



RESOLVING THE CONSTRAINTS IN ACCESSING MICROCREDIT: THE NEGLECTED VIEWS OF THE SMALLHOLDER FARMERS



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ABSTRACT

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Access to financial resources by smallholder farmers remain a daunting challenge in spite of increasing numbers of Microfinance Institutions (MFIs) in Ghana. This paper contributes to the debate in addressing gaps created by an ever increasing numbers of MFIs yet the declining number of small businesses, particularly smallholder farmers having access to credit. Using data from 104 smallholder farmer microcredit borrowers of Ada East in the Greater Accra Region, the paper analysed the constraints preventing borrowers from accessing microcredit. Random sampling was used to obtain information from farmers using semi structured questionnaire. The Kendall Coefficient of concordance was used to analyse the result to establish the level of agreement among farmers perception about the constraints associated with application and granting of loans. High interest rate (1.76 mean rank) was found to be the most critical constraint. Other constraints in accessing microcredit were credit inadequacy, short repayment duration and farmer based organizations (FBOs) membership requirements. It is recommended that MFIs should put in place mechanism to lower operational costs in order to reduce the cost of borrowing. Finally, simplifying loan application procedures and reducing bureaucracies to reduce delays in loan disbursement will minimize the constraints in access to microcredit.

Contribution/ Originality: Challenges associated with lending microcredit to smallholder farmers have been widely discussed in literature. However, the views of farmers on how such challenges could be resolved have largely been ignored. Unlike previous studies, this study analysed and provided solutions to the challenges of microcredit acquisition from the perspective of the farmer. The study, therefore, contributes to bridging the knowledge gap by bringing to fore the solution to address the challenges in accessing microcredit from smallholder farmers' perspective.

1. INTRODUCTION

Agriculture is the largest employer of the population in sub-Saharan Africa, employing about 53% of the active working population directly and indirectly. Majority of those employed in the sector directly reside in rural areas and are the most vulnerable to economic and environmental shocks (International Labour Organization, 2017). About 50% of agricultural labour force in sub-Saharan Africa is provided by women yet they are the most denied in terms of resources of production such as land, water, and most importantly agricultural credit (ILO 2015, cited in Food and Agriculture Organization (2017)). Prior to economic recovery and structural adjustment programmes in

the 1980s, agriculture sector was not only the largest employer of the working population of sub-Saharan Africa (SSA), but also the largest contributor to the GDPs of these countries within the region.

Among other factors, lack of agricultural credit supply to the sector has dwindled the fortunes of the sector over the years despite the huge potential of the sector to provide sustainable employment for the ever increasing youth population of the region and Ghana in particular. Total agricultural investment/credit supply over the last three decades has been dwindling due to multiplicity of reasons. Some of these are the removal of subsidies on agricultural inputs as a result of implementing economic reforms as recommended by the Bretton Woods Institutions such as World Bank (WB) and International Monetary Fund (IMF) to streamline public expenditure in transitioning economies in SSA.

Data from Microfinance and Information Exchange (MIX) indicate that 222 Microfinance Institutions (MFIs) in South Asia are serving over 78 million clients while in Latin America and Caribbean, 355 MFIs serve more than 23 million borrowers. In SSA, as many as 211 MFIs are serving little over 7 million ([Microfinance Barometer, 2017](#)). The clientele base of MFIs in SSA is not commensurate to the number of MFIs as seen in South Asia, Latin America and the Caribbean. MFIs are increasing in numbers, yet, there are few potential borrowers, especially farmers feigning interest in microcredit. This raises the question of what are the constraints of smallholder farmers in accessing the services of MFIs in SSA, specifically Ghana. This paper attempts to address and contribute to this knowledge gap.

Because of lack of financial support from the state many smallholder farmers in Ghana and SAA countries relied (and still do) heavily on informal financial sector (local money lenders) to meet financial capital needs for farm operations. Reliance on the informal sector however came with significant challenges. For example, farmers were been charged exorbitant interest rate for small loans they are offered. Some interest rates were above 100%. In case of default, products of farmers were either seized or bought at extremely low prices by creditors to deflate the debt owned. The consequences were falling incomes and stagnating poverty levels. In spite of high interest rates, farmers were still constrained to rely on it because there were limited alternatives, and also such loans were granted quicker which eliminates delays associated with the traditional financial sector.

Government alone could not finance the quantum of investment needed in the agriculture sector. So, to address the challenges of shortage or lack finances, Government took initiatives to liberalise the financial sector to allow for private investment in the sector. The emergence of the agricultural development bank, Community/Rural Banks, and Credit Unions in Ghana was one of the ways to address the funding gap. These initiatives could not address the challenges of finance as envisaged partly because of large number of smallholder farmers and the share volume of financial capital required.

Recent years have witnessed the emergence of 1000s (2548 MFIs by 2016) of legally operating MFIs in Ghana as a means to addressing the funding gap arising out of the inability of the state-sponsored and mainstream orthodox financial systems to address credit inadequacy of micro-entrepreneurs in informal sector ([Gyamfi, 2016](#)). Despite the rapidly increasing numbers of MFIs in Ghana about 78% of Ghanaians (majority are those who depend on agriculture sector for livelihood) still do not have access to microcredit ([World Bank, 2018](#)). It is ironic to observe that not more than 23% of potential borrowers have access to financial capital/credit with such large numbers of MFIs.

There is knowledge gap in the Ghanaian context as to why notwithstanding increasing numbers of MFIs spread across the length and breadth of the country a staggering 78% of potential borrowers (smallholder farmers inclusive) could not access credit for investment in farm operations. It has therefore become very critical to ascertain the reasons constraining smallholder farmers from accessing formalized credit facilities despite the surge in numbers of MFIs for policy recommendation.

2. CONSTRAINTS OF ACCESS TO MICROCREDIT (A REVIEW OF LITERATURE)

Studies have shown positive effect of microcredit on the productivity, income, and welfare of those who have access to it [Pitt et al. \(2003\)](#); [Akudugu \(2011\)](#) yet other studies have contested these outcome [see [Bateman \(2018\)](#)], still others found insignificant outcomes of microcredit on livelihood or welfare of beneficiaries or perhaps there positive outcomes may have been overblown ([Banerjee et al., 2015](#)). Regardless of these findings, credit specific characteristics such as location, interest payments, collateral requirements among others have constrained many beneficiaries from applying and accessing such facilities. These challenges are more pronounced in SSA where 80% of farmers are smallholders with less than 2 hectares with no collateral to guarantee access to credit ([Alliance for Green Revolution in Africa, 2014](#)).

Microcredit is accessed by both male and female farmers. However, it is more difficult for female farmers in third-world countries to obtain such facilities because the lending institutions normally require a guarantee in the form of land which women almost never had [FAO \(1993\)](#). The situation has improved in recent years as a result of relaxing of collateral requirement for women who are engaged mainly in non-farming activities, nonetheless the situation still persists in some SSA countries. By 2017, about 66% of beneficiaries of microcredit in SSA were women ([Microfinance Barometer, 2017](#)). Formally constituted groups (especially women) in Africa are better placed to obtain microcredit but there may be obstacles in the process of obtaining it such as high transportation and accommodation cost because of lengthy visits to the nearest town to access such facilities. It also comes along with high processing cost and interest rate ([FAO, 1998](#); [Tetteh et al., 2015](#)).

Studies on microcredit schemes in Philippine and Zimbabwe revealed that MFIs impose stringent collateral requirements or require borrowers to provide carefully documented evidence of their intention and their ability to repay the credit when the time is due ([Floro and Yotopoulos, 1991](#); [Maimbo and Mavrotas, 2003](#)). Some sources of microcredit schemes in Egypt are not flexible and also impose high transaction cost on the beneficiaries. Borrowers are mostly charged interest rate above what they are able to afford ([Nukpezah and Blankson, 2017](#)). Nevertheless borrowers are compelled to accept because it was extremely difficult to obtain such credit facilities from the conventional financial sector ([Baydas et al., 1995](#)). Like [Floro and Yotopoulos \(1991\)](#); [Baydas et al. \(1995\)](#) and [Maimbo and Mavrotas \(2003\)](#); [Kimathi \(2015\)](#) found similar results when analyzing “The challenges confronting small scale businesses in accessing microfinance services from MFIs..... [in] rural Tanzania” [see also [Laetitia et al. \(2015\)](#)]. [Titilola \(1987\)](#) drew attention to the fact that even though farmers in Nigeria could obtain credit from formal sources, the amount advanced to them was small, irregular and had high interest rates. When examining the effects of structural adjustment programme on agricultural lending practices of commercial banks in Nigeria, [Atunrase \(1987\)](#) came to the conclusion that, short repayment period, high interest rate, lateness/delay in disbursement of funds and complex procedures were some of the constraints of microcredit (also [Tetteh et al. \(2015\)](#) and [Selase et al. \(2017\)](#) in Ghana).

[Hasen \(1987\)](#) asserted that farmers in Ghana are required to clear a specific number of acres of land available as well as acceptable security before credit is given to them. In several instances the quantity of acreage required to be cleared by farmers is way above what smallholder farmers have land to cultivate. This has hindered access to credit by smallholder farmers who mostly need these facilities. Farmers/borrowers are required to repay their credit before next one is advanced to them. This makes farmers to sell off their produce immediately after harvest when prices are very low. The rigidity in repayment schedule for borrowers made it impossible for borrowers to apply for credit because of fear of penalties if they are unable to repay a given amount at a schedule time (*Ibid*). In support of [Atunrase \(1987\)](#); [Al-Hassan and Sagre \(2006\)](#) also found out that high interest rate, short repayment period, and small amount of credit were some of the major challenges of microcredit acquisition by farmers in the Kasssena-Nankana district in the Upper East of Ghana (also [Tetteh et al. \(2015\)](#)). [Akudugu et al. \(2009\)](#) found that where farmers have no shares in a particular credit scheme or credit union they face a lot of difficulties in accessing credit from such schemes compared to their counterparts who own shares in such facilities. Savings is very difficult

for smallholder farmers to do because they have many dependants and have to meet the needs of all members of their household, using ones savings as a criteria for accessing loans tend to create a lot of challenges for the very poor who are in dire need of financial capital.

3. METHODOLOGY

3.1. Study Area

This work was carried out 2017 in the Ada East District of Greater Accra Region (GAR) of Ghana. The population of Ada East District is about 71,671 representing 1.8 percent of GAR. Males constitute 47.5 % and females (52.5%). About 70 percent (68.3%) of the population reside in rural localities. About 44.1% of households in the district are engaged in agriculture. In the rural localities, more than half (55.8%) are agricultural households while in the urban localities, 23.48 % of households are into agriculture. Though the population within the district are engaged in variety of agricultural activities, crop production (83.3%) is the dominant activity (General Social Survey, 2014). Crops mainly produced in the district are basically varieties of vegetables and fruits including tomatoes, pepper, okra, eggplant, onion, watermelon, mango, and pawpaw. There is also widespread cultivation of maize and cassava. The key livestock produced are cattle, sheep, goat, and poultry.

3.2. Method of Data Collection

A total of 104 smallholder farmers were included in the study. Multistage sampling technique was used. The first stage involved the selection of Ada East District. This district was selected purposively because it is predominantly farming and rural district within the region where MFIs offering financial support to farmers exist, but several reports on the local radio (Radio Ada) revealed that despite surge in numbers of financial institutions particularly MFIs, thousands of farmers still do not have access to financial capital. Ada East District is politically and administratively divided into three local council areas; Ada-Foah, Big-Ada, and Kasseh-Ada. Based on these demarcations we identified fifty five (55), fifty five (55), and eighty (80) smallholder farmers from Ada-Foah, Big-Ada, and Kasseh-Ada respectively. The numbers of smallholder farmers identified in these areas were based on population dynamics in terms of agricultural production, availability of MFIs and their centre of operation. Most of the MFIs have Kasseh as their operational centre or headquarters because of the presence of a major market (Kasseh Market), which is the biggest market within the district. Also, the numbers of smallholder farmers and agricultural activities at Kasseh-Ada are more intense than Ada-Foah and Big-Ada, for which reason more respondents were identified. We then applied simple random sampling to select thirty two (32), thirty (32), and forty six (46) smallholder farmer microcredit borrowers from Ada-Foah, Big-Ada, and Kasseh-Ada respectively. To these one hundred and ten (110) farmers, semi structured questionnaires were administered. We also had key informant interviews with MFI managers and Agricultural Extension Agents (AEAs) to validate some of the information provided by farmers. There were data loss because of outliers and improper responses to some questionnaires resulting in the use of one hundred and four (104) farmers.

3.3. Procedure for Analyzing Constraints of Access to Microcredit

As stated earlier, farmers face a lot of difficulties when applying for credit, however these challenges are area specific. Also, these constraints may not necessarily be statistically significant to affect farmers and farm operations. The Kendall's Coefficient of Concordance of constraint analysis was used to test for level of agreement of the constraint rankings by respondents. This is because Kendall's Coefficient of Concordance (W) is a measure of agreement among several judges (n) assessing a given set of objects (p) (Legendre, 2005). The index (W) measures the ratio of the observed variance of sum of the ranks. This index makes it possible to find the sum of ranks for each constraint being ranked. If the rankings are in perfect agreement, the variability among these sums will be maximum (Mattson, 1986). The Kendall's Coefficient of Concordance is given by the relation:

$$W = \frac{12S' - 3p^2(n+1)^2}{p^2(n^3-n) - pT}$$

Where: W = Kendall's Coefficient of Concordance.

p = Number of constraints.

n = Number of respondents.

T = Correction factor for tie ranks.

S = Sum of square statistics.

The sum of squared statistics is given by the relation.

$$S = \sum_{i=1}^n (R_i - R)^2$$

Where: R_i = the row sum of ranks and R is the mean of R_i .

The correction factor for tied ranks (T) is also given by the relation.

$$T = \sum_{i=1}^m (t_k^3 - t_k^k)$$

Where t_k = the number of ranks in each (k) of (m) groups of tie.

The hypothesis tested is:

H_0 = There is no agreement among the rankings of the constraints.

H_A = There is agreement among the rankings of the constraints.

The Chi-Square (X^2), which is computed as shown below, was used to test significance of the Kendall's Coefficient of Concordance;

$$X^2 = p(n-1)W$$

Here the variables hold their original meaning as stated earlier. The decision rule is that if the calculated Chi-Square (X^2_{cal}) is greater than Chi-Square (X^2_{crit}) then we accept the alternate hypothesis (H_A) which is, there is agreement among the rankings of the constraints and reject null hypothesis (H_0) which is, there is no agreement among rankings of constraints. This is expressed as: $(X^2_{\text{cal}}) > (X^2_{\text{crit}})$ accept H_A and reject H_0 .

4 RESULTS AND DISCUSSIONS

4.1. Socioeconomic Characteristics of Respondents

Interpretations of scientific research results must be conditional on the methodology, circumstances or prevailing conditions at the time of the study of which many scientists fail to acknowledge (Udry, 2018). The study considers Udry's observation in the interpretation and analysis of the results. Smallholder farmers who were involved in the study have different backgrounds; they are heterogeneous in their socioeconomic pursuit. The distributions of age categories of farmers are presented on Table 1.

Table-1. Age categories' frequencies.

Age range	20-29	30-39	40-49	50-59	≥60
Frequency	3	13	21	56	11
Percentage (%)	3	13	20	54	11

Source: Field survey data, 2017.

The distribution showed an average age (51 years), minimum (27 years), and maximum (68 years). The highest age category of farmers is 50-59 years (54%) and the least category is 20-29 years (3%). This implies that microcredit is supplied to old and more experienced farmers. It is observed from the result that the youth which are

mainly between the ages of 20-39 years do not have access to credit despite the fact that they are more active and could be more efficient in using credit for agricultural production. The fact that most of the farmers are between ages 50-59 years and the average is 50.75 (≈ 51) years is consistent with the national statistics which shows that the average age of Ghanaian farmers is above 50 years (about 54). Agriculture production in Ghana and SSA in general is largely manpower driven, therefore it is incumbent on national governments to institute measures to encourage the youth to venture in farming since it is the easiest and sustainable source of employment particularly for the youth. Lack of credit facilities for the youth as has been revealed by this study is a disincentive.

Household head: Ninety four percent (94%) of the respondents are household heads. This is so because the decision to apply for credit is dependent on whether the farmer or individual involved is the decision maker of household. When there is default it is normally the household head that is morally and financially (sometimes) held responsible for the action(s) of members of household. For this reason, household heads are unlikely to grant permission to any member of household to apply for loans but themselves or where they do, the loan may eventually be managed by them. This is the reason why as many as 94% of respondents are household heads.

Group membership-FBOs: A little over fifty percent (50.4%) belong to FBOs while 49.6% do not and as such obtain credit on individual capacity. It has been reported in other studies for example (Baryeh, 2009) that being part of a group is a key requirement and enhances access to credit. The largely equal nature (group and non-group respondents) of this result may be because in this study area membership of a group may not be a significant requirement to apply for and access loans.

Religious status: Majority of respondents, 80 (77%) are Christians. This result agrees with the national statistics which indicates majority of Ghanaians are Christians by faith. Africa Traditional Religion (ATR) is second in terms of followership. This is contrary to national statistics that suggests Islam is second most populous religion in Ghana (GSS, 2014). Per the findings Islam is the least (6%) religion followed in the study area and ATR is second (17%). This is because most Islamic faith followers are found in Northern sector of the country.

Marital status: Twenty percent (20%) of respondents were single while 69% were married as shown in [Table 2](#). The perception that married people are more responsible and have many financial needs as compared to unmarried people could be the reason for the distributions on [Table 2](#). Married people will borrow in order to get start-up capital. This enables them to engage in businesses which will increase their productivity and eventually their incomes so that they are able to meet the needs of their families. Credit institutions may also find it easier to give credit to married persons than unmarried persons since most of the time they give security to each other (husband and wife). This assertion is supported by the findings of Olujide (2008) in Nigeria.

Table-2. Frequencies of marital status of the respondents.

Marital status	Married	Unmarried	Divorced	Separated	Widowed
Frequency	72	21	2	4	5
Percentage (%)	69	20	2	4	5

Source: Field survey data, 2017.

Educational status: As shown in [Table 3](#), majority, 101 (97.1%) smallholder farmers are those who have some form of formal education while only 3 (3%) do not have any form of formal education at all. For those who have formal education, majority (42%) have education up to Junior High School (JHS) level while tertiary is least (7%). The proportion of farmers that have some form of formal education (97.1%) is higher than was recorded (68.5%) by GSS (2014). This could be because more educated people may tend to apply for loans because the application procedure requires some basic education. Also, illiterate farmers may shy away from applying for credit because of the complexities involved in the application processes. The few numbers of tertiary level farmers is as a result of the perception that farming is for the less educated and under-privileged in society.

Table-3. Educational level of respondents.

Educational level	Primary	JHS/Middle school	SHS/Tech/Vocational	Tertiary	No formal education
Frequency	17	60	11	13	3
Percentage (%)	16	58	11	12	3

Source: Field survey data, 2017.

Occupational status: The distribution of main occupational status or economic activities of respondents, as shown in [Figure 1](#) suggests that the main occupational activity is farming; crop farming (75%) and fishing is least (2%). The few numbers for fishing as a major economic activity could be because of the location and distance of MFIs to the fishing communities. The fishing communities (located around the coastal areas) are far away from the locations of the MFIs. The MFIs are mainly located at Kasseh-Ada and Big-Ada, which are non-coastal communities. This means borrower-lender distance could be a critical constraint in accessing credit. Fifteen percent (15%) considers trading as major economic activity while other occupations such as pastoral work, driving, “Okada” driving, etc. account for 8%.

Distribution of Major Occupation

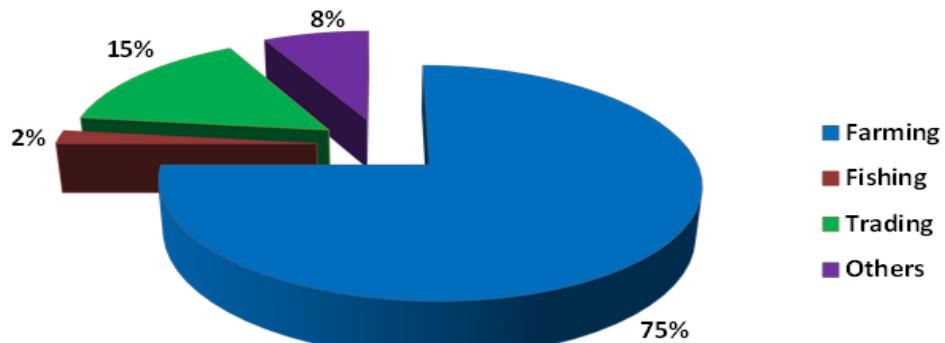


Figure-1. Major occupational status/economic activity of respondents.

Source: Field survey data, 2017.

The main minor occupation as shown in [Figure 2](#) is trading which involves buying and selling of commodities in small retail outlets. Farming, and crop production for that matter is a seasonal activity so farmers need alternate sources of livelihood to depend on during off season. For this reason most farmers (64%) are engaged in petty trading as means to supplementing income from farming activities. Fishing and farming which accounted for 2% and 21% respectively are regarded as minor economic activities by respondents.

Distribution of Minor Occupation

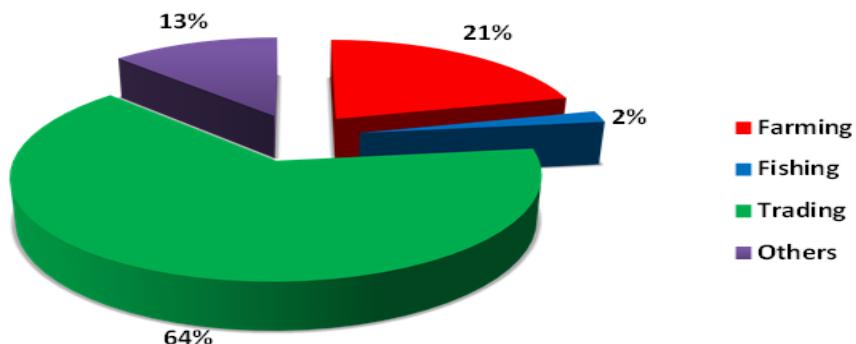


Figure-2. Distributions of minor occupation/economic activity.

Source: Field survey data, 2017.

The main form of land ownership in the study area is through inheritance or family land. Almost eighty percent (79.5%) revealed it is the means through which land was acquired for farming and the least (0.9%) is through buying. Land acquisition in Ghana through buying is very expensive and the study area is no exception. It will therefore, not be economically viable to purchase land for smallholder farming. Where it is even viable smallholder farmers are not able to raise the monetary resources to pay for it. For this reason majority of the farmers rely on family inherited land. Under this situation it is extremely difficult for vulnerable people such as migrants, and women to acquire lands for production because migrants are not indigenes to inherit land, and lands are mostly inherited by men in these communities to the detriment of women. Between buying and family inheritance of land are rent (8.4%) and sharecropping (11.2%) as means of acquiring land for farming.

4.2. Sources of Microcredit

The sources of microcredit for smallholder farmers in the study area are Ada Rural Bank (ARB), Opportunity International Savings and Loans (OISL), Ministry of Food and Agriculture (MoFA), Credit Union (CU), Ghana Commercial Bank (GCB) (now GCB Bank), and others such as Alpha and Omega Microcredit (now Alphamaga Microcredit) and El-Shadai Microcredit. It can be observed in [Figure 3](#), ARB is the major formal microcredit provider to smallholder farmers. A little over thirty three percent (33.3%) of farmers received credit from ARB during the period of this study. OISL, MoFA, CU and GCB came second, third, fourth, and fifth respectively. Ironically, GCB Bank which is the largest banking institution in Ghana is least provider of credit to *farmers*. This is a disincentive for agricultural production. It was observed that apart from MoFA, all the other microcredit schemes are involved in provision of financial capital while MoFA mostly provide credit in the form of inputs. The inputs supplied are to be repaid at the end of the season with interest but as was revealed by Agricultural Extension Agents (AEAs), most farmers tend to default because these are government funded credit facilities. It must be stressed here that by 2018, Alphamaga Microfinance has become one of the dominant players in providing microfinance services in the study area. The proportional distribution of credit providers by the various MFIs as at the time of this study is shown on [Figure 3](#).

Major Sources of Formal Credit

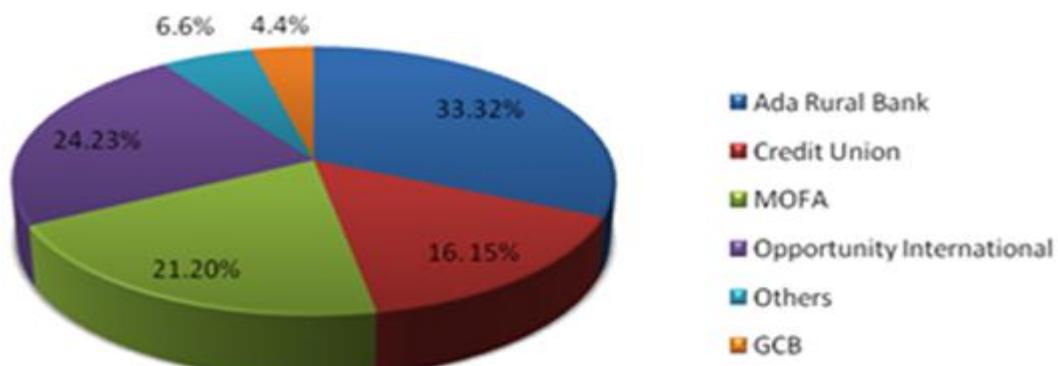


Figure-3. Sources of microcredit.

Source: Field survey data, 2017.

To ascertain whether there were any efforts by the various credit providers to sensitise farmers on the presence of their product and services, farmers were required to respond to whether there were awareness creation by schemes. Forty five 45 (43%) indicated there was no awareness creation by the aforementioned credit schemes and 57% asserted otherwise. This figure (43%) is relatively high noting that farming is the main economic activity. This means there must be concerted efforts to create awareness of microcredit facilities available to farmers. Also, 88%

did not receive the total credit applied for. This suggests MFIs are unable to meet financial capital demand or for some reasons are unwilling to meet the credit demand of farmers. Only 28% were assigned reasons why total credit applied for was not granted and 72% were offered no explanation. The main reasons for granting limited amount were lack of or inadequate savings with MFIs (89%), and small farm size (11%). The perception of high risk associated to agricultural production reliant on rainfall could also be a reason. For respondents who received the entire credit applied for, 50% believe it happened so because the crops cultivated and 33% attributed it to farm size (relatively big farms).

4.3. Purposes of Obtaining Microcredit

Eighty one (78%) of respondents were not specifically told or directed what the credit granted should be used for. This could be interpreted as microcredits were given for general purpose. However, the main purpose of borrowers (smallholder farmers) going for credit was for investment in farming activities. About 87 (84%) obtained credit mainly to engage in farming activities. **Figure 4** shows distributions of various reasons smallholder farmers applied for and received microcredit.

Purpose of Obtaining Formal Credit

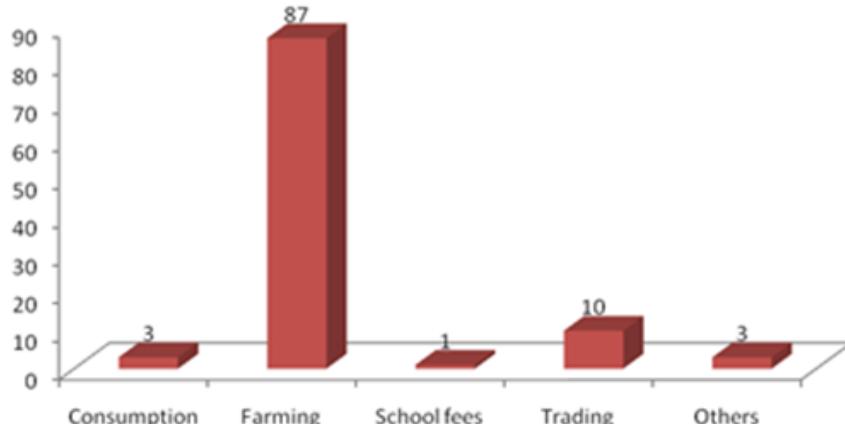


Figure 4. Purpose of obtaining microcredit.

Source: Field survey data, 2017.

The foremost reason (83%) for obtaining microcredit was for farming (investment in farm operations) as revealed by 87 respondents. Credit was mainly used to pay for cost of ploughing, seeds, fertilizer, weedicides, and labour. Unlike research results by [Kedir et al. \(2007\)](#) but similar with [Diagne \(1999\)](#) this result shows that rural household borrowers took credit for productive purposes (investment in farming). The difference in this result with [Kedir et al. \(2007\)](#) might be as a result of the respondents and the setting (rural versus urban areas). Only 3 (2.9%) smallholder farmers obtained credit for consumption purposes. But this does not mean that the borrowers necessarily used the entire loan for intended purpose in all situations. It is possible to shift credit to unintended purposes.

4.4. Constraints of Access to Microcredit

The hypothesis in this study is, there is no agreement among the rankings of constraints for the null hypothesis (H_0) and the alternate hypothesis (H_A) is there is agreement among rankings of the constraints. The challenges identified were therefore ranked and the hypothesis tested.

Kendall's Coefficient of Concordance (W) was used to test the level of agreement among rankings of constraints associated with application and receiving of microcredit by farmers. The Kendall's Coefficient of

Concordance (W) was estimated at 0.692, a Chi-Square of 295.016 with 4 degrees of freedom and asymptotic significance of 0.000. An 18.47 Chi-Square critical was obtained from the Chi-Square Table at 1 percent significance level. Since Chi-Square critical is less than computed Chi-Square, the alternate hypothesis is accepted in favour of the null hypothesis and this means that there was an agreement among rankings of challenges by farmers. The Kendall's Coefficient of Concordance (W) estimated at 0.692 indicates there is 69.2% agreement among rankings of the constraints. This goodness of fit measure is enough to suggest that the challenges were major constraints hampering acquisition of microcredit by farmers in the Ada East District of GAR and need to be seriously addressed if farmers are to make use of such facilities. The goal of microfinance programmes is to eliminate poverty by providing financial capital to the poor to invest in income generating activities. Therefore, if there are impediments to accessing such facilities then they need to be resolved to help achieve the goal of microfinance. A brief of the result is shown in [Table 4](#).

High interest rate: high interest rate had least mean rank (1.76) and as such is most critical of the challenges confronting farmers in acquisition of microcredit. Interest rate influence farmers decision to apply for credit. For lenders, interest rate serves as a screening device to limit the likelihood of default by borrowers that results from imperfect information (due to the fact that borrowers know better than lenders about their potential risk of default). However, high interest rate negatively affects borrowers and causes non-repayment. To get better services, one of the decisive factors is the availability of alternative microcredit schemes. This can raise competition among lenders to bring down the cost of borrowing or innovation of efficient ways to reduce cost of operation which will translate to lower interest for borrowers. MFIs need to recognise that high interest rates increase the possibility of default because borrowers will require longer duration to repay as a result of the interest charged. This finding agrees with the works of Stiglitz and Weiss (1981); Okurut *et al.* (2004); Segers *et al.* (2010) and Selase *et al.* (2017).

Table-4. Constraints of microcredit.

Constraints	Mean Rank
High interest rate	1.76
Small credit size/Credit inadequacy	2.69
Short repayment period	2.84
Late disbursement	2.91
Association membership requirement	4.80
N=104; Kendall's Coefficient=.692; df=4; Chi-Square=295.016; Asymp. Sig=.000	

df= degree of freedom; Asymp. Sig= Asymptomatic significance; N= Number of objects
Stata Results of Survey Data, 2017.

Credit inadequacy: The second major constraint (2.69 mean rank) farmers encounter in accessing credit is small credit size or credit inadequacy. [Duca and Rosenthal \(1993\)](#) argued that farm households were credit constrained only when it will like to borrow more than what lenders are willing to supply. It was therefore no surprise that 88% of the borrowers did not receive the total credit demanded as indicated earlier. According to [Diagne *et al.* \(2000\)](#) it is noted that credit from any source be it formal or informal is of limited supply. Lenders are constrained by factors beyond their control on the maximum amount they can give to a potential borrower. This maximum is usually a function of available resources and is independent of interest rate that can be charged, for the possibility of default. This especially is the case in developing countries like Ghana where established commercial banks are very few and limited in their ability to raise capital for long term onward lending (as was observed in GCB Bank earlier). As such, any farmer, however credit worthy, faces a limit on the overall amount he/she can borrow from any given source of credit regardless of the rate he/she is willing to pay or collateral he/she is willing to put up. Recent empirical study from Pakistan by [Saqib *et al.* \(2018\)](#) concluded that smallholder farmers 'had the highest credit inadequacy of [microcredit] for investment in agriculture', which supports this finding.

Short credit repayment duration: Loan repayment period or duration is another important constraint in accessing microcredit. It is the third ranked constraint (2.91 mean rank). Smallholder farmers were not contented with the time allocation to repay loans. Most farmers think repayment periods were too short. In the words of one respondent “.....because of the short repayment duration, we are compelled to sell immediately after harvest when prices are very low in order to follow repayment schedule so as to avoid penalty”. Nevertheless, short repayment, however disincentive it may be a strategy by lenders to recover the funds from farmers to reduce possibility default that may arise as a result of longer repayment duration (which could lead to irresponsible behaviour of borrowers). Like this study ([Selase et al., 2017](#)) also found short repayment duration and late disbursement as some of the most important challenges facing farmers in assessing microcredit in the Techiman Municipality of the Bono East of Ghana.

Late disbursement of credit: microcredit disbursement period is another key challenge that borrowers' are confronted with. [Lawal et al. \(2009\)](#) mentioned that, the time lag between application and disbursement of credit was one of the major constraints borrowers face. In similar way, sample farmers in the Ada East District of GAR revealed late or delays in disbursement as a significant constraint in accessing microcredit. It should be noted that if farmers receive credit at the right time, it will be invested in farm operations rather than unproductive ventures. This will improve repayment rate among borrowers due monetary returns accruing from investment of credit in income generating activities. Late disbursement of credit increases likelihood to use loans to smooth consumption, and pay for other social needs. This could make it difficult to repay when the time is due.

Group membership requirement-FBOs: The fifth and least ranked challenge was membership of FBO requirement. Collectively, the constraints as ranked by farmers were statistically significant to constrain application for microcredit. Nonetheless, in order of rank farmers consider membership of FBO requirement as the least constraint associated with application and receiving of microcredit. This happens in circumstances where MFIs prefer granting microcredit facilities on individual basis if experience has shown high default rates among organised groups, especially in situations where there are strict joint liabilities. This result supports earlier finding that almost half (49.6%) of farmers accessed credit on individual capacity. This finding is consistent with the findings of [Baryeh \(2009\)](#).

4.5. Addressing Constraints; Smallholder Farmers' Perspective

Whereas farmers ranked the constraints associated with acquisition of microcredit in order to estimate Kendall's Coefficient of Concordance to ascertain the statistical significance or otherwise of these constraints, they were also required to proffer solutions on how each of these constraints could be addressed by MFIs. Proportional distributions of the responses are presented on [Figure 5](#).

Opinions of Farmers on How Constraints Could be Addressed

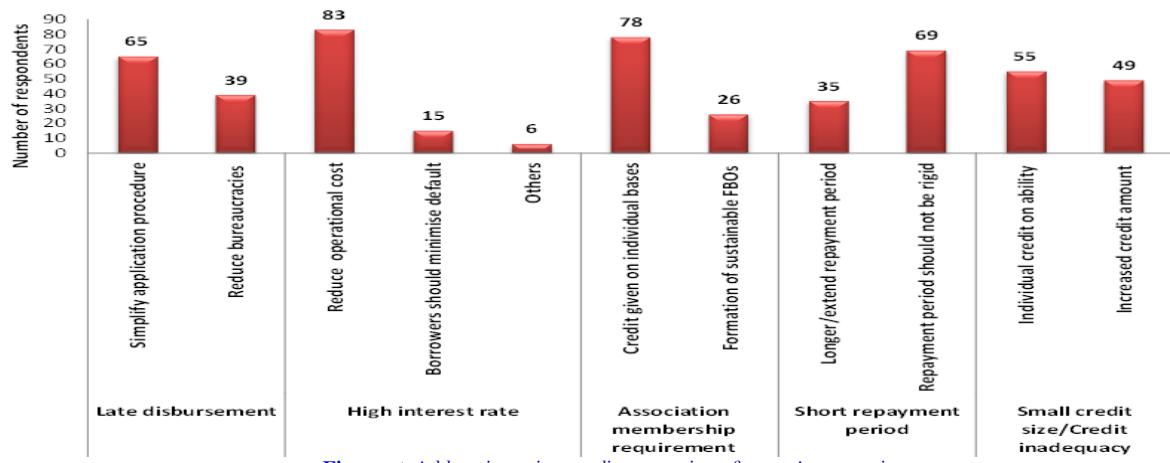


Figure-5. Addressing microcredit constraints; farmers' perspective.

Source: Survey data, 2017.

Late disbursement: Sixty three percent (63%) suggested application procedure should be simplified while the remaining 37% recommended reduction in bureaucracies. This supports earlier information in which majority described application procedure as cumbersome. The fact that majority of farmers have education up to JHS level suggests it is inadequate to help farmers appreciate and or understand the complexity and procedural requirements involved in acquisition of microcredit in the study area.

High interest rate: Eighty percent (80%) of farmers proposed reduction of interest rate to a relatively low figure. This is because MFIs could charge interest as high as 6% per month (72% per annum) while traditional financial institutions were charging 28% (average). Fifteen (15) farmers (15%) suggested farmers should always endeavour to repay the credit at scheduled time since this can reduce the risk associated with borrowing, and others (example MFIs reducing operational cost) was 5 %.

FBO membership requirement: On constraint of FBO membership requirement, 75% submitted that credit should be granted on individual basis. This is because FBOs by themselves have lots of challenges, especially managing people who are not resident in one area or community and have different socioeconomic pursuit. The remaining 25% proposed groups (FBOs) should be formed on a sustainable basis, not just for one-off credit. Groups formed on a sustainable basis can easily be relied upon at any time credit facility is available rather than formation of new one.

Short repayment period: thirty four percent (34%) of farmers indicated repayment period should be extended little longer (at least year) while the remaining 66 % advocated non-rigidity in repayment schedules. This means there should be flexibility in repayment schedule to allow delays in repayment or restructuring of loans without penalty in case of uncertainties. Farmers detest being penalized in difficult times if for one genuine reason or another are unable to strictly adhere to agreed repayment plan or scheduled. Cassava, one of the high value crops cultivated in the area takes about between ten (10) to fourteen (14) months to mature. For this reason extending the repayment period to coincide with cassava's maturity period is highly recommended if farmers are to rely on monetary returns from farms to meet their financial obligation to creditors.

Credit inadequacy: while it is generally agreed that farmers lack access to credit, where it is available the amount supplied are very small as compared to the needs of farmers. For this reason 53% of farmers advised that MFIs should endeavour to increase the amount that is granted to clients if available, particularly to clients that have good repayment history. The others (47%) suggested credit should be supplied on individual strength/ability. This implies credit should not be granted equally across board since every farmer has his/her individual strength or ability and/ or how much credit he/she can manage.

5. CONCLUSION AND RECOMMENDATION

The evolution of microcredit was seen as relief to millions of the worlds' most vulnerable households especially those who live on less than 2 dollar a day. Despite years of microcredit intervention about 80% of the poor still do not have access to credit in Ghana. The study, therefore analyses the constraints in accessing microcredit facilities by farm households in Ada East District of the GAR.

Using data from 104 households, we found there were five (5) main microcredit providers; ARB, OISL, MoFA, CU and GCB Bank serving thousands of potential borrowers. Microcredits supplied to farmers are for general purpose, however, majority of farmers applied for credit for specific purpose; investment in farm operation. High interest rate, credit inadequacy, short repayment period, late disbursement and requirement of membership of group/FBOs are statistically significant constraints in accessing credit. The most highly ranked constraint or problem was interest rate and the least was requirement of membership of group/FBOs.

It is recommended that MFIs should put in place mechanism to lessen operational cost and this can help reduce the cost of borrowing. Disbursement of credit should be made to coincide with the time it is critically needed. By simplifying loan application procedures and reducing bureaucracies, delays in disbursement of loans will be

minimized or avoided. MFIs should relax FBOs requirement membership so that loans are easily accessible on individual basis. Being part a group also comes with its challenges. Repayment schedules should be flexible to accommodate for uncertainties without penalties. Per the findings, the quantum of microcredit disbursed is woefully inadequate. MFIs should make efforts to increase total credit granted if such facilities are available especially in situation where the borrower has a good credit history. In this way the smallholder farmer can progress to medium scale and finally large scale, alleviating poverty in the process.

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