Source: Survey data, July 2008

Figure 1: Sectors supported with loan

Five out of five respondents believe Agricultural, Commerce, and Service sectors were support with loan representing 100% respond. Four out of five also believe construction sector is supported with loan which represents 80%. And finally three out five believe manufacturing; micro – finance and personal loan are supported with loan, representing 60% of the total responses. The respondents answered affirmatively that the maturity period of loans given to the above sectors are; six to twelve (6-12) month for construction; twelve month for Agriculture, Service and Commerce and 12-24 months for manufacturing and personal loans. One out of five respondents constituting 20% answered affirmatively that customers complain about the duration and says it's short. Notwithstanding, other four respondents constitution 80% of the majority had a contrary view implying customers do not complain about the duration. The bank seems to have credit policy for the customers at the community level are



given the priority in respect loans; thus micro finance scheme is provided to boast their standard of living. From the project officer's view, the credit policy seems to improve the living standards of the community by offering micro finance loans with lowest interest rate and shorted repayment period. To the manager, normally authority level is use to be applied for the policy in granting loans at the community level. General conditions must also be applied at the community level. The condition for obtaining loan in the bank according to the manager those seeking for credit must have good operation of account (high turnover), good credit history, loyalty, and credibility. To him customers are aware of these conditions, which are given by the manager, and the project officer and this information get to customers through advertisement, notice in the banking hall and direct contact and enquiry. Similarly, the project officer comes out with similar condition such as:

- 1. Must be a customer,
- 2. Operate proper account (High turnover).
- 3. Presents Personal guarantors.
- 4. Mortgage deed.
- 5. Cash lien.

4.1 Information Flow

Responses show that information about bank service reach customer through the following means: advertising materials, van announcements, handouts, agent, personal visit by project officer and marketing officers. To them information materials are issued almost everyday. Customers know where to pick them and normally the educated one's such as teachers and public servants pick them. Some customers usually ask for further explanation when they read the brochures. These include interest rates, negotiation of loan duration as well as conditions attached to services provide by the bank. In obtaining information from customers they keep track of personal information such as age, house number are needed form customers but most feel reluctant to provide such information due to illiteracy and ignorance as proposed by the manager. The clerk added that customers are reluctant in given information like their name, residential address, occupation, marital status and I. D. number.

4.2 Effect of Information

Responses show that, due to the reluctance of customers to give certain information about them, it affects the bank negatively in terms of full or access to bio data as indicated by the manager. They further explained that the information gap slows down decision making and poor account operation. This is because the customers find no need to keep good accounts. This makes credit to business outside the normal line of activities of the bank or the customers somewhat difficult in terms of repayment of loan.

4.3 Suggestion to Bridge the Gap

Suggestions were raise by the respondents as a way to bridge the information gaps which are outlined as follows: there must be a frequent visit by customers for information concerning



credit and others from the project officer in charge of credit. Customers are also encouraged to do away with fear of visiting the bank. It is noticed that some customers have large amount of savings in their accounts but do not withdraw these monies neither do they access loan(s). The credit officer explained that such people have some funny believe that if they go to the bank others may think they do not have money. They are also required to provide accurate and reliable information in order to speed up the processing of loans. They are also to collect and give information periodically to or from the bank. The bank is also expected to have more interaction with the clients. Improvement of road and infrastructure encourage frequent contact between the bank and its clients, the bank should embark on mass education to the customers in durbars. They are also expected to strengthen their data base on customers in order to ensure better house numbering and frequent visit. Agents must also be ready to interpret the bank policies to the less educated (illiterate clients).

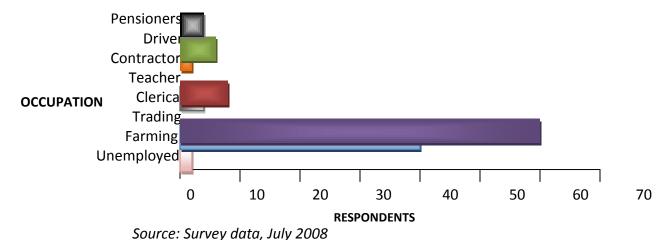


Figure 2: Customers according to occupation

Out of 120 respondents contacted, unemployed constitute 0.8%, 33.3% of respondents are farmers, 49.2% traders, 2.5% representing clerical workers, 6.7% teachers and 0.8% contractors. It is also review that, 4.2% are drivers whilst 2.5% are pensioners.

Table 1. A distribution according to how customer got to know the existence of the bank.

Response	No. of Respondents	% No. of Respondents
Seen the office of the bank	51	42.5
Through the bank outreach	13	10.8
program		
Through Advertisement	27	22.5
Through friend and relatives	28	23.3
Bill board of the bank	1	0.8
Total	120	100

Source: Survey data, July 2008



Out of one hundred and twenty respondents, fifty-one (51) representing 42.5% got to know of the bank by the mere presence of it structure (office of the bank), thirteen (13) representing 10.8% got to know the existence of the bank through outreach programmes of the bank, twenty-seven (27) respondents representing 22.5% got to know through advertisement, twenty-eight (28) respondents representing 23.3% also got to know of it through friends and relatives, bill boards did not seem to have created much awareness of the bank existence as it recorded only one (1) response representing 0.8%. However, friends and relatives have played significant rule in creating awareness of the bank in their community as it recorded the second highest. The bank's effort and physical presence to make the bank known through advertisement, Billboards of the bank and outreach program, physical evidence of its structure together recorded 76.6%. It is worthwhile to note that 97.5% of customers knew the requirements for becoming a customer. Out of those who knew, twenty-seven representing (22.5%) become customers through loan application. There were 45% of those who opened an account without completing and submitting loan applications. Besides about fourteen (11.7%) of them was introduced to the bank by other customers, 18% were also invited by the bank staff through SUSU and micro-credit while the remaining (2.5%) could not remember how they become a customers.

Table 2. The staff responsible for the dissemination of information to customers

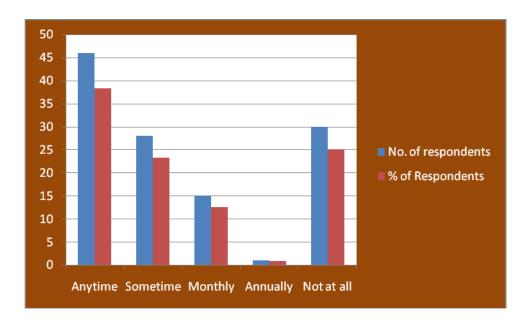
Response	No. of Respondents	% No. of Respondents
Clerk	60	50.0
Manager	48	40.0
Project Officer	12	10.0
Total	120	100

Source: Survey data, July 2008

It can deduce that the front desk officers and the manager played very important roles in disseminating information to customers. Majority of customers got their information from the counter clerks. Sixty (60) representing 50% and the manager forty-eight representing 40% while the rest twelve representing 10% were assisted by the project officer. However, less than half i.e. thirty-one representing 25.8% knew how to obtain credit from the bank while the remaining eighty-nine representing 74.2% did not know, Seventy-four (61.7%) of the customers knew of the different kinds of services offered by the bank apart from operating a savings or current account. The different kinds of services known to them are loans to customers, consumer credit facilities (micro-credit) and the "SUSU scheme". The remaining forty-six (38.3%) did not know about other kinds of services available at the bank. The SUSU scheme is simply a saving and loan scheme for identified groups such as petty traders. In this scheme, members of the group individually make financial contributions of amounts agreed by the group. The total amount obtained is given to a member at a specific time and other members benefit as they take their turn through the rotation principle. Kwaebibirem Rural Bank Ltd. uses the same concept as one of its products to reach out to customers and also to encourage them to save. It has assigned



some of its officers as SUSU Agents. Their role is to ensure that contributions are made as they move from one member to next every day to collect the amount agreed to pay each day. With this scheme members are allowed to access credit equal to the amount contributed i.e. a contributor of one million can access for an amount wealth two million and thy have the chance to access loan twice in a year provided they are able to meet the terms of repayment. The micro-credit is one of their products whereby the bank identifies a group and given them training and at the end together takes loan from the bank and share among themselves.



Source: Survey data, July 2008

Figure 3. A Bar Chart Showing Customers Understanding Of the Interest Rate and As To Whether They Ask For Explanation

This is in line with the finding form (Ekumah and Essel 2003) when nearly 75% of all customers in the two rural banks do not understand what is displayed. For those that pay attention to them only two percent (2%) make an attempt to ask for explanation of what they do not understand. This reinforces the findings of the study conducted by Kumah and Agbogah (2000) that 85% of respondents from ten (10) rural banks interviewed did not know the levels of interest rates on their credit.

Table 3. Effect of the bank's interest rate in respect with access for credit

Responses	No. of respondents	% of Respondents
Yes	108	90.0
No	12	10.0
Total	120	100

Source: Survey data, July 2008

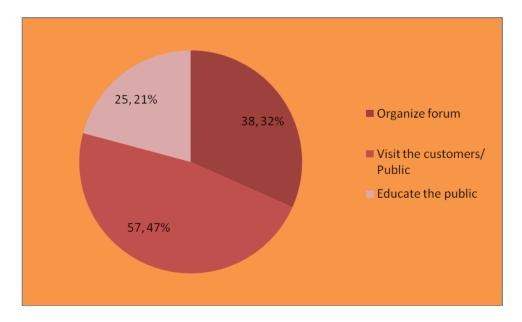


It can clearly be seen that, out of one hundred and twenty respondents one hundred and eight representing 90% answered affirmatively to the assertion that "their knowledge about the interest rate affects their access to credit" while other twelve (12) respondents constituting 10% of course the minority had a contrary view.

This they explain that because they lack understanding to the interest rate display, their decision on cost/benefit analysis are not taking into considerations before going for the loan. This has also gone a long way to affect the bank to the extent that it increase loan operation cost since they have to follow up to see how the loans are being put into use. The credit officer come out with the fact that, credit customers misuse the loan given to them because they lack management abilities and had never taken into consideration how much it will cost them to repay the loan which brings about poor repayment of the loans.

4.4 Suggestion to bridge the information gap

The main was to solicit customer's suggestions to bridge the vacuum created in information flow between them and the bank. The responses are represented in pie chart below. This suggests what the bank and customers should do respectively.



Source: Survey data, July 2008

Figure 4. Customer's suggestion about what the bank should do to help Bridge the information Gap

A question that sought to find out about what the bank should do to improve information flow between the band and its customers, provided the following responses in the chart 4.6 above chart. It can be observed that that out of one hundred and twenty respondents. Twenty-five (25) constituting 20.7% suggested that there is the need to educate the customers and the public as a whole; thirty- eight constituting 31.4% suggested that the bank organized forum



whilst fifty-seven representing 47.1% says the bank should visit the customers or the general public to discuses bank issues with them. Another question was asked to find out what customers should also do to improve information flow between the bank and the customers. The table below displays the response gathered from customers.

4.5 Awareness of non-customers on existence of the bank

Non-customers are aware of the existence of the bank in the community. 55% of them got to know by the evidence of the bank's structure in the community. 5% and 20% got to know through bill boards of the bank and advertisement respectively. While the remaining 20% is equal shared between those who got to know through friends/ relatives and banks' outreach programs. 55% of them know the requirement of becoming a customer while the other 45% did not know at all. 30% believed that requirements are through saving with the bank, 10% believed invitation by the bank staff, 15% also believed it is introduction by customer friend or relative while the remaining 45% could not tell how to become a customer. Respondents who were asked about the reason why they have not join the bank, gave the following responses. Ten (10) out of the constitution 50% do not know the bank procedure for becoming a customer. Three constitution 15% and two also representing 10% of the respondents do not have savings and don't want to become a customer respectively. Wiles the remaining three representing 15% and two representing 10% have other source for savings and getting loan respectively. This information is presented below in a Bar chart.

4.6 Reason for non-participation

Majority of the non-customers three/ quarters (75%) do not have enough information about the bank whiles five (25%) have access to the banks information of which 3 of them got access through enquiry from the bank officers whiles the two claim they have a staff friend from the bank. 80% of the respondents requests the bank officers to inform them about the bank procedure, 15% desires that friends and relative who know the bank Procedure should inform them while 5% wish to make enquiry by themselves. 45% of the espondents expect the bank to inform the public about its services through media advertisement, 25% expects to organized a public forum while 20% expects announcement but 10% give no response to these. The responses are presented below in a bar chart. Even though banks make their information available, non-customers have no or limited access to them. This in effect led to their non participation in the bank as customers. In the survey some raise the question what benefit will I have if save with the bank. In attempt to satisfy them with my little idea I have I was told they wish the bank visit them to explain all of that I told them. Some are in the view that credit are given to the known once therefore no to approach them since they don't know anyone.

5.0 Conclusion

The study was into credit accessibility granted by rural banks in the rural community. Relevant data was collected through questionnaires and interview schedule Administered to Kwaebibirem Rural Bank Ltd and both its customers and non-customers in Kade and other



district in the Eastern Region of Ghana. The major objective of this study was to examine the existence of information gap and its impact in the rural financial market. At the end of the research work, it becomes evident that, banks make some effort to disseminate information to their customers but yet they lack information that enhances effective access to credit. Customers' knowledge on banks information differs among themselves which comes about as a result of ignorance and illiteracy rate in the community which make it very difficult to communicate and interpret the bank's process to the customers as well as the general public. It has also become evident that, there are many outsiders who are not yet customers because they lack information that will challenge them to become a customer of the bank. It is known that, only few people access loan in the banks but this does not mean that, the rest have no need to satisfy but rather lack the necessary information that will lead to their access to the credit. Sometime access is denied and the person finds it discriminatory but meanwhile he did not meet the requirement. There is evidence that information is a serious variable to empower rural people to access credit. Without the right information communicated at the right time, accessibility to credit is constrained. Moreover, there is evidence form the study that information flow from the banks to the customers and the rural public and the vice versa is variedly impeded. The major causes are; the imperfect information, lack of transparency from the banks, irregularity information in the dealings of the rural financial institutions, the opportunistic and the unusual information seeking behavior of customers. The researcher wants to believe that any rural financial institution that does not recognize the significance of information will continue to ruin the rural deprived. Information, therefore, becomes the supremacy to effectively access credit.

Acknowledgement

I would like to express profound gratitude to Dr (Mrs) Patience Ami. Kponyoh-Binfor, Mr. Samuel Antwi, Dr. T.E.O Asamoah, Dr. Nuertey, Mr. W.O. Danso and staff of CSIR-Oil Palm Research Institute for their support. I am grateful to the management and staff of Kwaebibirem Rural Bank Ltd., Kade for given me information for this research.

References

- Bank of Ghana, 1997, "Monetary Policy Measures for 1987 Financial Year". Notice No. BG./GOV/SEC/87/6.Accra.
- Besley, T. 1995. "Non-Market Institutions for Credit and Risk Sharing in Lo Income Countries." Journal of Economic Perspectives. No.9, 3, 115-27.
- Caprio, G., and, D. Klingebiel. 1996. "Bank Insolvency: Bad Luck, Bad Policy, or Bad Banking," Paper presented at the Annual Bank Conference on Development Economics, April 25-26. The World Bank. Washington.
- Constantiou. I. 2001. "Information Asymmetry Models in the Internet Connectivity Market." Proceedings of Internet Economic Workshop (IEW). May. Belin Germany.
- Ekumah, E. K. and Essel, T. T. 2001. "Gender Access to Credit under Ghana's Financial Sector Reform: A case study of two Rural Banks in the Central Region of Ghana" IFLIP Research Papers No. 01-4. International Labor Office, Geneva.



- Ekumah, E. K. and Essel, T. T. 2003. INFORMATION IS POWER: The Credit Accessibility In Rural Banks In Ghana.
- Galassi, F. L., 2002. "Mutual Institutions in the Financial Sector. Lessons from History in Alleviating Poverty." Paper presented at the 1st ILO/IFLIP Workshop. International Labour Office. Geneva, 15-17 May.
- Ghatak, M., 1999. "Group Lending, Local Information and Poor Selection." Journal of Development Economics. Vol. 60, 27-50.
- Graham Young (2003) Credit Information Systems for Africa.
- Haag, Stephen, Meave Cumming and James Dawkin. 2000. Management Information System USA: Irwin/McGraw-Hill
- Hartley, R. V. L., 1928. "Transmission of Information." Bell System Technical Journal. 7,535-563.
- Kumah, F. K. and D.P., Agbogah, 2000. "Has the Financial Sector Liberalization affected the mode of Savings Mobilization and of Credit Allocation by Rural Banks in Ghana?" Mimeo. ILO/IFLIP. March.
- Lubbe, Vander J.C.A., 1997. Information and Communication Theory. Netherlands: Universal Press.
- Mishkin, F. S. 1991. Asymmetric Information and Financial Crisis. Chicago, I11.: University of Chicago Press 69-108.
- Padmanabhan, K. P., 1988. Rural Credit. London: Intermediate Technology Publications.
- Patrick, H. T., 1994. The Japanese Main Bank System. U.K.: Oxford University Press.
- Roe, A. R., and N.K., Sowa, 1995. Journal of African Economies. Supplement Part 1. Vol 6, No. 1, 212-64.
- Saharan Africa. "Journal of African Economies. Supplement Part 1. No 6, No. 1, 212-64 Shannon, C.E., 1948, the Mathematical Theory of Communication. Bell System Technical Journal. Vol. 27, 379-423.
- Stiglitz, J. Weiss A. 1081. Credit Rationing In Markets with Imperfect Information. USA: American Economic Review, 71(3): 393-409.
- Winter-Nelson, Alex and Anna Femu (2002) liquidity constraint, Access to credit, & propor growth in rural Tanzania.