

# GENDER ANALYSIS OF ACCESS TO CREDIT AND REPAYMENT PERFORMANCE BY RURAL SMALL SCALE FARMERS IN ARUA, UGANDA.

# MDP-IFAD RESEARCH REPORT

By

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#### **EXECUTIVE SUMMARY**

The access to finance by the poor is a prerequisite for poverty reduction and sustainable economic development of a country. As of 2009, only 15 per cent of the population in rural areas of Uganda used banking services and just 7 per cent were served by other formal institutions and nearly half of the population was relying on informal financial arrangements (mostly friends and relatives), while 31 per cent lacked access to finance of any kind (IFAD, 2013).

Despite the fact that agriculture sector in Uganda accounts for approximately 23 per cent of GDP and employs about 60 per cent of the labour force, a number that is increasing as the population grows (IFAD, 2018), quite a lot still find it difficult to have access to credit which is necessary as input to promote a sustainable agricultural development and the livelihoods of rural farmers in Uganda (IFAD, 2018)

The study revealed that women were more involved than men in the farming occupation with majority of the women in their active working ages. All the respondents do not have access to formal sources and rely more on informal sources which is cooperative as major credit source. They also rely on self and family compared to borrowing from the banks, SACCOS and other financial institutions which are not readily available in the study area.

Factors that had negative impact on access to credit from the Probit regression include high level of expenditure, secondary occupation, being married and secondary education. Farming experience, higher level of income, household size, tertiary education all have positive effect on smallscale farmers access to credit. Female farmers had about 82% chances of getting access to credit compared to male farmers which is about 60%.

The Tobit regression analysis also revealed that being a man, higher income, household size, borrowing experience and having tertiary education had positive significant relationship with credit repayment performance while being married, high farming experience, having primary and secondary education and higher expenditure negatively influences repayment performance.

From the study it can be concluded that insufficient funds for active borrowers and group unavailability for inactive borrowers were the major constraints faced by the respondents in the study area.

Keywords: Rural Finance, Small-Scale Farmers, Credit, Repayment Performance

# ACRONYMS

PROFIRA	-	Project for Financial Inclusion in Rural Areas
IFAD	_	International Fund for Agricultural Development
SACCOs	-	Savings and Credit Cooperatives
CSCGs	-	Community Savings and Credit Groups
BoU	-	Bank of Uganda

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### **CHAPTER ONE**

### INTRODUCTION

#### **1.1 BACKGROUND OF THE STUDY**

The access to finance by the poor is a prerequisite for poverty reduction and sustainable economic development of a country. As of 2009, only 15 per cent of the population in rural areas of Uganda used banking services and just 7 per cent were served by other formal institutions and nearly half of the population was relying on informal financial arrangements (mostly friends and relatives), while 31 per cent lacked access to finance of any kind (IFAD, 2013).

In Uganda, small scale farmers are the majority constituting about 85% of the farming community; 12% are medium scale farmers while 3% are large scale farmers (Balya, 2010). Smallholder farmers mostly practice subsistence farming. Farming is labour intensive, done using rudimentary technologies and done by the family, particularly by women and children in Uganda with limited ability hire of farm labour. Women play a vital role in Uganda's rural agricultural sector and contribute a higher than average share of crop labor in the region. They also make up more than half of Uganda's agricultural workforce, and a higher proportion of women than men work in farming - 76% versus 62%. Yet compared to men, their productivity is low (World Bank, 2015).

Uganda's financial sector is divided into four Tiers: The first Tier comprises commercial banks, the second include credit institutions and financial companies, while the third consists of the MDIs, and the fourth includes the SACCOS, Financial NGOs and all other non-deposit taking financial institutions (BoU, 2014). Tiers 1-3 are regulated and supervised by Bank of Uganda. However, financial inclusion in Uganda is still very low, with only 33% of the 12 million bankable population holding bank accounts besides a low saving-GDP ratio of 16%. Interestingly, the stock of private sector credit to GDP stands at 11.8%, an indicator of poor financial intermediation in the country. Formal institutions are less prominent in rural areas than urban areas; they only serve 14% of the rural population. However, the introduction of mobile money, the share of individuals operating a bank account has steadily increased, rising from 20% in 2011 to 44.4% in 2014 (BoU, 2015). Worse, access to formal financial institutions is unevenly distributed by district: 41% of districts

in Uganda lack access to any bank branch, 41% and 48% of districts out of the 112 districts in Uganda lack access to any bank branch and ATM, respectively.

While there is a relatively broad range of financial intermediaries in Uganda, the supply of financial services to rural areas is still limited and falls significantly short of demand, in that the country is characterized by low banking intermediation. At present, community-based financial institutions such as the SACCOs and CSCGs are the only. Therefore limited access to credit constrains the economic development of these small scale farmers and hence requires a thorough analysis as this seems to be binding to many developing countries of which Uganda is no exception.

It is however important to note that certain factors are considered before credit is availed to the beneficiary and one of such factors is the beneficiaries ability to repay the loan which in turn is also determined by many factors. Credit repayment performance could be influenced by a myriad of factors such as interest rate, unstable prices of agricultural commodities, and the social relations and responsibilities of the borrower (Ugbomeh *et al.*, 2008). The resolve by various stakeholders in improving the status of the poor through credit extension has informed a new policy dimension and question. The question of repayment of loan is one of the important issues since it influences access to credit (Dadson, 2012).

### **1.2 RESEARCH PROBLEM**

The accessibility of good financial services is considered as one of the engines of economic development. The establishment and expansion of financial serves is also one of the instruments to break the vicious circle of poverty. Governments of less developed countries have frequently practiced the policies of providing cheap credit to the agricultural sector through financial intermediaries. Generally, there are two main sources of credit namely formal and informal sources. The two sources continue to be the major sources of agricultural credit, though their proportion differs. Agriculture remains the major source of livelihood in Uganda. According to the Uganda National Household Survey (UNHS) 2016/17, the bigger proportion of the working population is engaged in agriculture, forestry and fishing (65%). Among the females in the working population, 70% are engaged in agriculture compared to 58% of the males. Agricultural

finance is therefore regarded as a decisive factor input in farming production, helping poor farmers to maintain consumption of basic necessities, adopt advanced technology and raise their incomes (Lemessa and Gemechu, 2016). Therefore, access to credit is a potent tool to enhance agricultural productivity, to encourage economic development and thereby to alleviate poverty. Nevertheless, the majority of small scale farmers especially women and youths in developing countries have only limited access to commercial banks and other formal financial institutions. The lending terms and conditions created by the commercial banks like collateral and terms of repayments also deny small scale farmers from accessing credit. In addition, the small scale farmers characteristic such as level of literacy, income and degree of awareness of credit availability are regarded as main factors determining the farmer's access to formal credit market. Therefore, the small scale farmers in developing countries have relied almost exclusively on informal credit gathering from friends, relatives, village traders and landlords.

### **1.3 OBJECTIVES OF THE STUDY**

The overall objective of the study is to examine the gender differences in access to credit by rural small scale farmers in Uganda. The specific objectives of the study are:

- 1 To examine the nature and structure of sources of credit to male and female small scale farmers in Arua, Uganda.
- 2 To examine the determinants of access to credit to male and female small scale farmers in Arua, Uganda.
- 3 To determine the factors affecting loan repayment performance of male and female small scale farmers in Arua, Uganda.
- 4 To identify the constraints to access to credit for male and female small scale farmers in Arua, Uganda.

### **1.4 SIGNIFICANCE OF THE STUDY**

Despite the fact that agriculture sector in Uganda accounts for approximately 23 per cent of GDP and employs about 60 per cent of the labour force, a number that is increasing as the population grows (IFAD, 2018), quite a lot still find it difficult to have access to credit which is necessary as

input to promote a sustainable agricultural development and the livelihoods of rural farmers in Uganda (IFAD, 2018) and Africa (Ogundeji *et al.*, 2018).

In the past, several empirical studies have focused on the benefits, problems, access and role of credit to enhance productivity and profitability while very few studies (Awoke 2014; Salem & Jann, 2014) have identified participation and loan default of borrowers in the credit market in reference to gender.

This study therefore seeks to contribute to this gap in research, specifically in Uganda. The study will be significant because gender relations in households are important in women's empowerment and contribute to the knowledge on gender relations and related knowledge on microfinance resources for empowerment and poverty reduction among women. This proposition echoes IFADs vision and the Sustainable Development Goals 1 and 5 (End poverty in all its form everywhere and achieve gender equality and empower all women and girls) respectively. Gender and development practitioners could also use the research findings to sensitize communities and families on access to and repayment of credit globally. The study findings, conclusions and recommendations will help assess the performance of the Project for Financial Inclusion in Rural Areas (PROFIRA) and also form the basis for the government and IFAD in advising lending agencies on improving lending policies for the farmers especially women and combat the various challenges encountered by the small scale agropreneur. Equally important, the study will add to the existing body of knowledge on gender relations at the household levels, and also form a basis for future research in related areas.

### **1.5 SCOPE OF THE STUDY**

The study will be conducted in Arua which is one of the districts in the West Nile Region of Northern Uganda. It will cover the period between August to October 2019. This period is notable because of PROFIRA which was enacted in 2013 and will expire in 2020, with the main goal to sustainably increase access to and use of financial services by the rural population in the target area through partnership with the Government of Uganda thanks to its involvement in the rural financial sector under the Rural Financial Services Programme and community-based savings and credit groups.

### **CHAPTER TWO**

### METHODOLOGY

### **2.1 INTRODUCTION**

This chapter highlights the specific methodologies, procedures and instruments that were used in the study. Data collection methods, data analysis and interpretations are also described.

### **2.2 STUDY AREA**

The study was conducted in Arua, a districts in the West Nile Region of Northern Uganda. It has a total area of 4,274.13 km<sup>2</sup> of which about 87% is arable, a density of 240/km<sup>2</sup> with coordinates 03°00'N 31°10'E. The economy of Arua depends mainly on agriculture which employs over 80% of the households. Of those employed in agriculture, 86% are engaged in the crop sector, 0.6% in animal rearing and 0.9% in fishing (UNDP 2017). The districts population estimate is 782,077 (UBS, 2016) with 51.8% of the population as women while 48.2% of the population are men.



### Figure 1: Map of Arua

### **2.3 RESEARCH DESIGN**

A multistage sampling procedure will be used for this research. The first was the purposive selection of Arua district being a farming centre in Uganda. The second will be the purposive selection of farming concentrated areas in the town. The third will be the simple random selection of 200 small scale farmers in the area which will constitute the sample size for the study. Because of language barrier enumerators were hired to help interpret the questions to the farmers.

### 2.4 DATA COLLECTION AND ANALYSIS

Multiple data collection methods were employed for data collection from the primary data and secondary data sources. For primary data, the methods used included; administered questionnaire administration, interviews and conversations with stakeholders, and focus group discussions. For secondary data an extensive literature review from a wide range of selected articles from journals, government and international agencies policies and publications, technical documents, reports and books was carried out to inform both the approach used, the focus of the work and analysis of the content.

Data analysis was used to organize, inspect and transform data with the aim of highlighting required information, suggest conclusion and support decision. Analysis of the data collected helped to develop strong evidence from the investigations. A multi-stage Sampling method was used with a sample size of 200 households and an average of 65 households sampled from each of the three sub counties. Data was analyzed using Stata and Microsoft excel while data description was done using percentages and frequencies.

### 2.5 DESCRIPTION OF RELEVANT VARIABLES

#### **Descriptive Statistics**

Descriptive statistics makes use of central tendencies and the measure of dispersion which involves Kurtosis and Skewness. This involves the use of mean, median and mode of the distribution. These will be used to describe the socioeconomic characteristics, various types of credit sources and constraints to credit. Frequencies, percentages and distribution tables were also used.

S/N	Objectives	Required Data	Method Of Analysis
1	To examine the nature and	Primary data (formal and	Descriptive statistics
	structure of sources of credit to	informal credit sources).	such as frequency
	male and female small scale	Relevant variables include	distribution tables and
	farmers in Arua, Uganda.	self or family, cooperative	percentages.
		societies, commercial banks,	
		micro finance banks,	
		SACCOs,	
2	To examine the determinants of	Primary data obtained from	Probit Model
	access to credit to male and	the use of questionnaire.	
	female small scale farmers in	(Socio-economic data).	
	Arua, Uganda.	Variables include age,	
		gender, educational level,	
		membership in cooperative	
		society, farm size, farming	
		experience, household size.	
3	To determine the factors	Primary data from the use of	Tobit model
	affecting loan repayment	questionnaire. (Socio-	
	performance of male and female	economic data). Variables	
	small scale farmers in Arua,	include farming turnover,	
	Uganda.	collateral, losses, loan	
4	To identify the constraints to	acquisition cost.	Descriptive statistics
4	To identify the constraints to	Primary data from the use of	Descriptive statistics
	facess to credit for male and	questionnaire (socio-	such as frequency
	Arma Uganda	include collectoral distance	
	Alua, Ugallua	from source of credit interest	percentagesin
		rate education	
4	To identify the constraints to access to credit for male and female small scale farmers in Arua, Uganda	Primary data from the use of questionnaire (socio- economic data). Variables include collateral, distance from source of credit, interest rate, education.	Descriptive statistics such as frequency distribution tables and percentagesm

Table 1. Analysis of objective, required data and method of analysis.

# The Probit Model

A probit model is a type of regression where the dependent variable can only take two values, for example married or not married. The purpose of the model is to estimate the probability that an observation with particular characteristics will fall into a specific one of the categories; moreover, the probit model is a type of binary classification model. The model is a popular specification for an ordinal or a binary response model. It was introduced by Chester Bliss in 1934

The dependent variable Y is the credit participation of farmers. A respondent is said to participate in credit market if such individual borrows from that source of credit.

Yi is the binary variable that assumes 1 if farmers i, participate in credit market and 0 if otherwise. Therefore, Y can be specified as follows:

$$Yi = \beta o + \sum_{d=11}^{11} \beta j Xj + \varepsilon i$$
$$\varepsilon i \sim N(0,1)$$
$$Yi = 1 \text{ if } y > 0$$
$$Yi = 0 \text{ if } y \le 0$$

Xj is a vector of explanatory variables thought to affect the participation decision

 $\beta$ i is a coefficient of explanatory variables in the Probit regression model-farmers participation model

 $\varepsilon i$  is random error term

 $X_1$  = Primary occupation (1 = farming, 0 = others)

 $X_2 =$  Age of farmers (years)

 $X_3$  = Gender of the Respondent (1 = Male, 0 = Female)

 $X_4 =$  Marital status (1 = Married, 0 = Single)

 $X_5$  = Educational level of respondents (no of years of schooling)

 $X_6 =$  Farming experience (years)

X<sub>7</sub> = Household size (Number of Persons)

 $X_8$  = Secondary occupation (1 = business, 0 = others)

 $X_9 =$  Total income (\$/month)

 $X_{10} = Total expenditure (\$/month)$ 

e = error term

### **The Tobit Model**

Tobin (1958) devised what became known as the Tobit (Tobin's probit) or censored normal regression model for situations in which y is observed for values greater than 0 but is not observed (that is censored) for values of zero or less. The empirical model is defined as

$$Yi^* = \beta o + \sum_{d=11}^{11} \beta j X j + \varepsilon i$$
$$Yi^* = xi\beta + \varepsilon i$$
$$Yi = Yi^* \text{ if } yi > 0$$
$$Yi = 0 \text{ if } yi \le 0$$

where

yi\* is the latent dependent variable which is not observable

yi is the observed dependent variable,

xi is the vector of the independent variables,

 $\beta$  is the vector of coefficients, and the

εi 's are residuals assumed to be independently and normally distributed

where,

 $Y_1$  = Loan repayment performance of farmers

 $X_1$  = Repayment period (days)

 $X_2 =$  Age of farmers (years)

 $X_3$  = Gender of the Respondent (1 = Male, 0 = Female)

 $X_4$  = Marital status (1 = Married, 0 = Single)

 $X_5$  = Educational level (no of years spent in school)

 $X_6 =$  Farming experience (years)

X<sub>7</sub> = Farmers household size (Number of Persons)

 $X_8$  = Primary occupation (1 = farming, 0 = others)

 $X_9 =$  Total income (\$/month)

 $X_{10} = Total expenditure (\$/month)$ 

 $X_{11}$  = Borrowing experience (years)

e = error term

Repayment Rate Formular(RR100)

 $\frac{\textit{Amount collected}}{\textit{Amount repaid to date}} \ge 100$ 

### 2.6 METHOD OF DATA ANALYSIS

- (i) The data collected from the small scale famers were encoded into SPSS IBM 21. Descriptive statistics such as frequency, percentages and distribution table were used in objective one to examine the nature and structure of sources of credit to male and female small scale farmers in the study area.
- (ii) Probit model were used to examine the determinants of access to credit to male and female small scale farmers in the study area.
- (iii) Tobit model was used to determine the factors affecting loan repayment performance of male and female small scale farmers in the study area.
- (iv) Descriptive statistics such as frequency, percentages and distribution tables were used to identify the constraints to access to credit for male and female small scale farmers in the study area.

# CHAPTER THREE RESULTS AND DISCUSSIONS

# **3.1. INTRODUCTION**

The study was undertaken to examine the gender analysis of access to credit and loan repayment performance among smallholder farmers in northern Uganda in order to understand the various sources and nature of credit as well as constraints faced in accessing credit. The purpose of this chapter is to present the general finding based on careful analysis of survey information and discuss the results. This thesis has indicated a wide range of issues that are related to the desired upscale of financial inclusion in Uganda.

# **3.2. DEMOGRAPHY OF RESPONDENTS**

Survey was carried out on 200 respondents from randomly selected households. This comprised 137 (68.5%) women and 63 (31.5%) men. About 94 (47%) of the respondents are youths less than 40 years. The higher number of women farmers from the households surveyed implied that there were more women practicing small scale agriculture than were men. The average household size was 6. Land (family land) and house ownership stands at 100% for both men and women although most of the houses in the research area are made of mud and thatched roofs.

The total farm size of the sampled household was 963 acres while the average farm size per household is 4.82 acres. This result confirmed that the respondents were smallholder farmers with small land size for cultivation less than 2ha according to Sarah *et al* 2016.

The survey was carried out in 3 sub-counties namely Yumbe 52.5%, Maracha 17.0% and Arua 30.5%). The table below shows the villages surveyed.

 Table 2: Distribution of respondents by district

	Men (%)	Women (%)
Yumbe	31.75	62.04
Maracha	25.4	13.14
Arua	42.86	24.82

Source: Field Survey, 2019.

Figure 3 below shows the gender proportion of the respondents. It showed 31.5% men and 68.5% women. This showed more women are involved in small scale farming in the study area.

# Figure 2: Distribution of respondents by gender



Source: Field Survey, 2019.

Majority of the respondents fall between the active ages of 31 to 60 years. 36.5% women and 22.22% have ages less than 30 years. The older generation greater than 60 remain in the minority for both gender in the study area.

Table	3:	Distribution	of	respondents	by	age in	years.
				1	•		•

	Men (%)	Women ( % )
< 30	22.22	36.5
31 - 60	60.32	51.09
> 60	17.46	12.41

Source: Field Survey, 2019.

Survey result on marital status showed that majority (87.5%) of the respondents are married. Out of the 63 men, 59 of them are married while 4 are widowed. 116 women are married, 18 are widowed while 3 are single.



Figure 3: Distribution of respondents by marital status.

Survey result on education indicated that there are more male farmers with at least a secondary education than there are female farmers in all. Of the 63 male respondents, 36 men have primary education, 21 men have secondary education and 6 men have tertiary education (higher institution of learning). Also, of the 137 female respondents, 64.96% women have primary education, 11.68% women have secondary education and 2.19% women have tertiary education while 21.17% women have had no form of education.

	Men ( % )	Women ( % )
Non Formal		21.17
Primary	57.14	64.96
Secondary	17.46	11.68
Tertiary	9.52	2.19

Source: Field Survey, 2019.

Source: Field Survey, 2019.

The result shows that majority of the women and men have only spent between 1 to 7 years in school. 21.17% Of women haven't attended any school in their lives. There is a higher percentage of men who have spent above 13 years schooling than women. This categorization is based on the standard system of education in Uganda.

Table 5: Distribution of respondents by schooling years.

	Men (%)	Women (%)
< 0		21.17
1 – 7	57.14	64.96
8 - 13	17.46	11.68
> 13	9.52	2.19

Source: Field Survey, 2019.

Results showed majority (96.8%) of the male are involved in farming while 3.2% are involved in business as primary occupation. The primary occupation of majority of the women 96.4% is farming with only 3.6% are into business.

Figure 4: Distribution of respondents by primary occupation.



Source: Field Survey, 2019.

The survey result shows that majority of the men (63.49%) are not engaged in any other form of secondary activity after their primary occupation which is farming. This however is different from the women in which majority of them (55.47%) are involved in another form of secondary occupation ranging from trade to business which can either come in form of retailing, hairdressing and sewing.

	Men (%)	Women (%)
None	63.49	40.88
Farming	3.17	3.65
Business	33.33	55.47

Table 6: Distribution of respondents by secondary occupation.

Source: Field Survey, 2019.

The survey showed 76.19% men and 67.88% women have a household size less than 6 which formed majority of the respondents. The frequency of women with household size range 7 to 9 is however larger than that of the men (14.29%). This is vice versa in the last category as men have more household size (9.52%) than women (2.19%). It is observed that there were higher numbers of household size among the Muslim respondents compared to their Christian counterparts

Table 7: Distribution of respondents by household size.

	Men (%)	Women ( % )
< 6	76.19	67.88
7-9	14.29	29.93
>9	9.52	2.19
Total	100.0	100.0

Source: Field Survey, 2019.

Majority of the respondents have less than 10 years farming experience with 24 men and 57 women in this category. 25.55% of women however has over 30 years' experience compared to 22.22% in men. 33.33% of the men and 21.17% of women also have a farming experience which ranges between 21 to 30 years. Minority respondents is constituted in the 11 to 20 category with 6.35% men and 11.68% women.

	Men (%)	Women ( % )
< 10	38.1	41.61
11 – 20	6.35	11.68
21 - 30	33.33	21.17
> 30	22.22	25.55

Table 8: Distribution of respondents by farming experience.

Source: Field Survey, 2019.

The survey showed all the respondents were involved in crop farming. The crops include cassava, beans, groundnuts, simsim, millet and maize. Tobacco is the major cash crop and is the main source of livelihood for majority of the population in the district.

Figure 5: Distribution of respondents by type of farming.



Source: Field Survey, 2019.

73% of the men were Christians while 27% were Muslims. Majority of the women however were Muslims constituting 65.7% while 34.3% identifies with Christianity. Overall, Yumbe and Arua are predominantly a muslim community with only few Christians. Maracha on the other hand has a greater number of Christians

Figure 6: Distribution of respondents by religion.



Source: Field Survey, 2019.

The survey result on average monthly income shows that majority of the women (48.91%) earn as low as \$50 or less in a month. They slightly earn more than their male counterpart when the range is between 51 to 100 dollars. Very few earn above \$150 in a month but men still significantly earn more than women. Men generally earn more than women in the study area even though women constitute majority in farming in the area.

	Men (%)	Women (%)
< 50	17.46	48.91
51 - 100	38.1	39.42
101 – 150	30.16	8.76
> 150	14.29	2.92

 Table 9: Distribution of respondents by monthly income in dollar.

Source: Field Survey, 2019.

Survey result on average monthly expenditure shows that majority of the respondents spend more than \$60 monthly. Fewest for men is within 21 to 40 dollars monthly while for women, it is within 41 to 60 dollars. It is observed that women spend more than men in relation to lower denominations

but there was a significant rise for men in spending above \$60 which can be attributed to being the breadwinner of the house paying bills, giving wives or family money or other needed expenses.

	Men (%)	Women (%)
< 20	11.11	21.17
21 - 40	1.59	18.98
41 - 60	11.11	10.22
> 60	76.19	49.64

Table 10: Distribution of respondents by monthly expenditure in dollar.

Source: Field Survey, 2019.

# **3.3 SOURCES AND NATURE OF CREDIT**

The survey shows that the major source of credit for small-scale farmers in the research area was mainly the cooperative society in form of group and community savings scheme, self and family. The commercial banks in the community are few and famers don't patronize them for credit or loans. There were no SACCOs and Micro-finance in the area for activity. 50.79% men and 86.13% women have sourced for credit from either the cooperative society which they belong to, friends or family. There is a sense of belonging with these sources compared to banks or any other source of credit available. The other respondents do not have access to credit.

# Table 11: Distribution of respondents by source of credit.

	(%) utilizi	(%) utilizing the source	
	Men	Women	
Self and Family	50.79	86.13	
Cooperative society	50.79	86.13	

Source: Field Survey, 2019.

The tables below shows the nature of the credits obtained as to when it is acquired. There are two categories majorly specified which is the planting season and harvesting season. The survey shows that more borrowing occurs during the planting season which may be due to purchase of seedlings, equipment, fertilizers and other things needed for effective planting. 93.75% of the male respondents and 88.98% of the female respondents are mainly planting season borrowers while only 6.25% men and 9.32%, 5.08% women borrow during the harvest seasons from cooperative

and family respectively. It is worthy to note that some women (5.93%) borrow in both seasons from self and family.

	Seasons	
	% Planting	% Harvest
Self and Family	93.75	6.25
Cooperative society	93.75	6.25

### Table 12: Distribution of male respondents by nature of credit.

Source: Field Survey, 2019.

 Table 13: Distribution of female respondents by nature of credit.

	Seasons		
	% Planting	% Harvest	% Both
Self and Family	88.98	5.08	5.93
Cooperative society	88.98	9.32	0

Source: Field Survey, 2019.

# 3.4 FACTORS AFFECTING SMALL SCALE FARMERS ACCESS TO CREDIT.

The survey shows that all the respondents own a piece of land they are using for their agricultural activities. This is so because it is an ancestral of family land that is passed from generation to another. Majority of 52.38% men and 70.8% women have lands raging between 1 to 5 acres. Few also have lands ranging from 6 to 10 acres of land. Only men 17.46% had acres of land greater than 10. 50.79% men and 86.13% women belonged and so do have access to credit in the study area as the rest do not associate with any cooperative society and so lack access to credit. Survey also shows that majority of the respondents get responses from the credit sources immediately on the day of application for loan or credit which is lag time. 6.25% men and 11.02% women which constitute minority only get theirs after 7 days of application. This is as a result of the agreement members of the cooperative have reached in their constitution as to when to collect loan after requesting for it.

Variable	Male	Female
Do you own a land?		
Yes	100.0%	100.0%
Size of Land		
1-5	52.38%	70.80%
6 – 10	30.16%	29.20%
> 10	17.46%	
Ownership of land?		
Family land	100.0%	100.0%
House ownership?		
Yes	100.0%	100.0%
Cooperative Society membership		
Yes	50.79%	86.13%
No	49.21%	13.87%
Access to Credit		
Yes	50.79%	86.13%
No	49.21%	13.87%
Lag Time		
0	93.75%	88.98%
7	6.25%	11.02%

Table 14: Distribution of factors that affect access of small scale farmers to credit

Source: Field Survey, 2019.

Result from the Probit model revealed that; being a male small-scale farmer, being married, engaging in business as secondary occupation, attaining a secondary level of education, and having a high level of expenditure all had a negative impact on chances of access to credit; which implies, they decrease the chance of a small-scale farmer towards securing a loan.

Attaining a tertiary education, years of experience in farming, household size, and income level all had a positive impact on chances of access to credit; by implication, having a tertiary education, having a higher year of experience in farming, having a larger household size and higher level of income all increased the chances of a farmer's access to credit.

Factors that were found to have significantly impacted access to credit were – gender of the farmer (p = 0.010), marital status of the farmer (p = 0.002), attaining tertiary education status (0.022), age of the farmer (p = 0.003), household size of the farmer (p = 0.002) and index of expenditure of the farmer (p = 0.026).

The result from the marginal probabilities revealed that while female farmers had about 82% chances of getting access to credit, the chance of access to credit among male farmers is about 60%). The likelihood of access to loan among single farmers was higher than those who were married; 97% and 69% respectively. Probability of access to loan was about 84% for farmers who had attained tertiary education, and 74% for farmers who had below tertiary education.

The probability of access to loan decreased consistently with increasing age; 98% for a farmer aged 20 years, 95% for a farmer aged 30 years, 84% for a farmer aged 40 years, 62% for a farmer aged 50 years, 42% for a farmer aged 60 years, and 17% for a farmer aged 70 years. The chances of access to credit improved markedly with higher household size; 49% for a farmer with household of size 3, rising up to 98% for a farmer with a household size of 12 persons. Increasing level in the index of income was found to markedly raise the chances of access to credit; 35% when log of income is at 0.5, rising up to 84% when log of income is 2.5. Increasing level of the index of expenditure diminishes the probability of access to credit; from 99% when log of expenditure is 0.5, to a decrement of 16% when lo fog expenditure is 2.5

	Coefficient	Std. Error	p-value	Margin	95% CI	p-value
			(Coefficient)			(Margin)
Gender						
Female	1			0.82	0.79 - 0.86	< 0.001
Male	-3.31	1.28	0.010	0.60	0.52 - 0.69	< 0.001
Marital Status	1			<b>-</b>		
Single	1	• • • •	0.000	0.97	0.94 – 0.99	< 0.001
Married	-7.86	2.60	0.002	0.69	0.65 - 0.72	< 0.001
Secondary Occupation				o <b></b>	0.001	0.001
Others	l	0.00	0.00 <b>-</b>	0.75	0.70 - 0.81	< 0.001
Business	-0.12	0.88	0.895	0.74	0.68 - 0.81	< 0.001
Secondary Level of Education				0		0.001
No	l	0.05	0.454	0.76	0.73 - 0.78	< 0.001
Yes	-0.64	0.85	0.454	0.72	0.63 - 0.80	< 0.001
Tertiary Level of Education				0.74		0.001
No		1.00	0.000	0.74	0.72 - 0.76	< 0.001
Yes	2.94	1.28	0.022	0.84	0.80 - 0.89	< 0.001
Age <sup>2</sup> (Square of Age)	-0.003	< 0.01	0.003	0.00	0.07 0.00	.0.001
20 years				0.98	0.97 - 0.99	< 0.001
30 years				0.95	0.92 - 0.98	< 0.001
40 years				0.84	0.78 - 0.90	< 0.001
S0 years				0.62	0.55 - 0.69	< 0.001
70 years				0.42	0.30 - 0.34	< 0.001
Voor of Experience	0.12	0.07	0.061	0.17	0.12 - 0.21	< 0.001
	0.12	0.07	0.001	0.62	0.55 0.68	< 0.001
20 years				0.02	0.53 - 0.08	< 0.001
20 years				0.08	0.02 - 0.73 0.72 0.78	< 0.001
10 years				0.75	0.72 - 0.78 0.79 - 0.85	< 0.001
50 years				0.82	0.77 = 0.03 0.82 = 0.92	< 0.001
Household Size	1 38	0.45	0.002	0.00	0.02 0.72	< 0.001
3 persons	1.50	0.45	0.002	0 4 9	0.39 - 0.59	< 0.001
6 persons				0.49	0.35 - 0.82	< 0.001
9 persons				0.93	0.91 - 0.96	< 0.001
12 persons				0.98	0.97 - 1.00	< 0.001
Lg. Inc. (Log of Income)	4.93	3.90	0.207	0170		
0.5				0.35	-0.06 - 0.75	0.099
1.0				0.50	0.18 - 0.81	0.002
1.5				0.65	0.53 - 0.77	< 0.001
2.0				0.75	0.73 - 0.76	< 0.001
2.5				0.84	0.76 - 0.93	< 0.001
Lg. Exp. (Log of Expenditure)	-9.45	4.24	0.026			
0.5				0.99	0.99 - 1.00	< 0.001
1.0				0.97	0.90 - 1.05	< 0.001
1.5				0.84	0.79 - 0.90	< 0.001
2.0				0.51	0.30 - 0.72	< 0.001
2.5				0.16	-0.11 - 0.43	0.252

# Table 15: Probit analysis showing the factors influencing access to credit.

### **3.5 DETERMINANTS OF CREDIT REPAYMENT PERFORMANCE**

The table below shows that collateral will not affect most of the respondents in their repayment ability. This is because little or no collateral is required by their respective cooperatives. 12.5% men and 35.59% women of those that borrowed will only be affected by the little collateral. All the respondents however revealed that farming turnover or in case of loss, their repayment ability will be affected. There are also 2 distinct repayment plan for the respondents depending on the agreement in their constitution. 62.5% men and 68.64% women pay back their credits in full while the rest pay on instalment basis. Results also shows that majority of the credit sources supervise borrowers on how they use the credit gotten. This is to ensure judicious use of the loans borrowed. It should be noted that majority of the respondents have a borrowing experience of 1 to 5 years. This is because the initiative of the credit and savings group aligns in timeline with these years. Only few have a borrowing experience between 6 to 10 years (37.5% men and 10.16%) with even fewer above 10 years.

Variable	Male	Female
Collateral effect		
Yes	12.5%	35.59%
No	87.5%	64.41
Farm turn over effect		
Yes	100.0%	100.0%
Losses effect		
Yes	100.0%	100.0%
Repayment plan		
Full	62.5%	68.64%
Instalment	37.5%	31.36%
Supervision of credit		
Yes	56.25%	68.64%
No	43.75%	31.36%
Borrowing experience		
1-5	50.0%	88.14%
6 - 10	37.5%	10.16%
11 – 15	12.5%	1.7%

 Table 16: Distribution of factors that affect credit repayment performance of small scale

 farmers

Source: Field Survey, 2019.

The result from the Tobit model reveals the loan repayment performance of the farmers; an index derived on a continuous scale, lower bounded at 100 to infinity. Thus, the closer the repayment index is to 100, the better the performance of the farmer.

It was revealed that, being a male farmer, engaging in business as a secondary form of occupation, attaining a tertiary level of education and having up to three months repayment period reduces the estimated value of the repayment index; implying that, these factors better the farmers ability to loan repayment at varying degrees. Similarly, having a larger household size, higher level of income index and a higher level of borrowing experience also better the farmers' ability to loan repayment, as they noticeably reduce the value of the repayment index. Key factors with high positive impact and statistical significance on loan repayment index were: male gender (p = 0.009), having a repayment period of 3 months (p = 0.008), higher level of borrowing experience (p = 0.013).

It was exposed that, being married, engaging in farming as primary occupation, having attained primary or secondary education, and getting supervision from loan sources increase the values of the repayment index; by implication, these factors limits the farmers ability towards loan repayment, at different levels. In like manner, a higher age, higher year of experience in farming, and higher level of expenditure index adds to the value of the repayment index; implying that, these factors deteriorate the ability of a farmer to repay loans. Major factors with optimal negative impacts and statistical significance on loan repayment index were: practicing farming as primary occupation (p = 0.003), and having not more than secondary education (p = 0.07),

	Coefficient	p-value	95% CI
Gender			
Female	1		
Male	-247.62	0.009	-431.69, -63.54
Marital Status			
Single	1		
Married	173.32	0.134	-54.24, 400.88
Primary Occupation			
Others	1		
Farming	520.55	0.003	181.71, 859.40
Secondary Occupation			
Others	1		
Business	-58.65	0.526	-241.25, 123.95
Primary Level of Education			
No	1		
Yes	105.62	0.291	-91.48, 302.73
Secondary Level of Education			
No	1		
Yes	441.53	0.007	122.83, 760.24
Tertiary Level of Education			
No	1		
Yes	-58.70	0.832	-604.20, 486.80
Repayment Period			
One month	1		
Three months	-245.06	0.003	-406.94, -83.17
Supervision from loan sources			
No	1		
Yes	176.64	0.123	-48.50, 401.78
Age <sup>2</sup> (Square of Age)	0.03	0.665	-0.11, 0.18
Year of Experience	0.48	0.941	-12.41, 13.38
Household Size	-4.24	0.803	-37.85, 29.37
Lg. Inc. (Log of Income)	-89.40	0.636	-462.16, 283.36
Lg. Exp. (Log of Expenditure)	288.50	0.095	-51.22, 628.21
Borrowing experience	-45.40	0.013	-81.19, -9.62

# Table 17: Tobit analysis showing the factors influencing loan repayment performance.

### 3.6. CONSTRAINTS TO ACCESS TO CREDIT

In an open ended question, respondents were asked to state the constraints they face in accessing credit. There was a peculiar constraint common to those with access to credit which was different from those without access to credit. Those generally with access to credit faced the difficulty of insufficient funds within their respective cooperative societies. Insufficient funds interprets to a scenario where a member of a cooperative is constrained to only have access to the quota he or she has contributed over a given period and so cannot request above such personal contribution even if the purpose for which the credit was requested requires a greater cash inflow. So what is done to salvage the situation is lending from friends or family. They were also generally very satisfied with distance to credit agency (the cooperative societies were located central to members houses and so there was little or no cost incurred in accessing credit), interest rate (they have all agreed on the particular rate and have the power as a society to review it), repayment period, application process, lag time between application and disbursement of credit and interpersonal relationship of the credit agency.

The major constraints faced by the farmers without access to credit include group unavailability. This interprets to a scenario where respondents are constrained because they do not belong to any cooperative society because there needs to be a certain number before a group savings is formed and once the number is reached, no one can join in. That means anybody that wants to have access to credit needs to look for either a group that is not yet up to the required membership number or look for others without group to form a new cooperative society.

Constraints	Those with ac	ccess to credit	Those without access to credit		
	Male Female		Male	Female	
Insufficient	100.0%	100.0%			
Fund					
Group			100.0%	100.0%	
unavailability					

Table 18: Distribution of respondents according to constraints to access to credit.

Source: Field Survey, 2019.

# CHAPTER FOUR CONCLUSION AND RECOMMENDATIONS

### 4.1 SUMMARY

The access to finance by the poor is a prerequisite for poverty reduction and sustainable economic development of a country. As of 2009, only 15 per cent of the population in rural areas of Uganda used banking services and just 7 per cent were served by other formal institutions and nearly half of the population was relying on informal financial arrangements while 31 per cent lacked access to finance of any kind. While there is a relatively broad range of financial intermediaries in Uganda, the supply of financial services to rural areas is still limited and falls significantly short of demand. This research therefore assesses the gender analysis of access to credit and repayment performance by rural small scale farmers in Arua. The main objectives of the study is to assess the gender differences in access to credit by rural small scale farmers with the view of achieving the following objectives: to examine the nature and structure of sources of credit to male and female small scale farmers in Arua, to examine the determinants of access to credit to male and female small scale farmers in Arua, to determine the factors affecting loan repayment performance of male and female small scale farmers in Arua and to identify the constraints to access to credit for male and female small scale farmers in Arua, Uganda. Survey was carried out on 200 respondents from randomly selected households. This comprised 137 (68.5%) women and 63 (31.5%) men. About 94 (47%) of the respondents are youths less than 40 years. The higher number of women farmers from the households surveyed implied that there were more women practicing small scale agriculture than were men. The average household size was 6. Land (family land) and house ownership stands at 100% for both men and women although most of the houses in the research area are made of mud and thatched roofs. Secondary data was used in getting information about Project for Financial Inclusion in Rural Area. Descriptive statistics such as mean, frequency, percentages and standard deviations were used in each objectives.

The study shows that the major source of credit for small-scale farmers in the research area was mainly the cooperative society in form of group and community savings scheme, self and family. The commercial banks in the community are few and famers don't patronize them for credit or loans. 50.79% men and 86.13% women have sourced for credit from either the cooperative society which they belong to, friends or family. There are two categories majorly specified for nature of

credit which is the planting season and harvesting season. The survey shows that more borrowing occurs during the planting season which may be due to purchase of seedlings, equipment, fertilizers and other things needed for effective planting. 93.75% of the male respondents and 88.98% of the female respondents are mainly planting season borrowers while only 6.25% men and 9.32%, 5.08% women borrow during the harvest seasons from cooperative and family respectively.

Result from the Probit model revealed that being a male small-scale farmer, being married, engaging in business as secondary occupation, attaining a secondary level of education, and having a high level of expenditure all had a negative impact on chances of access to credit; which implies, they decrease the chance of a small-scale farmer towards securing a loan. Attaining a tertiary education, years of experience in farming, household size, and income level all had a positive impact on chances of access to credit. The marginal probability revealed that while female farmers had about 82% chances of getting access to credit, the chance of access to credit among male farmers is about 60%.

The result from the Tobit model reveals that being a male farmer, engaging in business as a secondary form of occupation, attaining a tertiary level of education and having up to three months repayment period reduces the estimated value of the repayment index; implying that, these factors better the farmers ability to loan repayment at varying degrees. Similarly, having a larger household size, higher level of income index and a higher level of borrowing experience also better the farmers' ability to loan repayment, as they noticeably reduce the value of the repayment index. There were constraint common to those with access to credit and those without access to credit. For those with access, it was the constraint of insufficient funds within their respective cooperative societies. Insufficient funds interprets to a scenario where a member of a cooperative is constrained to only have access to the quota he or she has contributed over a given period and so cannot request above such personal contribution even if the purpose for which the credit was requested requires a greater cash inflow. For those without access, it is group unavailability which interprets to a scenario where respondents are constrained because they do not belong to any cooperative society because there needs to be a certain number before a group savings is formed and once the number is reached (usually 30 persons per group), no one can join in.

### **4.2 CONCLUSION**

Arising from the findings of this study, this study indicates that women were more involved than men in the farming occupation with majority of the women in their active working ages. Most respondents had an average education of 6 years. Most of the respondents were married with an average household size of 6 persons per household. All the respondents do not have access to formal sources of credit and borrowed on the average \$120 (men) and \$86 (women) from the informal source of credit. The study revealed that the farmers rely more on cooperative as major credit source compared to borrowing from the banks which are not readily available in the study area. Factors that had negative impact on access to credit from the Probit regression include high level of expenditure, secondary occupation, being married and secondary education. Farming experience, higher level of income, household size, tertiary education all have positive effect on smallscale farmers access to credit. Female farmers had about 82% chances of getting access to credit compared to male farmers which is about 60%. The Tobit regression analysis also revealed that being a man, higher income, household size, borrowing experience and having tertiary education had positive significant relationship with credit repayment performance while being married, high farming experience, having primary and secondary education and higher expenditure negatively influences repayment performance. From the study it can be concluded that insufficient funds for active borrowers and group unavailability for inactive borrowers were the major constraints faced by the respondents in the study area.

#### **4.3 RECOMMENDATIONS**

As a solution to upscaling formal borrowing practices in Uganda there is need to critically analyze the challenges farmers face as documented here to have better understanding of necessary steps to take that will benefit farmers and facilitate adoption.

Developing appropriate and feasible formal and informal credit outlets will enable farmers readily adopt more borrowing culture which will lead to increase in productivity, yields, income generation as well as food and nutrition security. Farmers' awareness of the benefits of credit practices as well as trainings on credit management should be a top priority of development partners and extension agents. Such localized solutions should take education, socioeconomic, gender related factors into account.

Group membership should be flexible to accommodate one or two persons more pending the time more people show up to form a cluster of group cooperative. PROFIRA should also intensify its effort in making it effortless for potential borrowers secure a group so as to have access to credit. Facilitating and education of smallscale farmers on farming activities that generates returns quickly compared to those with 1 or 2 years will go a long way in creating more income and thus savings.

#### REFERENCES

Awoke, M.U. (2004). Factors Affecting Loan Acquisition and Repayment Patterns of Smallholder Farmers in Ika North – East of Delta State, Nigeria. *Journal of Sustainable Tropical Agricultural Research* 9: 61-64.

Balya, C. 2010; Farm Africa at www.farmafrica.org.uk/where-we-work/uganda

Bank of Uganda. (2014). *State of financial inclusion in Uganda*. Bank of Uganda Supervision Report. Kampala. Uganda.

Bank of Uganda (2015) Financial Stability Report June 2015 7. Kampala Uganda.

Dadson A.V., 2012. Determinants of Loan Repayment Default among Farmers in Ghana. J. Develop. Agric. Econ. 4(13):339-345.

Global Financial Development Report: Financial Inclusion. World Bank. 2014.

https://www.ifad.org/web/operations/project/id/1630/country/uganda

https://blogs.worldbank.org/voices/leveling-field-women-farmers-uganda

- Lemessa, A., & Gemechu, A. (2016). Analysis of factors affecting smallholder farmers' access to formal credit in Jibat District, West Shoa Zone, Ethiopia. *International Journal of African and Asian Studies*, 25, 43-53.
- Ogundeji, Emmanuel Donkor, Charmaine Motsoari & Stephen Onakuse (2018). Impact of access to credit on farm income: policy implications for rural agricultural development in Lesotho, Agrekon, 57:2,152-166, DOI: 10.1080/03031853.2018.1483251
- President's report (2013): Proposed loan to the Republic of Uganda for The Project for Financial Inclusion in Rural Areas.

Project for Financial Inclusion in Rural Areas (PROFIRA): Supervision report (2014)

- Ugbomeh, George & Achoja, Felix & Victor, Ideh & Ofuoku, Albert. (2008). Determinants of Loan Repayment Performance Among Women Self Help Groups in Bayelsa State, Nigeria. Agriculturae Conspectus Scientificus (ACS). 73.
- World Bank. (2008). Agriculture for development. World development report 2008. Washington: The World Bank.
- Yehuala S (2008). Determinants of smallholder farmers access to formal credit. A case of Metema Woreda, North Gonder, Ethiopia. Unpublished Master's Thesis. Haramaya University, Ethiopia.

### APPENDIX

### University of Ibadan

Center for Sustainable Development (CESDEV)

### Research topic: GENDER ANALYSIS OF ACCESS TO CREDIT AND REPAYMENT PERFORMANCE BY RURAL SMALL SCALE FARMERS IN ARUA, UGANDA.

This questionnaire is designed to facilitate my research on the above stated research topic. Therefore, it would be appreciated if you provide responses to the question with utmost sincerity as your answers will be kept confidential. Please tick ( $\sqrt{}$ ) where necessary and provide thoughts where required. Thanks.

### Section A: SOCIO ECONOMIC CHARACTERISTICS OF SMALL SCALE FARMERS

1.	District	
2.	Gender	
3.	Age	
4.	Marital Status	Single () Divorced () Married () Widower/Widow ()
5.	Educational level	Non formal schooling () Primary () Secondary () Tertiary ()
6.	Number of years of schooling years	bu have had:
7.	Primary Occupation	
8.	Secondary Occupation	
9.	Household size	
10.	Farming Experience	
11.	Type of farming	Crop() Livestock() Fishery()
12.	Religion	Christianity() Islam() Traditional() Others()
13.	What is your average monthly in	ncome in the last six months UGX
14.	What is your average monthly e	xpenditure in the last six months UGX

# Section B: INFORMATION ON NATURE AND STRUCTURE OF SOURCES OF CREDIT

- 15. What are your main sources of Credit? You can choose more than one Commercial Banks () SACCOs () Micro-finance Banks () Self or Family () Cooperative society () Others () Sources of Finance for the Small farm holders (Please tick in respect of different farm activities)
- 16. <u>Have you ever obtained credit from the following?</u>

Source		Planting Season	Harvest Season
1.	Self and retained profits		
2.	Friends, Families and relative		
3.	Cooperative society		
4.	Commercial banks		
5.	Credit institutions and financial		
	companies		
6.	MDIs,		
7.	SACCOS,		
8.	Financial NGOs and all other		
	non-deposit taking financial		
	institutions		

### Section C: INFORMATION ON DETERMINANTS OF ACCESS TO CREDIT

17. Do you own a l	land?			Yes ()	No ( )	)		
18. Size of land ho	lding in Acres							
19. Ownership of t	he land (a) Fa	amily land (b) Ren	tal land (c)	Government land (d)	Other	s,		
20 Do you own of	 howao?			$\mathbf{V}_{22}(\mathbf{r})$	$\mathbf{N}_{\mathbf{n}}(\mathbf{r})$			
20. Do you own a 21. Do you belong	to any Cooper	ativa sociatu?		res ()	NO()			
21. Do you belong	to any Cooper	all ve society?		Tes ()	No()			
22. Do you have at	2 months have	you applied for a	radit?	Tes ()	No()			
23. Over the past 1	2 monuis, nave	e you applied for cl		Tes ()	No()			
24. Were you define 25. What is the lag	day batwaan a	nulication and dish	nursement of	f credit?	NO()			
25. What is the am	ount of the last	credit/loan that yo	have rece	ived?				
20. What is the sou	urce of this loar	/credit?		iveu:				
27. What is the sol	an adequate for	vour nurnose? Ve	es No <sup>.</sup>					
20. Is the credit/loc 29 What is the pro	portion of cred	lit from each source	e in the past	two years?				
Vear	portion of cree		e in the pust	two years.				
Self and retained	profits							
Friends Familie	s and relative							
Cooperative soci	ety							
Commercial ban	ke							
Commercial banks								
MDI <sub>o</sub>	Credit institutions and financial companies							
MDIS,								
SACCOS,	and all athen a	an danaait talaina (						
Financial NGUS	and all other n	on-deposit taking I	inancial ins	litutions		1000/		
101AL	1 11	1	(1 C 11	• 0		100%		
30. How would yo	u describe your	access to credit fr	om the follo	owing?	T 1			
Year	Easy	Somehow easy	Difficult	Somehow difficult	I do	o not		
Calfan 1 mataina i					кпо	W		
Self and retained								
profits								
Friends, Familie	s and							
relative								
Cooperative soci	ety							
Commercial ban	ks							
Credit institution	is and							
financial compar	nies							
MDIs,								
SACCOS,								
Financial NGOs	and							
all other non-dep	oosit							
taking financial								
institutions								

# Section D: INFORMATION ON FACTORS AFFECTING LOAN REPAYMENT PERFORMANCE

31.	Do collateral affect your repayment performance?	Yes ()	No()
32.	Does your farming turnover determine repayment?	Yes ()	No ( )
33.	Will losses affect your repayment ability?	Yes ()	No()
34.	How often do you borrow?	per	month
35.	What is the repayment plan?	Full ()	Monthly ()
36.	What is your borrowing experience?		years
37.	Do your sources supervise the use of loans obtained?	Yes ()	No ( )
38.	What is loan acquisition cost?	UGX	
39.	Do you get exactly what you requested for?	Yes ()	No()
40	Please complete the following Table in respect of your current cu	edit/loan receive	he

40. Please complete the following Table in respect of your current credit/loan received

Source of	Amount	Amount	Collateral	Repayment	Amount	Amount	Total
loan (e.g.	requested	received	provided	period	repaid	expected	amount
Cooperative,			(Yes/No)		to date	to be	repayable
friends,						repaid to	
bank etc.)						date	

# Section D: INFORMATION ON CONSTRAINTS TO ACCESS TO CREDIT

- 41. What are the constraints you face in the access to credit?
  - ..... •
  - ..... •
  - .....
  - .....
  - ..... •

Year	Very satisfied	Somewhat Satisfied	Not Satisfied	Not satisfied at all
Application process for the				
credit				
Length of time between				
approval of credit/loan and				
disbursements of the money				
Rate of interest				
Repayment period				
Collateral required				
Interpersonal relationship of				
the Credit agency				

PICTURES SHOWING RESEARCHERS ENGAGEMENT WITH THE RESPONDENTS ON THE FIELD.



















