

**STUDY OF  
VILLAGE SAVINGS AND LOANS ASSOCIATIONS  
(VSLAs)  
AND THEIR ABILITY TO ADDRESS  
CREDIT NEEDS OF SMALL HOLDER FARMERS  
IN SOUTHERN TANZANIA**



*Abhishek Sharma, Hongdi Zhao  
Cornell Institute for Public Affairs / Cornell University  
December 2017*

The research fellowships for this study  
were made possible through a generous gift

from Cornell alumni

**Laurie and Duane Phillips**

**Class of 1978.**

## TABLE OF CONTENTS

Acknowledgements.....	i
About the authors.....	ii
Acronyms .....	iii
List of Tables.....	iv
List of Figures .....	iv
Highlights .....	1
Executive Summary .....	3
<b>1. Introduction.....</b>	<b>6</b>
<b>2. Literature Review.....</b>	<b>7</b>
<b>3. Methodology, Research Design and Data.....</b>	<b>10</b>
3.1 Mixed Methods Research.....	10
3.2 Individual Interviews .....	11
3.3 Focus Group Discussions .....	12
3.4 Interview with Key Stakeholders .....	12
3.5 Data Collection .....	12
3.6 LIMITATIONS .....	15
<b>4. Observations and Findings .....</b>	<b>15</b>
4.1 Who is Participating in VSLAs and Why? .....	15
4.2 Inclusion and Exclusion in the Savings Groups.....	16
4.3 Governance and Participation of Men and Women .....	18
4.4 Sources of Funds for Agriculture .....	19
4.5 Saving Groups and Agricultural Inputs .....	20
4.6 Who takes Loans, How Much and Why? .....	21
4.7 More on the Number of Loans Taken by Participants .....	23
4.8 Sources of Income .....	24
4.9 Decision Making .....	25
4.10 Market Access.....	25
4.11 Findings about VICOBA's .....	26
<b>5. Conclusions.....</b>	<b>27</b>
References .....	29
Appendices .....	32
Appendix A – Tables .....	33
Appendix B – Research Proposal.....	34
Appendix C – Interview Protocol .....	36
Appendix D – Focus Group Protocol.....	45
Appendix E – Consent Form .....	50

## ACKNOWLEDGEMENTS

This study would not have been possible without the kind support and help of many other individuals and organizations. We would like to extend our sincere thanks to all of them.

We are highly indebted to CARE USA, CARE-Cornell Collaboration, CARE Tanzania and CARE Access Africa for their guidance and continuous supervision regarding the project, and also for their support in completing the project.

We are really grateful to Professor Margaret Johnson for her strong support, patience, advice, and mentorship at every step during the study, Professor Arnab Basu of Cornell University for his valuable suggestions and Dr. Nina T. Chaopricha for providing us this wonderful opportunity. We are thankful to Professor Henry Mahoo from Sokoine University of Agriculture in Tanzania, representatives from FSD Tanzania and UYACODE Organizations, Regional Authorities for Iringa and Njombe and District Agricultural Officers from Ludewa and Iringa Rural for taking our time and sharing his valuable experience with us.

The force behind this study has been the leadership of Ms. Vidhya Sriram from CARE USA who has been patient yet relentless in the face of all the challenges that were faced right from the very beginning of this fellowship. We are really thankful to Ms. Maureen Kwilasa, LLM, from CARE Access Africa, for being the amazing host that she is, providing us with inputs and guidance at every stage of the project, and managing everything on the field.

We would like to express our special gratitude and thanks to all the staff members of CARE Tanzania and CARE Access Africa team for their efforts to provide us necessary information about this project, and the support they gave us during our stay in Tanzania.

Last but certainly not the least, we would like to thank all the members of the VSLA program and local non-participants joined the individual interviews and focus group discussions. Without them, this research would not have been possible.

## ABOUT THE AUTHORS

Abhishek Sharma is an MPA fellow at Cornell Institute for Public Affairs (CIPA) where he is focusing on International Development. Prior to joining Cornell University, Abhishek worked on poverty eradication and rural development in India with UNDP, different state Governments, and NGOs. Taking a rights-based approach, his work was mainly focussed on the strengthening of local self-government and community-based organizations. Abhishek completed Master's in Business Administration in Rural Management from Institute of Rural Management Anand and Electrical Engineering from National Institute of Technology Hamirpur in India.

Hongdi Zhao is a second-year CIPA fellow studying Master of Public Administration at Cornell University, focusing on International Development. She holds a BS in Statistics from East China Normal University in Shanghai. Her interest in international development is derived from her domestic and international volunteer experiences and internships in China, India, Kenya, and Tanzania. She has interned with 'Tofauti On the Move', a local NGO in Kenya. Her work there was focussed on the NGO's education project to teach children in Kibera - the largest urban slum in Africa. Before coming to Cornell, she has also had internship experiences with Ecobank in Dar Es Salaam Tanzania, and United Nations Environment Programme in Nairobi.

## ACRONYMS

AVSI Foundation – Association of Volunteers in International Service  
BRAC – Building Resources Across Communities  
CARE – Cooperative for Assistance and Relief Everywhere  
FAO – Food and Agriculture Organization  
FGD – Focus Group Discussion  
FSD- Financial Sector Deepening  
GDP – Gross Domestic Product  
IFAD – International Fund for Agricultural Development  
IFC – International Finance Corporation  
IPA – Innovations for Poverty Action  
MFI – Microfinance Institutions  
NGO – Non-Governmental Organization  
ROSCAs – Rotating Savings and Credit Associations  
SHG – Self Help Groups  
TACODO – Tanzania Community Development Organization  
UYACODE- Umoja Youth Aids Control and Community Development  
VICOBA – Village Community Banks  
VSLAs – Village Savings and Loans Associations  
USA – United States of America

## LIST OF TABLES

- Table 1: Reasons behind non-participation
- Table 2: Agricultural Inputs – Descriptive Statistics
- Table 3: Frequency of loans by VSLA members
- Table 4: Frequency (without outliers)
- Table 5: Size of loans by VSLA Members
- Table 6: Reasons for loans from VSLA
- Table 7: Sources of Income

## LIST OF FIGURES

- Figure 1: Number of respondents from each village
- Figure 2: Participation in the Study
- Figure 2A: Participation in the Study (Region wise)
- Figure 3: Gender of the Participants
- Figure 3A: Gender of the Participants (Region wise)
- Figure 4: Age distribution of the Participants
- Figure 4A: Age distribution of the Participants (Region wise)
- Figure 5: Land Holding Pattern of the Participants
- Figure 5A: Land Holding Pattern of the Participants (Region wise)
- Figure 6: Reasons for Non-Participation
- Figure 7: Sources of funds for agriculture
- Figure 8: Reasons for loans from VSLAs
- Figure 9: Decision Making in Agriculture

## HIGHLIGHTS

### **Village Saving and Loan Associations in Southern Tanzania**

The study was conducted between June and August 2017 in two districts of Southern Tanzania, Iringa and Ludewa, with the goal of understanding the functioning of Village Savings and Loan Association (VSLA) groups and the effects of participation in the VSLA program there. The two main research questions were:

1. What are the practices of VSLAs as currently implemented in rural areas of Tanzania?
2. What are the likely effects of VSLAs in rural areas of Tanzania?

Data was collected through focus groups and individual interviews of VSLA participants and non-participants in the two districts. The study found that most of the participants in VSLAs in these two districts are women. VSLA participants interviewed said they viewed the groups as a support system, and spoke of increased personal agency as a result of participation. In these two districts, participation in VSLA groups is associated with increased expenditures on inputs to agriculture. Analysis of responses to questions about the maize crop of 2016 showed that the VSLA participants spent 86% more on agricultural inputs as compared with non-participants. Also, the members of VSLAs were better able to diversify their sources of income as compared with non members. However, the study found substantial non-participation in VSLAs in these two districts. The most commonly cited reason behind non-participation was the inability to afford the share.

#### **CARE's Village Savings and Loan Association (VSLA) program**

CARE International launched "Village Savings and Loan Associations" in Niger in the year 1991. Over the past 25 years, this model has been replicated in 35 countries comprising 200,000 groups and 5 million members. Under the guidance of CARE USA and CARE-Cornell Collaboration at the Atkinson Center for a Sustainable Future and supported by CARE Tanzania, this study was conducted by graduate students from the Cornell Institute for Public Affairs in the Iringa rural and Ludewa districts in Tanzania.

#### **Research Methods in This Study**

This study used both quantitative and qualitative data collection and analysis. Structured individual interviews with both closed- and open-ended questions were used to gather field data about farmers' agricultural expenses and credit needs. Focus group discussions were used to ask questions about the governance, administration, participation, advantages, and disadvantages, and challenges of savings groups. Additional, unstructured interviews were used to enhance understandings.

#### **Data Collected in the Field**

The sample selected for this study included 140 local Tanzanian farmers, aged between 18 to 68 years, representing four wards, nine villages and 33 different savings groups. Out of the 140 respondents, 82 were participants of the savings groups while 58 did not participate in savings groups. Within this sample of 82 savings group participants, 78 participants were from VSLA groups.

## Recommendations

Based on these findings, it is recommended that CARE consider an outreach campaign to include the very poor non-participants who are now effectively excluded from participation in savings groups due to lack of resources. CARE should work with partners to form new VSLA groups of the very poor via an outreach campaign. Also in this outreach campaign, an effort should be made to inform the people about VSLAs and how they are different from other savings groups.



## EXECUTIVE SUMMARY

CARE International launched “Village Savings and Loan Associations” in Niger in the year 1991. “VSLA is a micro-finance model under which saving groups are formed at community level to reduce poverty by financially and socially empowering poor and vulnerable people. A VSLA provides its members a safe place to save their money, to access loans and to obtain emergency insurance” (CARE, 2014). Over the past 25 years, this model has been replicated in 35 countries comprising 200,000 groups and 5 million members. Under the guidance of CARE USA and CARE-Cornell Collaboration at Atkinson Center for Sustainable Future and supported by CARE Tanzania, this study was conducted at Iringa rural and Ludewa district in Tanzania. The purpose of this applied research is to 1) understand and describe the current implementation of VSLA program in Tanzania, and 2) to understand its ability to address the credit needs of Tanzanian smallholder farmers in these two districts. Smallholder farmers for this study are those with a land holding of less than 2.2 hectares, a definition derived from a study conducted by Food and Agriculture Organization (FAO, 2015).

This study uses both quantitative and qualitative data collection and analysis. Structured individual interviews, included both closed and open-ended questions, were used to gather field data about farmers’ agricultural expenses and credit needs. Focus group discussions were used to ask questions about the governance, administration, participation, advantages and disadvantages, and challenges related of the savings groups. Finally, unstructured interviews with key stakeholders were used to enhance our understanding of the savings groups.

The sample selected for this study included 140 local Tanzanian farmers, aged between 18 to 68 years, representing 4 wards, 9 villages and 33 different savings groups. Out of the 140 respondents, 82 were participants of the savings groups while 58 did not participate in savings groups. Within these 82 savings group participants, 78 participants were from VSLA groups. The summary below is presented in terms of the two main research questions, with findings for sub-questions underneath.

### **Question 1: What are the practices of VSLAs as currently implemented in rural areas of Tanzania?**

This study found VSLA participants view the group as a support system wherein friends, family members, neighbours and group members in general support each other in times of need. Income enhancement and financial support are the motivations behind joining the group. People also realized the savings group’s transactional efficiency. As banks are far from the villages, and it takes much time to take loans from the banks, the participants reported the saving group allows them to take out loans on short notice in cases of financial emergency.

*Who participates?* One of the major reasons for non-participation in the VSLA program was that people did not have enough money. The study found some evidence that the poorest are excluded from participation. There appeared to be a great deal of misinformation prevalent among nonparticipants about the way savings groups work. Many believed that it takes too much money and time to participate in the VSLAs. While this study initially attempted to compare VSLAs and VICOBA (Village Community Banks), it was found early on that most respondents did not

understand the differences between the two types of savings groups. In fact, some respondents used VICOBA as a generic term for all kinds of saving groups. This difference is important, because VICOBA groups are promoted by different agencies, and do not share their capital at the end of a cycle, whereas CARE has made a conscious choice that the VSLA groups share their capital at the end of a cycle.

*Does participation work differently for men and women?* Many groups were mixed groups comprising both female and male participants. There are very few “male only” groups. This study found men and women participate in similar ways.

*Governance structure.* From the focus group discussions, it was observed that the basic VSLA governance structure promoted by CARE is being followed by the participants. They form a group of 15 to 25 people and choose leaders - chairperson, secretary and treasurer based on consensus. They used a lockbox with three locks and three keys to keep the money. However, this study found the groups had made changes according to their needs, based on a consensus of the group members. Those changes include setting an absolute maximum amount of loan that can be taken, even though CARE has promoted it to be three times the individual’s share. Other differences were found in the groups’ procedures for loan disbursement, the loan interest rate, and the loan repayment plan.

## **Question 2: What are the likely effects of VSLAs in rural areas of Tanzania?**

*Addressing agricultural credit needs of farmers.* This study found that members of VSLA groups are able to fund agriculture from more sources as compared to the farmers who were not members of VSLAs. Most common sources of funding are personal savings, business, animal husbandry and loans from VSLA groups. The study examined the number of loans taken out and reasons why people take loans. VSLA members in this sample took out an average of one loan per year over the two years studied. Most of the members took out loans for agriculture, to fund education of children and for starting a business.

The data showed that the majority of respondents were selling crops at their home, within the village or at their farms. It was observed that VSLA members on average spent 86% more than non-members on maize production in 2016. However, we found no difference between the VSLA members and non-members in this study with regard to their access to the market.

*Women.* The savings group literature has generally associated participation in savings groups with women’s empowerment. In this study, women stated that they became more financially independent after joining the groups. However, the study did not find evidence that participation in VSLAs led to more agricultural decision making by women. Gender empowerment has multiple dimensions. While participation in VSLAs has clearly contributed to a sense of empowerment on the part of these women, this was not seen in the specific area of decision making in agriculture.

## **Recommendations.**

Based on these findings, it is recommended that CARE consider an outreach campaign to include the very poor non-participants who are now effectively excluded from participation in savings groups due to lack of resources. CARE should work with partners to form new VSLA groups of

the excluded people in a campaign mode. Also, in this outreach campaign a communication aspect could be included to inform the people about VSLAs and how they are different from other groups.

This study lays down groundwork for future possible studies of VSLAs in Tanzania. Future cohorts of CARE-Cornell Collaboration fellows should undertake studies that challenge certain assumptions made in VSLA model. For example, is it possible that the VSLA model is capable of moving people just out of poverty, but is unable to lift people to the next level of prosperity, where they can invest more in businesses and agriculture? Researchers should study the impact of share-out (where savings group members distribute the entire capital they accumulated at the end of the year) or absence of it on the household credit flow. To understand this, they should also compare the implementation and effects of VSLAs and VICOBAAs. In particular, we recommend that future studies examine the impact of the maximum loan duration (currently three (3) months) and loan ceiling (three (3) times the share an individual has), and see if these must be adjusted to better facilitate a person's progression toward income growth and prosperity. We also recommend that CARE study the possibility of incorporating a Gender Self Learning component in the VSLA framework.

## 1. INTRODUCTION

"Credit is a kind of key, a passport to explore the potential of a person. The moment you lay your hands on credit, your mind starts ticking. You find out that you are a capable person." Muhammad Yunus – Nobel Laureate 2006 (Yunus M, 1997)

The formal institutions providing microfinance services have had a huge growth in the last 40 years. Capitalising on the lessons from Professor Muhammad Yunus and Grameen Bank, these institutions utilize the social capital of the people as a collateral and thus work with the group of 10-30 people. But this idea was not new and every society has had different institutions of people to help each another. Known by different names - Zadrugas in Bosnia, Equibs in Ethiopia and Eritrea, Tandas in Mexico, Cadenas in Colombia, Tontines in West Africa, chit funds in India etc., these institutions are called Rotating Savings and Credit Associations (ROSCAs) (Ashe J, Neilan K J, 2014). They cater to people's needs of credit in informal settings often in the areas where formal banking services are not available. An important aspect of these institutions is the social capital among the participants (Besley T, Coate S and Loury G, 1993) which was later highlighted in Grameen Bank experiment.

Deeply rooted in the idea of self-help, CARE launched its model of 'Village Savings and Loans Associations' (VSLAs) in Niger in the year 1991. The model improved upon the existing features of Rotating Savings and Credit Associations (ROSCAs) by providing more flexibility (in terms of savings and loans) and opportunity to earn interest (Karlan D et al, 2017) Since then the CARE's VSLA model has spread to 35 countries comprising 200,000 groups and 5 million members (CARE, 2016).

Under the guidance of CARE USA and CARE-Cornell Collaboration at Atkinson Center for Sustainable Future and supported by CARE Tanzania, this study was conducted for two months between June and August 2017. Initially, the study aimed to understand and describe the implementation of VSLA and VICOBA (Village Community Banks) programs and assess the relative ability of each program to address the credit needs of the small holder farmers. However, once on the field it was realized that the VICOBA groups were not present in the areas where field work was planned, hence the mandate of the study changed in between and study became limited to only VSLA program. Though the VSLA program has been evaluated repeatedly and its impact studied, the purpose of this applied research is to better understand and describe the current implementation of the program in Iringa Rural and Ludewa districts of Tanzania. This study sought to develop an understanding of the people who are participating in the VSLA program and the reasons for their participation. An individual questionnaire was designed with an aim to understand how the participation works for men and women and what is the governance structure of these institutions. The research also analyzed the ability of the program to address the capital needs of the small holder farmers, focusing on the value chain of the select major crops. There is no universally accepted definition of smallholder farmers. For the purpose of this study, small holder farmers are those who have land holding smaller than farm threshold of 2.2 hectares. This definition has been derived from the FAO's publication "The economic lives of small holder farmers - An analysis based on household data from nine countries" (FAO, 2015).

Tanzania is an East African country with a population of 55 million. Here, 73 percent of the people live in rural areas and most of them are engaged in agriculture. Agriculture contributes 28 percent to the country's GDP and there are 3.7 million smallholdings (80 percent of the total farms) employing about 19 million people (Rapsomanikis G, 2015). So, it is important for CARE to understand the credit needs of small holder farmers and whether the VSLA program has been able to address those needs. This understanding may also allow CARE to plan future interventions specific to small holder farmers or make changes in the current implementation of VSLA program to support the existing needs of the farmers. The results will be used internally by CARE to reflect upon the strengths and weaknesses of VSLAs as currently implemented in these settings in Tanzania, and to inform CARE's recent conversations with the Department of Gender at the Ministry of Health, Community Development, Gender, Elderly and Children as they work on guidelines on how promoters can form and operate saving groups. The study was conducted in one district each (Iringa rural district and Ludewa district) of the two regions which are Iringa region and Njombe region. These two districts were chosen by CARE Tanzania taking into consideration the future agricultural interventions which are in the planning stage and are to be launched in these areas. Also, relative strengths of the savings groups were considered by the CARE staff while choosing the area.

The subsequent sections of this document will cover the literature, methodology, findings, and conclusion. The conclusion section will also deal with the various areas where further study should be done to enhance the understanding of the VSLAs and their impact.

## 2. LITERATURE REVIEW

As a home to thousands of financial institutions - the developing world has witnessed many efforts from different stakeholders towards promoting a vibrant microfinance sector. Microfinance institutions are viewed as an alternative source to provide financial services in the rural areas (Christy R, Wenner M, & Dassie W, 2000). It is believed that the mechanism of microfinance can empower people to work by themselves to eradicate poverty without excessive reliance on external support (Girabi F & Mwakaje A.E.G., 2013).

Much research has been conducted about microfinance, with mixed findings. Microfinance programs, in general, seem to have contributed to poverty alleviation, increased feelings of empowerment and improved credit access (Christy R, Wenner M, & Dassie, 2000). However, to some extent, it has also been criticized for its impact. One of the most common criticisms is that microfinance mostly benefits the "richest of the poor". As Hulme D. and Mosley P. (1996) stated, access to microcredit tends to have greater income impact for people who are above the poverty line as compared to those who are below the poverty line. When the poor's basic needs cannot be met, they cannot pay attention to matters beyond their daily subsistence and they tend to invest in risky ventures. Critics argue that microfinance can place the poor into inextricable debt traps. Participants have the possibility of being dependent on borrowing rather than investing (Rajasekhar D, Manjula R, & Suchitra J.Y., 2017).

Loans, savings, insurance, and many other different types of financial products are needed by the poor to deal with emergencies and unexpected needs, smooth their household cash flow, and increase income through investment in profitable ways (Rutherford S., 1995). Sharif I. (1997)

stated the challenges of having good financial products is to formulate the right group of services for the right group of poor people.

In Tanzania, a large percentage of the poor are not served by the formal financial sector. As a country with a predominant portion of farmers reside in rural areas and heavily depend on agriculture as a means to make a living, very few branches of main banks exist in those remote areas to serve farmers. The other truth is that even if the mainstream banks do exist in few remote areas, because of a lack of collateral, or no documented credit history, they are excluded from the formal financial sector and banks are not willing to lend them money due to the comparative higher risks than other borrowers and higher costs of operating in remote rural areas (Girabi F. & Mwakaje A.E.G., 2013). Microfinance institutions were viewed as alternative sources of financial services in remote rural areas. People believed they will enable smallholder farmers to access financial services without collateral easily (IFAD, 2003a).

According to the World Bank, the range of institutions that provide microfinance services include (1) non-profit, non-governmental organizations (NGOs); (2) village banks or self-help groups (SHGs); (3) credit unions; (4) cooperatives; (5) state-owned development banks; (6) private commercial banks, and (7) finance companies. As a form of self-help groups, village savings and loan association (VSLA) program was launched by CARE in Niger in 1991. Since then, much research has been conducted to ascertain the impact of the VSLA model.

An assessment of the VSLA model in three countries in Africa (Ghana, Malawi, and Uganda) by researchers from Innovations for Poverty Action (IPA) and CARE showed that it has the capability of leading to significant change in key short-term behaviours. These include the exploitation of financial services to improve investments, regulate expenditures and absorb financial shocks (Innovation for Poverty Action, 2012). The evaluation also showed that participation in VSLA by women is linked to having more influence in household decision making, but it could not find any impact on food consumption and poverty. On the other hand, Anyongo (2005) argued that the VSLA model has helped its members to improve the livelihoods, and alleviate poverty, particularly prominent women, who constitute the majority in the VSLA groups. After using a novel survey instrument to evaluate the impact of VSLA, Brannen and Sheehan-Connor (2016) stated that participation in VSLA project has an overall positive impact on household and individual welfare. The VSLA model is both successful and sustainable at reaching out to those who do not benefit from traditional microfinance projects.

However, a study found that non-members and members in VSLAs are significantly different in terms of their basic characteristics, such as level of education, wealth, and access to financial services (Hendricks & Chidiac, 2011). At the baseline, compared with non-members, women participants had a larger household and older children. Members were also significantly wealthier. At the household level, members were 4 percentage points more likely to have iron sheet roof, and 4.4 percentage points more likely to have a bicycle and a mobile phone at the baseline. At the baseline, the members were also more likely to have better access to electricity in the house. Particularly in Uganda, this study found that members were more likely to have a business by 10.4 percentage points at the baseline. Members were more liberated than non-members by 12 percentage points in Uganda, and by 10 percentage points in Malawi. 40% of non-members in

Uganda had attended school for at least 5 years while 50% of members had attended school for at least 5 years.

Thus, according to this specific study the VSLAs may exclude the poorest and the most vulnerable people in communities, even though many benefits were associated with participation in the VSLA program. The more vulnerable people had more limited education, lower socioeconomic status and limited access to financial tools. One possibility that may help us explain this phenomenon is that the most vulnerable and poorest are seen as bad credit risks, thus in group saving and lending programs, they are not accepted by other members of the group (Marr A., 2004).

However, the SCORE (Sustainable, Comprehensive Responses for Vulnerable Children and their Families) project implemented by AVSI Foundation in partnership with CARE International, TPO and FHI360 has been successful in helping critical and moderately vulnerable children (VC) and household members in 35 districts across Uganda. Through establishing VSLA groups, AVSI Foundation states that SCORE is able to help the most vulnerable households increase household productive assets and financial access (Lowicki-Zucca, Walugembe, Ogaba & Langol, 2014). It had also been suggested that VSLA approach can be made more inclusive for those most disenfranchised members of the community without losing effectiveness.

**Savings Group and Agriculture** - In Sub-Saharan Africa, farmers make up more than two-third of the labour force and agriculture generates about one-third of GDP growth. However, only 1 percent of bank lending goes to the agricultural sector. Moreover, globally only a few adults in developing countries have a loan and bank account from the formal financial institution. According to the Findex data (as stated by IFC, 2014), the percentage of adults who have a loan and a bank account is as low as 4.7 percent and 5.9 percent respectively. Access to financial services is very important as it can lead to investments in productivity, improvement in harvest practices, better risk management, and smoothening of household cash flow (IFC 2014).

As a group, smallholders still dominate most farming systems. FAO in “The Economic Lives of Small Holder Farmers – 2015 considered smallholder farmers in Tanzania as those with land holding less than the middle size farm threshold of 2.2 hectares as gathered in Health and Development Survey (FAO, 2015). They are a quite heterogeneous group with the difference of their resource base, choice of crops and livestock, market access, etc. (IFC, 2014). Although their socioeconomic background is very diverse, they tend to have little or no access to formal credit. This limitation has a direct impact on their capacity to invest in new technologies and inputs, which lead them to not able to increase their yields and incomes and reduce poverty and hunger.

Appiah, Baah-Mintah, and Owusu-Adjei (2016) studied the effect of credit on agricultural technology and inputs. With the use of quasi-experimental and cross-sectional survey design, they assessed the effects of microcredit on agricultural production of small holder farmers in the Nkoranza North district in Ghana. The study showed that the acquisition of agricultural inputs is being greatly and positively influenced by access to credit. These agricultural inputs include fertilizer, pesticides, herbicides, technology, labor hiring, and land acquisition.

Contrary to that, a study of 15,221 households’ in Ghana, Malawi, and Uganda, researchers found that while loans and share-outs in VSLA program stimulated investment in small business, livestock, and human capital, it did not have effects on farmers’ agricultural input usage

(Innovation for Poverty Action, 2012). After a randomized intervention, which aimed at facilitating formal savings or agricultural inputs, was implemented among Malawian farmers researchers found that offering farmers access to financial saving products has had a meaningful impact on measures of household well-being, including significant amount of inputs, subsequent agricultural harvests, profits and household expenditure (Brune L. & National Bureau of Economic Research, 2015). However, more studies about the impact of saving on agricultural activities are needed.

This paper seeks to contribute to the available literature by showing a potential linkage between savings groups and Tanzanian local farmers credit needs. The arguments are based on the analysis of field interviews and focus group discussions of Village Savings and Loan Association program participants and non-participants.

### **3. METHODOLOGY, RESEARCH DESIGN AND DATA**

The study was conducted in 2 wards each of the two districts of Iringa Rural District from Iringa Region and Ludewa District from Njombe Region from June 19<sup>th</sup> to August 7<sup>th</sup>, 2017. To help understand the VSLAs and their likely effects on agricultural credit needs of the small holder farmers, mixed methods research was conducted. Structured interviews and focus group discussions were conducted to acquire qualitative and quantitative data. The approach enables the analysis of the issues associated with VSLA, increasing the understanding of VSLA program and its ability to address the credit needs of farmers. The area and the villages were such chosen that the likelihood of getting people to participate in the study was highest. The purposive sampling strategy was designed balance the sample on key demographic characteristics, including gender, age, and educational attainment. Local NGO partner and field workers were involved to identify the participants and non-participants of the savings groups who were then invited to participate in this study.

#### **3.1 MIXED METHODS RESEARCH**

Along with qualitative research and quantitative research, mixed methods research is recognized as the third major research approach. It is defined by Johnson R. B., Onwuegbuzie A.J., & Turner L.A. (2007) as the kind of research which combines elements of qualitative and quantitative research approaches for the broad purposes of breadth and depth of understanding and corroboration. The combination of the approaches includes the use of qualitative and quantitative data collection, and analysis. Mixed methods approaches are commonly used in microfinance research. Ghalib A.K. (2017) used convergent parallel design, which is one of the three basic mixed-methods design proposed by Creswell J.W. (2015) (explanatory sequential, exploratory sequential, and convergent parallel) to assess the types of poor that microfinance institutions (MFIs) is serving, and to assess whether household poverty can be reduced when they have access to microfinance. Creswell J.W. and Plano Clark V.L. (2011) argued that because mixed methods research incorporates elements of both quantitative and qualitative approaches, it exists in the “middle of the continuum”. They further claimed that instead of applying either quantitative or qualitative approach alone, mixed methods research provides a clearer understanding of research problems. As a result, this method appears to have advantages which are more beneficial to the research than individual qualitative or quantitative methods alone.

As this study focused on developing an understanding of VLSAs and their ability to address the credit needs of the farmers, focus group discussions (FGD) and individual interviews were selected as the measurement instruments. While focus group discussions mainly helped to better understand the governance, administration, participation advantages and disadvantages, and challenges about savings group, structured individual interviews were designed to collect both the quantitative data (such as expenses on agriculture) and qualitative data (such as the reason why not participating in savings group) to examine VSLAs' ability to address the local farmers' credit needs.

### **3.2 INDIVIDUAL INTERVIEWS**

This study used a structured questionnaire, with both closed and open-ended questions, as the primary instrument to gather field data about farmers' agricultural expenses and credit needs. Farmers' agricultural credit needs are measured principally through expenditures on various stages for each crop during the same agricultural season.

The individual interview questionnaire, which can be found in Appendix B was divided into three sections with a total of 27 questions. Farmers' general information such as gender, ward, village, land holding, and sources of income were collected in the first section. The second section had questions related to savings group participation. If the respondent is a member of savings group, s/he would answer questions related to her/his savings group, such as the name of the savings group, duration of participation, amount, and purpose of loans taken from the savings group etc. If s/he did not participate in any savings group, then s/he was asked the reasons for non-participation. This section not only helped understand the general frequency of loans taken from savings groups, it also provided data related to the reasons why people did not participate in the savings groups.

The third section of the questionnaire is made up of agriculture related questions. Respondents were asked to answer questions about the crops that they had planted during the past two years, and the money they spent during the various stages of production for each crop. The total expenditure for each crop was then calculated along with the different sources of funding for that expenditure.

Individual interviews were conducted by local Tanzanian facilitators who were fluent in both English and Swahili. Prior to the data collection, interviewers were trained and objectives of the questionnaire design were carefully explained to them. The questionnaire was discussed with the staff of CARE Tanzania to ensure that the questions were not too complex and were culturally acceptable for respondents and interviewers alike. The interview questionnaire was translated from English to Swahili and printed out in advance. Interviewers took notes on the translated printed paper questionnaire during each interview. After finishing all the individual interviews, data was input into Cornell Qualtrics, which is a web survey tool for Cornell faculty and students, with the help of a local Tanzanian translator. Individual interviews were analysed using descriptive statistics and t-test for chosen crops between VSLA members and non-members.

### **3.3 FOCUS GROUP DISCUSSIONS**

The focus group protocol, which can be found in Appendix C, was designed to better understand the governance, administration, participation advantages and disadvantages, and challenges about savings group. It included seven main questions which had other follow up questions under the same topic. The total number of questions were twenty-one and they were all open-ended questions that were intended to generate an open discussion. Those questions covered issues such as group formation, group governance structure, general group dynamics, reasons of participation, group challenges and limitations, suggestions, and changes participants want to make in their groups.

The focus group discussions were conducted by experienced Tanzanian CARE officer who spoke native Kiswahili. All focus group discussions were recorded after obtaining the consent from the participants. The four focus group discussions were transcribed with the help of a local Tanzanian translator. Focus group discussions were analysed by using a priori codes and emergent codes.

### **3.4 INTERVIEW WITH KEY STAKEHOLDERS**

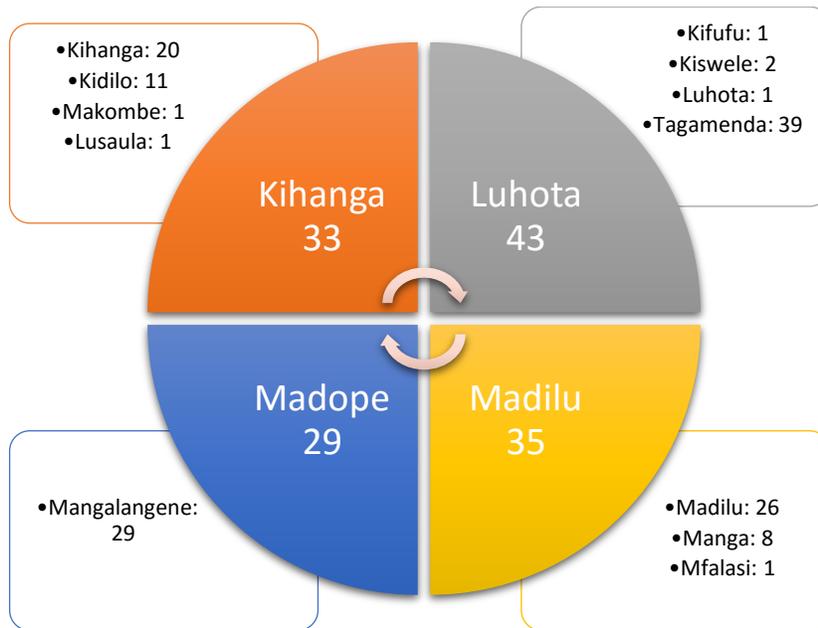
To understand the program and local context key stakeholder interviews were also conducted with local government officers, CARE program officers, TACODO (local NGO and implementing partner of VSLA program), and UYACODE who is an apex organization for VICOBA. The unstructured interviews were conducted to understand the VSLA/VICOBA governance structure as promoted by CARE, the formation of new groups, group dynamics, government policy towards informal savings groups and agriculture.

### **3.5 DATA COLLECTION**

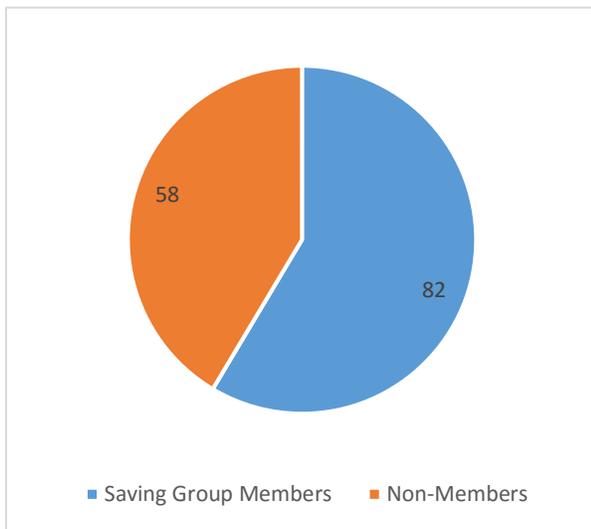
The sample for this study comprised 140 local Tanzanians, aged 18 to 68, represented from 4 wards, 9 villages with 33 different savings groups. All the participants of the study were engaged in agriculture. Respondents came from Kihanga and Luhota ward at Iringa rural district in Iringa region, and Madope and Madilu ward from Ludewa district in Njombe region. A detailed number of respondents from each ward and village are shown in Figure 1.

Out of the 140 interviewees, 82 were participants of the savings groups while 58 did not participate in savings groups. The non-participants were included to understand the reasons behind their non-participation and to have a counterfactual to the participant group. Basic characteristics of all respondents are showed in Table A.1 in Appendix A. Table A.2 (Appendix A) contains the basic characteristics of the respondents based on participation and non-participating in savings groups. Figure 2, 2A, 3, 3A, 4, 4A, 5 and 5A depicts the various characteristics of the participants like saving group membership, age, gender, and landholding.

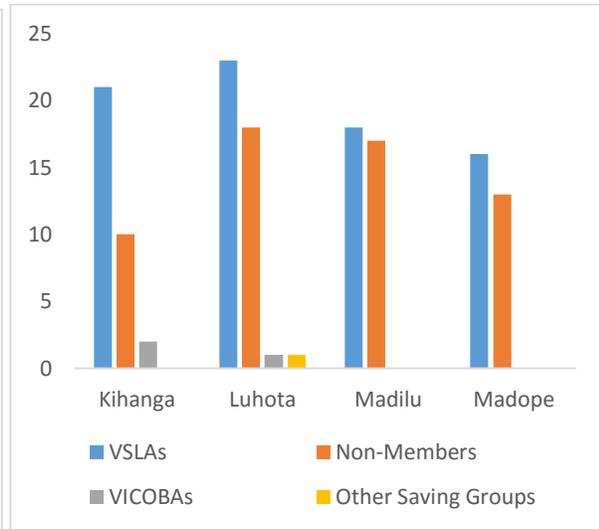
**Figure 1: Number of respondents from each village**



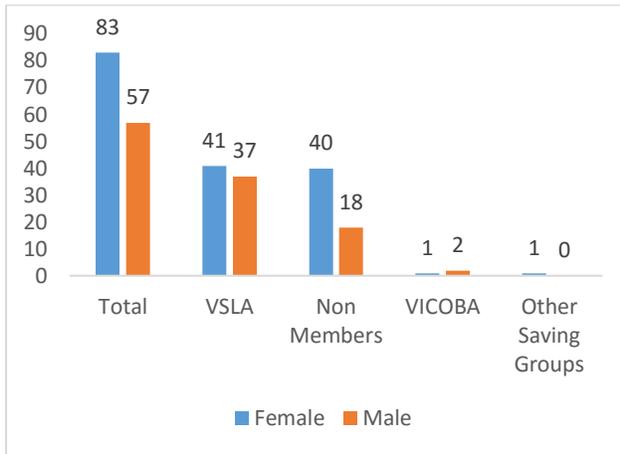
**Figure 2: Participation in the Study**



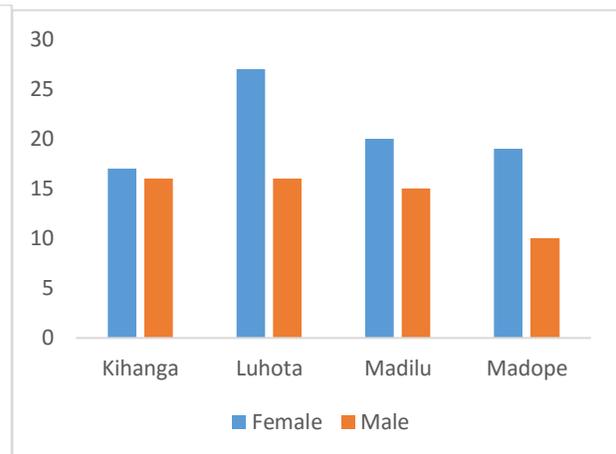
**Figure 2A: Participation in the Study (Region wise)**



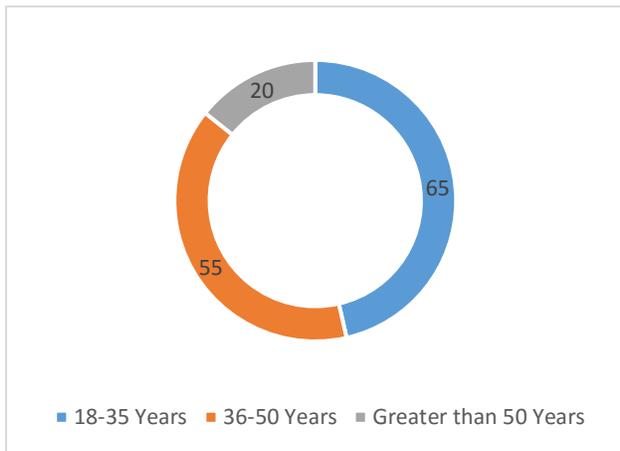
**Figure 3: Gender of the Participants**



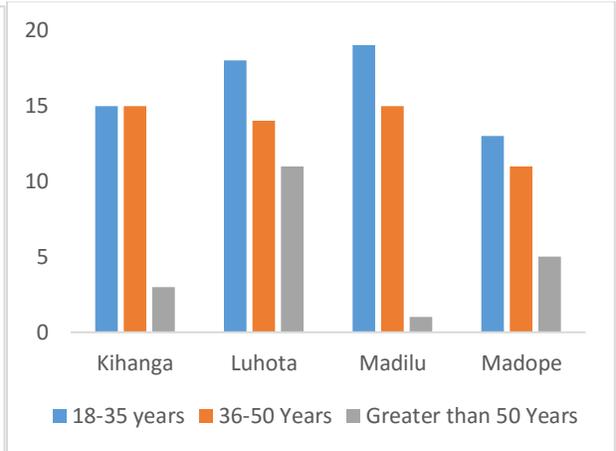
**Figure 3A: Gender of the Participants (Region wise)**



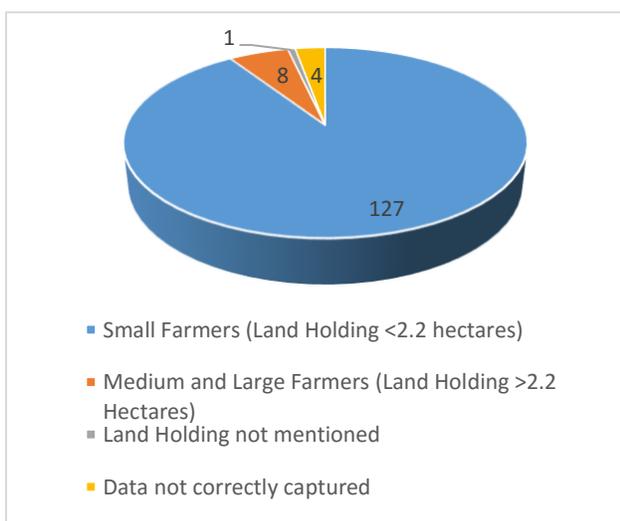
**Figure 4: Age distribution of the Participants**



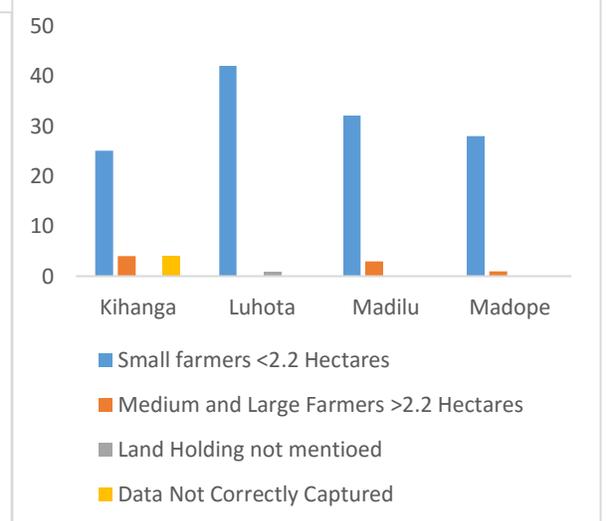
**Figure 4A: Age distribution of the Participants (Region wise)**



**Figure 5: Land Holding Pattern of the Participants**



**Figure 5A: Land Holding Pattern of the Participants (Region wise)**



Four focus group discussions, each with between 6 – 8 participants were carried out at Kihanga and Luhota ward at Iringa Rural District in Iringa Region. Out of the four focus group discussions, two focus group discussions' participants were VICOBA program participants, with one discussion to be women (8 participants) only and the other one to be men (6 participants) only. Other two focus group discussions' participants were VSLA members, with one discussion to be women (8 participants) only and the other one to be men (8 participants) only. After the 45 – 50 minutes' focus group discussion, everyone who participated in focus group discussion would also join the individual interview.

### **3.6 LIMITATIONS**

As discussed above the initial study was intended to include a comparative analysis of VSLAs and VICOBA's but it was found on the field that either most respondents did not understand the differences between the two types of savings groups or VICOBA's were absent in the geographical areas where field work was conducted. While this presented an important insight but at the same time it also left much to be desired for in the design of the study.

Another limitation of the study is the small sample size of 140 and the attempt at purposive sampling failed to generate a sample with demographic proportions which match those in target population. As a result, generalized causal claims cannot be made for any of the findings presented in the next section –they apply only to this sample. Also the study relies on self-reported data which is prone to several sources of bias including selective memory and social bias. For the researchers, inability to communicate in the local language posed a major limitation which hindered their understanding of context and ability to ask follow-up questions.

## **4. OBSERVATIONS AND FINDINGS**

### **4.1 WHO IS PARTICIPATING IN VSLAS AND WHY?**

In the two districts, 78 VSLA participants were interviewed. All of these 78 participants were engaged in agriculture, a pre-condition set for being a participant in the study. Of the 78 VSLA participants, 68 were small holder farmers with land holding less than 2.2 hectares, 7 were medium or large farmers with land holding greater than 2.2 hectares. One of the participants did not answer this question and for two participants the data was not captured correctly. It was observed that participants viewed VSLA group as the support system wherein friends, family members, neighbours and group members in general support each other in times of need. From the focus group discussions, it came up that the income enhancement and financial support were the important motivations behind joining the group. The reasons for taking loans have been discussed in detail in sub-section 6. It was interesting to find that for women (who are the majority participants in the groups) along with financial motivation other non-financial gains such as personal improvement and knowledge enhancement has been a major take away from the groups. Though it cannot be claimed whether these motivations were present among them before they joined the groups or they realised these benefits after they became part of the VSLAs, many women mentioned that they no longer are dependent on their husbands, have developed a saving habit, are more confident and empowered, and see savings groups as a platform where they learn from each other about agriculture. These are important aspects that were discussed by participants of the

focus group discussion indicating that the participation has increased the agency and structure but when asked explicitly about the decision making in agriculture during the personal interviews the analysis showed a different picture. This can be analysed using CARE’s view of women empowerment as the sum total of changes needed for a woman to realize her full human rights – an interplay of changes in Agency, Structure and Relations. Decision making in agriculture has been discussed in detail in sub-section 4.9.

It was also understood that people realise that the saving groups improve transactional efficiency in the financial domain. They realise that banks are far and much time is wasted in interacting with the banks especially when one has to take loans from them. They found saving groups to be an efficient system where they could take loans at a short notice in case of a financial emergency.

## 4.2 INCLUSION AND EXCLUSION IN THE SAVINGS GROUPS

To understand who are the participants of the savings groups, it is extremely important to understand who are the people who do not participate and the reason behind their non-participation. The study interviewed 58 non-participants and asked them the reason behind their non-participation. Of the 58 participants, 57 responded to this questions with some providing multiple responses and reasons behind their non-participation. In total 62 responses were categorized according to frequencies as shown in Table 1.

*Table 1: Reasons behind non-participation*

REASONS	FREQUENCY
Not enough money	31
No information	5
Not interested	3
Old age	1
Don't believe it helps	1
No time	8
Misinformation	4
Wasn't present at home when the group was formed	2
New to village	2
No availability of space in the groups	1
Family member is a participant	4
Total	62

It is clear from the table above that most common reason that people gave for their non-participation in the savings group was that they do not have enough money to participate. There appears to be exclusion of the poorest of the poor, based partly on the misperception that it takes much money to be part of the savings groups. The study also found evidence of wrong information/misinformation about the savings group among the non-participants.

### **What non-participant respondents said**

“No one in the family is a group member. I don't have enough income. One needs at least 3-4 income sources in order to sustain group membership. I think one needs to generate at least 15,000 per week for the group membership. We only have 10,000 per week. I have not had any training on the group but I heard from someone in Njombe about the 15,000 Shillings requirement”

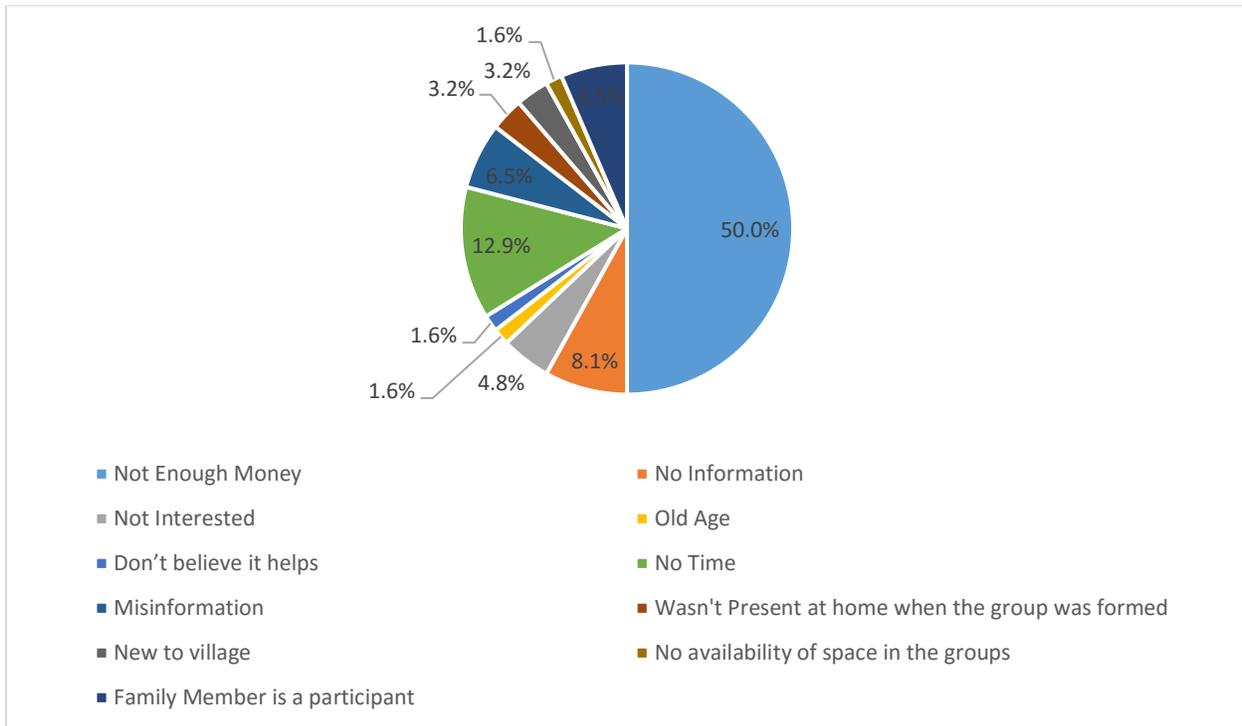
“I do not have enough income to sustain membership. We are engaged in agriculture as we do not have a steady income. I think it is easier to be in a group if you have a business that can take you between seasons”

“I cannot afford it. Usually, my income per week is 5,000. I have been told that I would need about 5,000 to 20,000. Also, I am a widow. I already have to search for money to sustain my household needs so I am not able to do more for the group”

The perception of savings group among the non-participants is that it is for the wealthy people. This is antithetical to the very purpose of savings group. Also, people believed (8 responses out of 62) that it took too much time to participate in the savings group and they do not have time to attend the regular meetings. Though it requires more evidence, it could be construed that this is also one of the misinformation that has been prevalent amongst the people.

In the figure 6 below the reasons for non-participation as stated by non-participants are given. Grouping together the themes on the basis of where CARE could potentially intervene (not enough money, no information, old age, misinformation, wasn't present at home when the group was formed, new to village and no availability of space in the groups), it was found that 74.19% of the reasons among 57 non-participants were those where CARE could potentially intervene. It is interesting to note that 66.67% female respondents said that they did not have enough money to participate in the savings group as compared to 15% of the male respondents who gave this reason. This is an important reflection on the gender dimension and also shows the relevance of working with the women in the rural areas.

**Figure 6: Reasons given for Non-Participation**



### 4.3 GOVERNANCE AND PARTICIPATION OF MEN AND WOMEN

It was observed that there were many groups which were mixed with the participation of both men and women. In the mixed groups, more women were present than men. In one of the village, one male only group was functioning. It was told that there are very few ‘male only’ groups and this was one of them and the interesting part was that the group was not formed by external promoter or NGO. The participant men observed others in the village who took part in saving groups and after having felt the need they decided to form the group of their own. From the focus group discussions, it was observed that the basic structure of the groups as promoted by CARE was being followed by the participants. At the same time, the groups made changes according to their needs and consensus of the group members. To illustrate, it was observed that maximum amount of loan that could be taken varied from group to group even though the CARE had promoted it to be three times the savings amount that an individual had at the time of applying for the loan. The loan that could be taken varied from 1 time, 2 times, 3 times, 3 times with a cap of 1 million and 4 times the savings amount. In many cases, the amount was fixed to 100,000, 300,000, 1 million and 1.1 million Shillings. The procedure of loan disbursement also varied with some groups asking for guarantor and collateral while the others did not ask for it. In general, it was observed that loan as given to the person who applied for it first but the preference was given to the members who had not taken the loan before. In case one of the members was facing an emergency, the exceptions were made in the rules after discussion with all the group members. Though the CARE has promoted that a 10% per month rate be charged, the actual the rate of interest a group charged varied, with some groups charging 10% per month, 5% per month, or 10% for two weeks. Similarly, according to CARE, a member should repay the loan in 3 instalments. One of the groups

interviewed said that this was preferred not it was not a necessary or binding condition on the group members. Members could repay the loan at the end of the third month in one instalment. Interesting this to note was that men's VSLA group did not know what to do when one of the members fail to repay the loan. They had not been trained by any one and did not have any group constitution in place. The leadership in the group was told to be democratic with "leader chosen by consensus". In one of the instances shared by a member, she wanted to increase the price of a share from 2000 to 3000 shillings, but other members in her group could not afford the increased share price, so her proposal was turned down by the group. Anecdotes like this shed light on the democratic decision making within the group.

#### **4.4 SOURCES OF FUNDS FOR AGRICULTURE**

One of the main themes of this study is to understand how the farmers fund their agriculture and the impact that participation in VSLA has had on the funding for agriculture. In the subsection, it is attempted to understand the sources of funds for Maize crop for the year 2016. As shown in figure 7 below, it was observed that members of VSLA groups were able to fund agriculture activities from more sources as compared to the farmers who were not members of VSLAs. Most common sources of funding were personal savings, business, animal husbandry and a loan from VSLA groups. As can be seen, 63.8% of the VSLA members funded Maize 2016 crop from more than one source as compared to 40.48 % of the non-members. It can be assumed that due to having more than one source to fund agriculture, farmers are more likely to be comfortable in investing in agriculture and purchasing better seeds, fertilizers, pesticides, and irrigation.

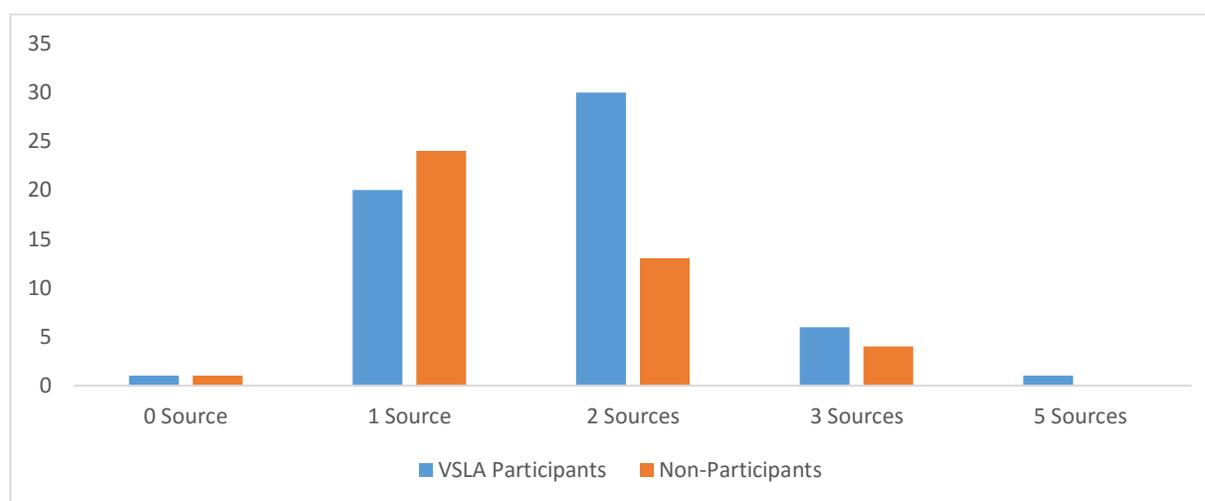
Another important point to note here is 6 out of 58 i.e. 10.3% VSLA members listed engaging in manual labor as one of the sources to raise money to fund agriculture as compared to 11 out of 42, or 26% of the non-members. This means that VSLA members are less likely to go for manual labor to fund agricultural activities like purchasing seeds, fertilizers, pesticides etc. as compared to the non-members. This is probably because they have more diversified sources of income or more avenues to fund their agricultural activities than the non-members. The discussion on the diversification of sources of income has been done in section 4.8.

Also, it was observed that 10 out of 58 VSLA members (17.2%) sold animals to fund agriculture as compared to 13 out of 42 (30.9%) non-members. This could be understood in two ways. One is that VSLA members prefer less to engage in animal husbandry as compared to non-members. The second argument could be related to distress sale of livestock. In rural communities, people engage in livestock rearing so that they could sell it in a time of need or distress. Animals are generally easy to sell and fetch immediate cash for the villagers. It cannot be ascertained with certainty through this study why VSLA members sell fewer animals as compared to non-members. Are they less likely to engage in animal husbandry as they have other better sources of income? Or are they more comfortable in raising the money for agriculture so they keep the animals for difficult times?

From the interviews, it was also gathered that 22 members (37.9%) took a loan from the VSLA groups. 3 VSLA members also reported to have taken external loans from One Acre Fund and 1 VSLA member took a loan from BRAC to fund agricultural activities. Another observation was that the study could not find any evidence of the operation of money lenders in the villages. None of the interviewees (VSLA members and non-members alike) mentioned about raising funds from

money lenders. It has to be noted that when VSLA members were asked to list the reasons behind taking the loans from VSLA, 49.3% (78/158) of the reasons they mentioned were related to agriculture. This has been dealt with in greater detail in section 4.6. During the individual interviews, some of the members mentioned that they were reluctant to take a loan from VSLAs for agriculture because of the risks involved in agriculture. A few of them talked about the risks posed by climate change and said they would rather invest in something tangible like building a house than invest in agriculture. However, this question was not systematically asked across the sample.

*Figure 7: Number of Sources of funds for agriculture*



## 4.5 SAVING GROUPS AND AGRICULTURAL INPUTS

This section analyses the relationship between participation in saving groups and agricultural inputs. The data from 2016 Maize crop was taken for the analysis and per acre expenditure on Maize production was taken for VSLA participants and non-participants. After cleaning the data, 56 VSLA participants and 42 non-participants were analysed. The descriptive statistics for the two categories are presented in the table 2 below. It can be seen that VSLA participants spent 132,731 Shillings per acre for Maize production as compared to 71,289 Shillings spent by non-VSLA participants. So, it can be observed that VSLA participants spent 86% more than non VSLA participants on Maize production in the year 2016. The standard deviation of VSLA participants is 109,601 and that of non-participants is 57,829.

*Table 2: Agricultural Inputs – Descriptive Statistics*

	VSLA	Non-Participants
<b>Number</b>	56	42
<b>Average</b>	1,32,731 TZS	71,289 TZS
<b>Maximum</b>	6,04,000 TZS	2,15,000 TZS
<b>Minimum</b>	0 TZS	0 TZS
<b>Standard Deviation</b>	1,09,601.71	57,829.23

## 4.6 WHO TAKES LOANS, HOW MUCH AND WHY?

To understand the functioning of the savings group it is important to analyse the loans that have been taken by different participants. For this section, it became meaningful to divide the sample into two groups. The basis on which the sample was divided was land holding. The analysis in this section has been done based on farmers having less than 2.2 acres and farmers having more than 2.2 acres. It is important to note that this is not 2.2 hectares, a criterion that has been used in other places in this report. Other possible distinction could be on the basis of office holders or leaders of the group and other participants. But in the absence of that data, a distinction based on land holding is being used.

Participants of the study were asked the number of times they took loans from VSLA groups in the last 2 years. 32 farmers with land holding <2.2 acres took loans 83 times with an average of 2.59 loans per participant as compared to 68 loans taken by 32 farmers at an average of 2.15 loans per farmer. The data has been presented in table 3 below. The important thing to note here is that of the farmers with land holding less than 2.2 acres, there was one farmer who took the loan for 19 times. Removing this outlier (table 4), the 31 small farmers took loan 64 times with an average of 2.06 which is less than the average number of loans taken by large farmers. For some of the participants answer to this question was not mentioned. The people who did not reply to this question have been removed from the calculation of average.

**Table 3: Frequency of loans by VSLA members**

	Farmers < 2.2 acres	Farmers >2.2 acres
Not Mentioned	8	5
Zero	1	0
1 Loan	13	12
2 Loans	7	9
3 Loans	6	9
>3 Loans	5	2
Number of farmers who replied to this question	32	32
Number of Loans	83	68
Average	2.59	2.12

**Table 4: Frequency (without outliers)**

	Farmers < 2.2 acres
Number of farmers who replied to this question	31
Number of Loans	64
Average	2.06

Along with the frequency of loans, another important consideration is the size of loans that the two groups are taking. Based on the recall, 122 loans were analysed and grouped again according to the land holding (table 3). It was found that for the farmers with land holding < 2.2 acres average loan size was 245,867 Shillings as compared to the average loan size of 300,016 Shillings for the farmers with land holding > 2.2 acres. So, it can be seen that there is a little difference in the average size of loans taken by larger farmers as compared to smaller/marginal farmers.

*Table 5: Size of loans by VSLA Members*

	Farmers with Land Holding < 2.2 acres	Farmers with Land Holding > 2.2 acres
Number	60	62
Average	2,45,867	3,00,016
Maximum	10,00,000	9,00,000
Minimum	12,000	20,000
Standard Deviation	1,97,849	1,98,426

To understand the disbursement of loan to various sub-groups it would be interesting when the group is divided on the basis of leaders and non-leaders. Some studies in the literature do give an evidence of elite capture but this study could not find any evidence of that based on the methodology followed.

The last sub-section here is the analysis of why different groups are taking loans. The analysis of 65 loans taken by farmers with land holding less than 2.2 acres and 67 loans taken by farmers with land holding greater than 2.2 acres was conducted. For the 65 loan taken by small farmers, they gave 78 reasons for taking those loans as for some loans they gave multiple reasons. Similarly, for the 67 loans taken by large farmers 80 reasons were provided. These reasons were categorized with the frequency of different categories calculated as has been shown in the table 6.

*Table 6: Reasons for loans from VSLA*

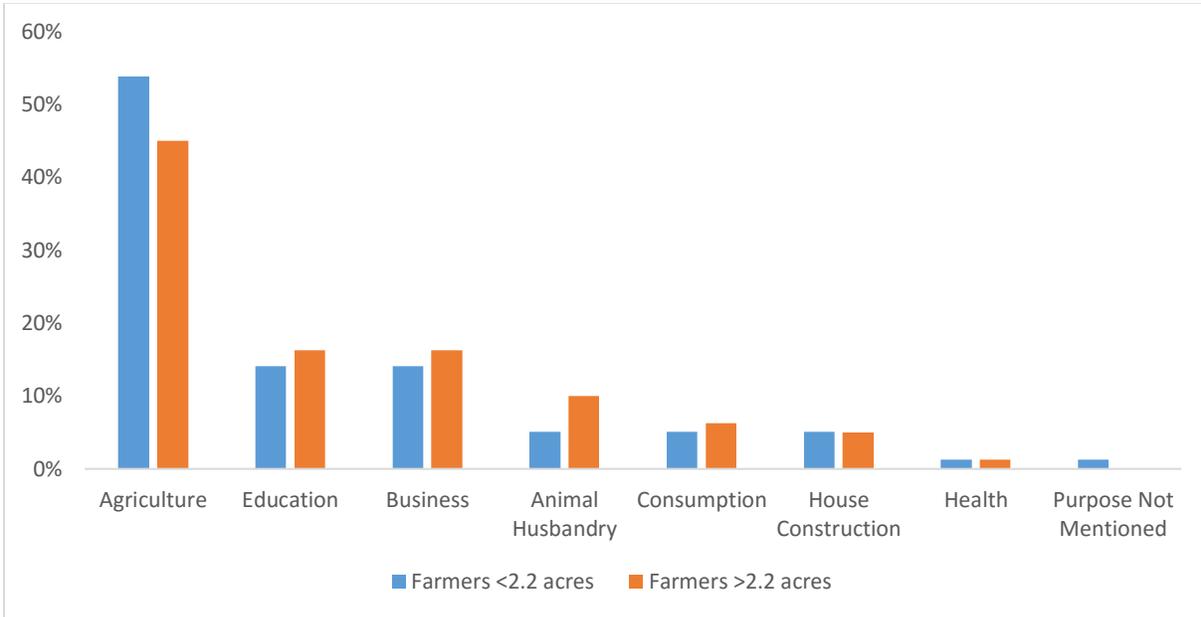
	Farmers <2.2 acres	Farmers <2.2 acres	Farmers >2.2 acres	Farmers >2.2 acres
Agriculture	42	53.85%	36	45.00%
Education	11	14.10%	13	16.25%
Business	11	14.10%	13	16.25%
Animal Husbandry	4	5.13%	8	10.00%
Consumption	4	5.13%	5	6.25%
House Construction	4	5.13%	4	5.00%
Health	1	1.28%	1	1.25%
Purpose Not Mentioned	1	1.28%	0	0.00%
Total	78	100%	80	100%

It can be observed from the figure 8 below, small proportion of loans (45%) were taken by farmers with land holding greater than 2.2 acres for agriculture as compared to farmers with land holding less than 2.2 acres (53.85%). It can also be observed that more proportion of loans were taken by large farmers for business and animal husbandry (26%) as compared to small farmers (19%).

The study cannot concretely state whether larger farmers among the lot are able to better diversify their sources of income than the small farmers but it can say that they are taking more loans for business and animal husbandry as compared to small farmers. Combining the analysis from subsection 4 (Sources of funds for agriculture) and this subsection, a holistic argument can be made that participants in VSLA program are able to generate funds from diverse sources for funding agriculture and within the VSLA participants, farmers with land holding more than 2.2

acres are investing more to diversify their income as compared to farmers with land holding less than 2.2 acres.

*Figure 8: Reasons for loans from VSLAs*



#### 4.7 MORE ON THE NUMBER OF LOANS TAKEN BY PARTICIPANTS

This sub-section tries to delve into the number of loans taken by VSLA members and the reasons for that. The average number of loans 64 members took was 2.06 times in 2 years which comes to almost an average of one loan per year. It is important to delve into this number and understand the rationale behind this low number of loans taken by the participants of the savings groups in the study area. In a study of Savings Groups in Kenya commissioned by ‘Financial Sector Deepening (FSD) Kenya,’ the average number of loans in 2 cycles was 4.4. This study was the comparison of groups promoted by faith-based organizations, CARE’s groups, and franchise model. (Mathews B.H., Musoke C., & Green C., 2010).

The possible reasons behind the low number of loans could be that people do not need money, there are training issues, there are less investment avenues and high risk involved in them, there is elite capture in the groups and only a few people are taking loans and those people could not be captured in the study or lastly there could be design issues related to the size of the group, cash out and low savings. It could be happening that a participant is waiting till the money is accumulated so that she can take a bigger loan. As once the loan is taken preference would be given to another person so there is always an incentive to wait and take a bigger loan than take a smaller loan and risk the chance of not getting the second loan.

The average loan size among the participants of the study was 283,129 Shillings per loan. Assuming the limit on loan to be 3 times the savings amount and 25 members in a group as promoted by CARE the average savings of the person should be 94,376 Shillings. With a saving of 20,000 Shillings per month (5000 Shillings per week) an individual must wait for 4.7 months.

Then during the next 4 to 4.5 months, 25 members would try to take loans as in the last 3 months no new loans would be given so that the loans already disbursed could come back. Does this point to the bottleneck with respect to the maximum number of loan that an individual can take given the number of people in a group and the average size of the share?

Share out is important as the members plan the share out in their group with respect to the larger expenditure. It is also important to understand that after the share-out members start saving in their group from scratch. So, there is a limit that has been created to the number of loans an individual can take from her group, maximum size of loan an individual can take (which is three times the size of savings an individual has in the group) and also the duration of loan (which is currently 3 months).

The question here arises – Is three months of repayment sufficient when the agricultural season is 4 to 6 months? Also with respect to other businesses, the duration of the loan will have a direct implication on the investment an individual can make. Does one loan a year meet the needs of the people? Is the size of the loan (current average of 283,129 Shillings) sufficient to fulfil the needs of modern agriculture (purchasing seeds, fertilizers, pesticides, irrigation etc.) and businesses? This study is inconclusive and it is expected that further analysis would be done in to explore these questions. It is important to question these basic assumptions of savings group – size of the group, share-out, 3 months’ loan and the loan limit of 3 times the savings.

#### 4.8 SOURCES OF INCOME

It has been understood that the diversification in livelihood activities is a risk mitigating strategy followed by poor households. The increase in a number of livelihood activities is associated with less likelihood of household being poor (Oyinbo O. and Olaleye K.T., 2016). To understand the ability of VSLAs to enable the diversification of livelihood activities, the study asked the households top three sources of income of their families. It was hypothesized that the people who participated in savings group are able to diversify their sources of income more as compared to people who do not participate.

From the data (table 7), it was analysed that 23.53% of people from VSLA listed just one source of income which is half the percentage of non-members (45.45%) who listed only one source of income. Conversely, 76.5% of the VSLA members said they had more than one source of income as compared to 54.55% non-members. The average number of livelihood activities stated by VSLA members were 2.06 as compared to 1.75 activities stated by non-members. It can be said that more VSLA participants have more sources of income as compared to non-participants.

*Table 7: Sources of Income*

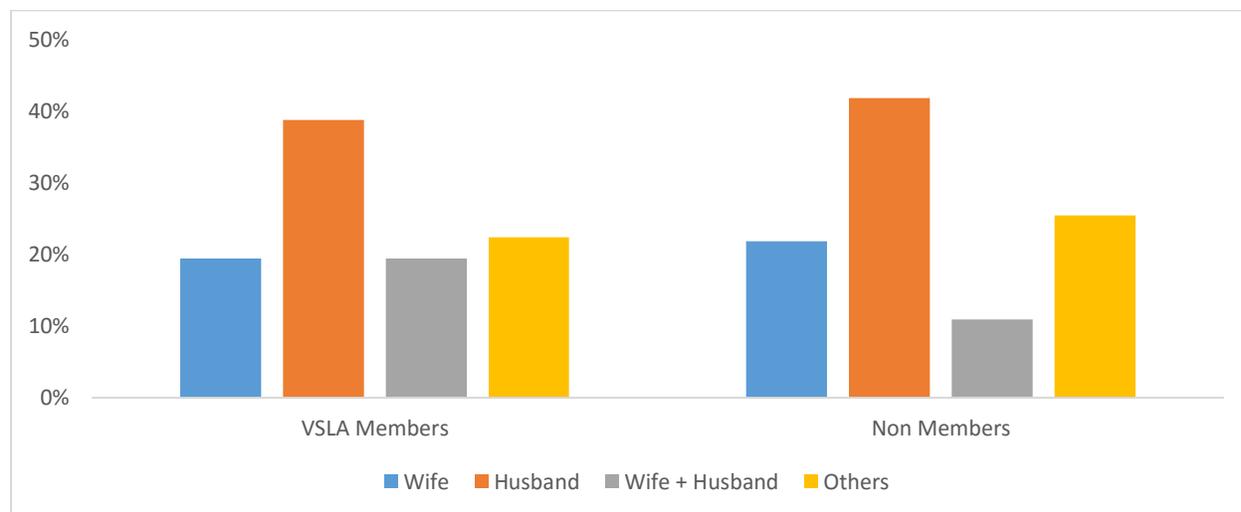
	VSLA Members	Non-Members
1 Source of Income	23.53%	45.45%
2 Sources of Income	47.06%	34.55%
3 Sources of Income	29.41%	20.00%

## 4.9 DECISION MAKING

The savings group literature has generally associated the participation in savings group with women's empowerment and increased decision making at the household level (Innovation for Poverty Action, 2012; Beaman L. & National Bureau of Economic Research, 2014). In FDG a general theme of discussion was that VSLAs have led to more financial independence among the women. But when specifically asked about decision making in agriculture this study did not find any evidence that participation in VSLA has resulted in more decision making related to agriculture. The other aspects of decision making were not studied as a part of this study. Only the primary decision making in agriculture was studied as it is one of the major livelihood activities in the rural areas and the majority of work in small holder agriculture is done by women.

19.40% VSLA members said that the wife is the primary decision maker in activities related to agriculture at the household level while for the non-members this percentage is slightly higher being 21.82%. Also, 19.40% of VSLA members said that both husband and wife take decisions jointly while only 10.91% of non-member said that they jointly take decisions. It is interesting to note that among all the 47 male participants of the study (who replied this question), only one person said that his wife is the primary decision maker in matters related to agriculture in the family. While an overwhelming number of male participants stated that either they took the decision or decisions were taken jointly or by another member of their family like the father. Figure-9 illustrates the decision making capacity of women in agriculture in the study area.

*Figure 9: Decision Making in Agriculture*



## 4.10 MARKET ACCESS

From the study, it was found that most of the respondents were selling the crops at their home, within the village or at their farms. It was found that there are a few aggregators who purchase the crops from the farmers and sell it in the market. Some of those aggregators were VSLA members and they raised the capital from the VSLA groups to pay for the crops. It was found that there is no difference between the VSLA members and non-members both in their access to the market.

There were 3 respondents who did not sell crops at all and used it entirely for consumption.. Nowhere was it found that role of aggregation has been taken up by the group as a whole. Taking crops to market by small holder farmers could be an expensive proposition but this role could be taken up by the VSLA group as the experiments have been done elsewhere.

#### **4.11 FINDINGS ABOUT VICOBAS**

Registered with the Registrar of Societies, Social and Economic Development Initiative of Tanzania (SEDT) is a non-governmental organization. The NGO adopted Village Community Banks (VICOBA) as a tool in Tanzania's Islands and the mainland in the year 2000 and 2002 respectively after modifying and adapting the MMD model which was innovated by CARE International in Niger in 1991 (SEDT 2008). A ledger-based system of recording members' shares was adopted by VICOBAs. SEDT (2008) support groups with training for at least fourteen to sixteen months. The training is focused on regulation, leadership, credit and saving operations, and conflict resolutions, etc.

One of the big difference between VICOBA and VSLA is the annual share out. Most VSLAs share out both the principle and profit at the end of each year when the books are closed. However, VICOBs only share out the profit (Brown A., Peter M., and Smith A., 2015). As it was mentioned during one of the study meetings with organizations, "For VICOBA, if there is no formula about how to share saving, there is no formula about how to dissolve a group also." In order to help CARE reflect upon the strengths and weaknesses of the VSLAs in relation to VICOBAs as currently implemented in the rural settings in Tanzania, two focus group were conducted with VICOBA members at Iringa rural district. Researchers also had a meeting with UYACODE, one of the VICOBA apex organization based in Dar Es Salaam. Another two apex organizations for VICOBA are CEVEDE and PHILETAJO.

The study found that VICOBA has been used as a general term for savings group in Iringa rural district. Members of the savings groups do not differentiate between VICOBAs and VSLAs. Some groups that are being called VICOBA by its member were not really VICOBA groups. They belonged to other types of savings group like VSLA or SILK. VICOBA's apex organization is in charge of training and forming new VICOBA groups, but it was also found that government's community development office also promoted savings groups with the name VICOBAs. Though not captured through the study, it was found by researchers that VICOBA we a more popular term among the participants even if they belonged to CARE promoted VSLAs. Discussion with community development officer and CARE's partner NGO, both of whom are familiar with VICOBAs, one common theme which appeared was that VICOBAs are not transparent because the group puts its money in the bank and only share out the profit at the end of year, while members do not know where the principle has been kept and how it is being used. The authors of this study consider that it could be a hearsay comment and might reflect the usual scepticism of keeping the money in the bank.

Having said this, it is important that more studies about VICOBA in Tanzania are conducted to understand the institutions. It is believed that they will provide important lessons especially with respect to the bank linkage and not going for share-out.

## 5. CONCLUSIONS

The study aimed to understand the implementation of VSLAs with a focus on who is participating, why they are participating, how the governance of the VSLA is conducted and possible effects of VSLAs on fulfilling the agricultural credit needs of the farmers.

The study found that most of the participants of the VSLAs were women, though men participation is also there and many groups on the field were found to be mixed groups having both men and women. Some evidence of exclusion of poorest of the poor from the VSLA groups was found with people stating that they do not have enough money to be part of the VSLAs. The study also saw many instances of misinformation/wrong information among the villagers. They had the idea that VSLA participation requires a high amount of money. If such perception prevails then that is detrimental to the purpose of saving groups which aims to bring people out of poverty by providing them credit. CARE might take up the task of linking the excluded people (even in the areas where it thinks it is strong) on a campaign mode. Another example of misinformation was that people used the words VSLAs and VICOBA interchangeably. In one of the instance during the fieldwork of this study, members of a group participated in focus group discussion stating that they were VICOBA members and then during personal interviews, they stated that they were part of VSLAs. All the organizations - profit and non-profit alike, do pay special attention to their brand because it helps them grow and take their voice to many other people. In this case, it is felt that CARE should make an effort to communicate with the people about VSLAs and how it is different from other groups. This is important because for future interventions if VSLA model is taken as a base and an entry point then it would be easy for CARE to build up on its success and replicate the model if people are aware of the brand VSLA and that it is associated with CARE.

It was found that participation in VSLAs is associated with higher investments in agriculture and VSLA members were able to raise the money for agriculture from more sources as compared to the non-members. Taking a distinction between farmers with land holding less than 2.2 acres and those with more than 2.2 acres, it was found that there was no statistical difference between the two groups in terms of a number of loans taken and the size of loans taken. It is felt that the distinction made on 2.2 acres is not very suitable for this analysis and another analysis should be done based on the leaders of the groups and the non-leaders. The future study should try to understand the decision making within the groups especially in the mixed groups where both men and women participate. It was found that participation in VSLAs was associated with participants having more sources of income but the study could not find any association of participation with the decision making of women related to agriculture. This study was too limited to draw conclusions about the gender related aspects of the VSLA groups and it is recommended that CARE could undertake a more thorough study to understand this. The sample size and sampling strategy has also posed challenges to make any generalized causal claims. In fact no generalized causation is being claimed through this study.

As mentioned in the introductory paragraph, the study was designed as a comparative analysis between the two types of savings groups i.e. VSLAs and VICOBA. In the absence of relevant data in the selected areas for field work, the study had to be changed in between while on the field. But in the conclusion, it is worthwhile to mention that comparison of VSLAs and VICOBA on various aspects will still be a meaningful exercise and should be pursued by CARE. That study

will give an opportunity to CARE to challenge the assumptions made in the VSLA model right at the point of its genesis. It could be entirely possible that the assumptions made in 1991 could no longer be true or are insufficient to meet the aspirations of the people. To illustrate, is it possible that VSLA model is capable of moving people out of poverty but it is insufficient to take people to the next level of prosperity where they can invest more in businesses and agriculture. Some of those assumptions have been challenged in Section 4 (subsection-7). Next cohort of CARE-Cornell fellows could take up this as part of their study. There is evidence that participation in VSLAs is associated with higher inputs in agriculture. But is this high input sufficient to take the Tanzania's agriculture to the higher trajectory of growth? Is there an artificial upper limit/glass ceiling in terms of a number of loans taken by the participants? Is that hampering the movement from being just above poverty to a path of higher prosperity? Is the loan duration of 3 months sufficient for fetching return from agriculture and small businesses? What is the importance of share-out especially in the light of the fact that the farmers used the share out to purchase inputs for agriculture, build their houses or any other major expenditure they were waiting to do for the whole year? In the absence of share-out, how do farmers manage such big one time expenditures? Many questions remain.

## REFERENCES

1. Alison Brown, Peter Mackie, and Alastair Smith. (2015). Financial Inclusion and microfinance in Tanzania. Inclusive Growth: Tanzania Country Report. Retrieved from [https://www.cardiff.ac.uk/\\_data/assets/pdf\\_file/0010/592129/Tanzania-Feb-2015-FINAL.pdf](https://www.cardiff.ac.uk/_data/assets/pdf_file/0010/592129/Tanzania-Feb-2015-FINAL.pdf)
2. Beaman, L., & National Bureau of Economic Research. (2014). Saving for a (not so) Rainy Day: A Randomized Evaluation of Savings Groups in Mali. Cambridge, Mass: National Bureau of Economic Research. Retrieved from <http://proxy.library.cornell.edu/login?url=http://www.nber.org/papers/w20600>
3. Brannen, C., & Sheehan-Connor, D. (2016). Evaluation of the impact of Village Savings and Loan Associations using a novel survey instrument. *Development Southern Africa*, 33(4), 502–517. Retrieved from. <https://doi.org/10.1080/0376835X.2016.1179097>
4. Brett Hudson Matthews, Christopher Musoke & Colleen Green (2010) Group Savings and Loan Associations Impact Study. FSD Kenya. Retrieved from [http://fsdkenya.org/wp-content/uploads/2010/12/11-01-19\\_GSL\\_Impact\\_assessment\\_study.pdf](http://fsdkenya.org/wp-content/uploads/2010/12/11-01-19_GSL_Impact_assessment_study.pdf)
5. Brune, L., & National Bureau of Economic Research. (2015). Facilitating Savings for Agriculture: Field Experimental Evidence from Malawi. Cambridge, Mass: National Bureau of Economic Research. Retrieved from <http://proxy.library.cornell.edu/login?url=http://www.nber.org/papers/w20946>
6. Care International. (n.d.). Retrieved from [http://www.care.org/sites/default/files/documents/vsla\\_25years\\_final\\_20sept16.pdf](http://www.care.org/sites/default/files/documents/vsla_25years_final_20sept16.pdf)
7. Care International. (n.d.). Retrieved from <https://www.care.org.au/wp-content/uploads/2014/12/CARE-VSLA-Report-Uganda-Eco-Devel.pdf>
8. Creswell, J. W. (2015). *A concise introduction to mixed methods research*. Thousand Oaks, CA: SAGE.
9. Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. (2nd ed.). Los Angeles: SAGE Publications.
10. Dean Karlan, Beniamino Savonitto, Bram Thuysbaert, and Christopher Udry Edited by Banerjee A. (2017). “Impact of Village Savings and Loan Associations – Findings from Ghana, Malawi and Uganda” - *Innovations for poverty action*, Retrieved from [www.pnas.org/cgi/doi/10.1073/pnas.1611520114](http://www.pnas.org/cgi/doi/10.1073/pnas.1611520114))
11. Eric K. A, Richard B, Ellen O. (2016). Effects of Credit on Agricultural Inputs and Technology in the Nkoranza North District, Ghana. *American Journal of Rural Development*, 4(6), 134-142. Retrieved from <http://pubs.sciepub.com/ajrd/4/6/3>

12. George Rapsomanikis, “The economic lives of smallholder farmers - An analysis based on household data from nine countries”, FAO, 2015 Retrieved from <http://www.fao.org/3/a-i5251e.pdf>
13. Ghalib, A. K. (2017). *Can Microfinance Alleviate Poverty? A Mixed-Methods Study in Rural Pakistan*. 1 Oliver’s Yard, 55 City Road, London EC1Y 1SP United Kingdom: SAGE Publications Ltd. Retrieved from <https://doi.org/10.4135/9781473994799>
14. Girabi, F., & Mwakaje, A. E. G. (2013). Impact of microfinance on smallholder farm productivity in tanzania: The case of iramba district. *Asian Economic and Financial Review*, 3(2), 227. Retrieved from <https://search.proquest.com/docview/1417578084?accountid=10267>
15. Hendricks, L., & Chidiac, S. (2011). “Village savings and loans: A pathway to financial inclusion for Africa's poorest households”, 2011 Global Microcredit Summit, November 14–17, [1]2011 — Valladolid, Spain. Retrieved from [http://www.microcreditsummit.org/uploads/resource/document/1\\_hendricks-village\\_savings\\_and\\_loans\\_as\\_a\\_pathway\\_to\\_financial\\_inclusion\\_for\\_africa\\_56610.pdf](http://www.microcreditsummit.org/uploads/resource/document/1_hendricks-village_savings_and_loans_as_a_pathway_to_financial_inclusion_for_africa_56610.pdf)
16. Hulme, D. and P. Mosley. 1996. *Finance against poverty*. Volumes 1 and 2. London: Routledge.
17. IFC (2014). *Access to Finance for Smallholder Farmers: Learning from the Experiences of Microfinance Institutions in Latin America*. Retrieved from <http://www.ifc.org/wps/wcm/connect/071dd78045eadb5cb067b99916182e35/A2F+for+Smallholder+Farmers-Final+English+Publication.pdf?MOD=AJPERES>
18. IFAD, 2003a. *Transforming rural institutions in order to reach millennium development goal*. Discussion paper. Retrieved from <https://www.ifad.org/documents/10180/b05fd462-5e66-4a17-b2be-bbb5d6b0a49f>
19. Jeffrey Ashe and Kyla Jagger Neilan, “In their own Hands: How saving groups are revolutionizing Development” Berrett-Koehler Publishers, Inc. 2014
20. Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a Definition of Mixed Methods Research. *Journal of Mixed Methods Research*, 1(2), 112–133. Retrieved from <https://doi.org/10.1177/1558689806298224>
21. Lowicki-Zucca, Massimo et al. “Savings Groups as a Socioeconomic Strategy to Improve Protection of Moderately and Critically Vulnerable Children in Uganda.” *Children and Youth Services Review* 47 (2014): 176–181. ScienceDirect. Web. Economic Dimensions of Child Protection and Well-Being.
22. Marr, A. (2004). A challenge to the orthodoxy concerning microfinance and poverty reduction. *Journal of Microfinance*, 5(2), 1–35. Retrieved from <http://scholarsarchive.byu.edu/esr/vol5/iss2/3/>

23. Muhammad Yunus, "The Grameen Bank Story: Rural Credit in Bangladesh", "Reasons for Hope - Instructive Experiences in Rural Development" Kumarian Press, Inc. 1997
24. Oyakhilomen Oyinbo and Kehinde Tobi Olaleye. "Farm Households Livelihood Diversification and Poverty Alleviation in Giwa Local Government Area of Kaduna State, Nigeria" *The Journal of Sustainable Development* Vol. 15, Iss. 1 (2016), Pp. 219- 232
25. Rajasekhar, D., Manjula, R., & Suchitra J.Y. (2017). Can Microfinance Promote Livelihoods and Reduce Vulnerability Among Adivasis? A Study of Some NGO Interventions from Karnataka and Tamil Nadu. *Social Change*, 47(1), 65–80.  
<https://doi.org/10.1177/0049085716683101>
26. Ralph Christy, Mark Wenner and Wylin Dassie. "A Microenterprise-centered Economic development strategy for the rural South: Sustaining Growth with Economic Opportunity" *Journal of Agriculture and Applied Economics*, Vol. 32, No. 1, July 2000.
27. Ralph Christy, Mark Wenner and Wylin Dassie. "A Microenterprise-centered Economic development strategy for the rural South: Sustaining Growth with Economic Opportunity" *Journal of Agriculture and Applied Economics*, Vol. 32, No. 1, July 2000.
28. Rutherford, S. (1995). 'The poor and their money. An essay about financial services for poor people'. University of Manchester, Institute for Development Policy and Management.
29. Sharif, I. (1997). 'Poverty and finance in Bangladesh: A new policy agenda'. In Wood, G.D. and Sharif, I. (Eds.), *Who Needs Credit? Poverty and Finance in Bangladesh*. Dhaka, Bangladesh: The University Press.
30. Social and Economic Development Initiatives of Tanzania, A paper presented to national policy dialogue on Mkukuta, P.E.R Annual Consultative Meeting, 19th – 21st November, 2008.
31. Thuysbaert, B., Karlan, D., & Udry, C. (2012). "Impact assessment of savings groups. Findings from three randomized evaluations of CARE VSLA programs in Ghana, Uganda and Malawi". 2012 IPA-ADB-JPAL Bangkok conference. Innovation for Poverty Action. Retrieved from [https://www.poverty-action.org/sites/default/files/day\\_3\\_s2\\_thuysbaert.pdf](https://www.poverty-action.org/sites/default/files/day_3_s2_thuysbaert.pdf)
32. Timothy Besley, Stephen Coate and Glenn Loury, "The Economics of Rotating Savings and Credit Associations", *The American Economic Review*, Vol. 83, No. 4 (Sep., 1993), pp. 792-810  
Published by: American Economic Association Retrieved from <http://www.jstor.org/stable/2117579>

## APPENDICES

## APPENDIX A – TABLES

*Table A.1: Basic Characteristics of Respondent (All)*

Characteristic	Total	
	N = 140	%
<i>Age (years)</i>		
18 - 35	65	46.43
36 - 50	55	39.29
>50	20	14.29
<i>Gender</i>		
Female	83	59.29
Male	57	40.71
<i>Education level</i>		
None	9	6.47
Up to primary	110	79.14
Up to secondary	20	14.39
Above secondary	0	0
<i>Participation in savings group</i>		
Yes	82	58.57
No	58	41.43
<i>Ward</i>		
Kihanga	33	23.57
Luhota	43	30.71
Madilu	35	25
Madope	29	20.71
<i>Landholding (hectares)</i>		
0 – 2.2	127	90.7
>2.2	8	5.7
Land Holding not mentioned	1	0.7
Data not captured correctly	4	2.8

*Table A.2: Basic Characteristics of Respondent (Savings group members & Non-member)*

Characteristic	Savings group member		Non-member	
	N = 82	%	N = 58	%
<i>Age (years)</i>				
18 - 35	38	46.34	27	46.55
36 - 50	34	41.46	21	36.21
>50	10	12.20	10	17.24
<i>Gender</i>				
Female	43	52.44	40	68.97
Male	39	47.56	18	31.03
<i>Education level</i>				
None	3	3.66	7	12.07
Up to primary	64	78.05	46	79.31
Up to secondary	15	18.29	5	8.62
Above secondary	0	0	0	0
<i>Landholding (hectares)</i>				
0 – 2.2	71	86.6	56	96.6
> 2.2	8	9.8	0	0
Land Holding not mentioned	1	1.2	0	0
Data not captured correctly	2	2.4	2	3.4

## APPENDIX B – RESEARCH PROPOSAL

### **VSLA Research Proposal for CARE U.S.A/CARE Tanzania**

Abhishek Sharma, Hongdi Zhao  
Cornell Institute for Public Affairs  
July 28, 2017

**The purpose of this applied research is** to better understand and describe the current implementation of 1) CARE Tanzania's Village Savings & Loan Associations programs and to 2) understand the ability of this program to address the capital needs of participating agricultural farmers, focusing on the possible effects of these programs on the value chain for select major crops in Iringa Rural district in Iringa and Ludewa district in Njombe.

**The results will be used internally to** help CARE reflect upon the strengths and weaknesses of VSLAs as currently implemented in these settings in Tanzania, and to inform CARE's recent conversations with the Department of Gender at the Ministry of Health, Community Development, Gender, Elderly and Children as they work on guidelines on how promoters can form and operate saving groups.

With the express permission of CARE International, the results may also be used by the Cornell fellows in future work for publication.

**The main deliverable is a report to be submitted at the completion of the fellowship in August 2017. The report will include:**

- 1: A description of implementation, practices, composition of participants and governance of VSLAs;
- 2: A description of the credit needs of farmers associated with VSLAs;
- 3: An analysis of the ability of VSLAs to address the credit needs of farmers.

**The main audiences (in priority order) are:**

1. CARE International in Tanzania Management and Program Staff;
2. CARE USA;
3. CARE-Cornell Collaboration;
4. Stakeholders and Savings Groups Promoters interested in learning about savings groups.

**DESIGN MATRIX for CARE Tanzania Proposal**

Evaluation Questions	Indicators, data sources & measurement instruments	Designs, sampling & analysis plans	Strengths & Limitations	What this analysis will allow you to say
<p><b>What are the practices and likely effects of Village Savings and Loan Associates (VSLAs) as currently being implemented in rural areas of Tanzania?</b></p> <p>1. PRACTICES  a. Who is/is not participating?  b. How and why/why not are they participating?  c. Does participation work differently for men and women?  d. What is the governance structure?</p> <p>2. LIKELY EFFECTS  a. Are VSLAs associated with addressing the agricultural credit needs of farmers?</p>	<p><i>Terms needing definition:</i>  a. “VSLA group”  b. “rural areas”  c. “participation”  d. “governance structure”</p> <p><i>Types of information needed:</i>  -information about the cultural, political and economic context of each of the 2 regions where data is being collected  -information about who is participating in VSLAs in each village in the study  -information about the credit needs of the farmers</p> <p><i>Sources of information:</i>  1) CARE VSLA groups  2) Government, foundation or NGO data on poverty and health levels over time  3) People who are not participating in savings group programs</p> <p><i>Measurement instrument:</i>  For 1a.-1c.: Focus group interview instrument; individual instrument 2a.</p>	<p><i>Research design:</i>  *For questions 1a-1d.: “During” XO  *For questions 2a: “Post-only” X O</p> <p><i>Sampling strategy:</i>  In participating communities in 2 areas. Within those areas, villages will be selected. Within selected villages, select current participants, non-participants. Research will be restricted to people with agricultural land holding less than 2.2 acres</p> <p>Sample should include, within each set of 1) participants and 2) non-participants, some of the following: men, women.</p> <p>Focus groups  Qualitative Focus Group analysis with emergent coding</p> <p>Interviews –  Quantitative analysis for agricultural credit needs using T-Test</p> <p>Data collection will entail first a focus group in each area and then individual interviews.</p>	<p><i>Weakness of measurement strategy:</i> Other sources of information beyond self-report interviews are needed for a full picture of the situation, such as information about trends before and after the introduction of VSLAs in agricultural credit scenario.</p> <p>It will not be possible to generalize from the study. However, results will be fairly-well contextualized.</p>	<p>The following types of people are/are not participating in the program...</p> <p>People who are participating are doing so in the following ways...</p> <p>Participation in the program does/does not work differently for men and women.</p> <p>The governance structure of program is...</p> <p>The programs (is not) associated addressing the credit needs of the farmers.</p>

## APPENDIX C – INTERVIEW PROTOCOL

### Individual Interviews Protocol CARE-Cornell Collaboration Research Tanzania

Name of the Interviewer \_\_\_\_\_ Date \_\_\_\_\_  
Site \_\_\_\_\_ District \_\_\_\_\_

**NOTE FOR THE INTERVIEWEES** (This is different from the consent form. Interviewer has to read and explain this to the interviewee before starting the interview).

**These instructions are also for the interviewer** to keep in mind at all times while conducting the interview.

*“Thank you for agreeing to participate in this study, which will take place from 19<sup>th</sup> June, 2017 to 8<sup>th</sup> August, 2017. My name is Maureen, I am the facilitator for our focus group discussion today, and I am from CARE Tanzania. The other two friends are Abhishek Sharma and Hongdi Zhao from Cornell University in the United States. They are both pursuing their Master of Public Administration at Cornell. We have one more colleague here today with us. Her name is Benta Kayuni, from CARE Tanzania headquarter in Dar Es Salaam.*

*CARE International is a global confederation of 14 member organizations working together to end poverty. In 2016, CARE worked in 94 countries around the world, implementing 962 poverty-fighting development and humanitarian aid projects, to reach more than 80 million people directly and 256 million people indirectly.*

**The purpose of this study is to help CARE Tanzania, CARE U.S.A, and CARE-Cornell better understand 1) The CARE’s Village Savings & Loan Associations program and the VICOBA groups and to 2) understand the ability of both the programs to address the capital needs of the agricultural farmers.**

**The research will be used to help CARE reflect upon the strengths and weaknesses of VSLAs and to inform government departments/ministries in laying down guidelines for the saving groups.**

*You are welcome to ask questions or raise concerns at any time about the nature of the study or the methods we are using. All your information and interview responses will be kept confidential, which means they will only be reported together with responses of others, as part of a larger report. Your name or other identifying information will not be attached to your responses in any report. You have the right to withdraw from the study at any time. In case you choose to withdraw from the study, your responses will be destroyed and omitted from the final report. Neither your responses nor declining to provide responses will have any effect on your ability to participate in a village savings program. Though non-identifying quotes from you may be used in the final report, your name and other identifying information will be kept anonymous.*

We want to ask you some simple questions about the savings group that you are part of. The questions will be based on your experiences of being part of the savings groups or why you are not part of savings group. In the focus group discussion, we would ask you to discuss amongst yourself the experiences of your savings group. There are now right and wrong answers here. In the personal interviews would ask you about the financial expenditure that you are incurring

in the agriculture. Both focus group discussion and personal interview would be conducted by trained facilitators and we assure you that your information will be kept confidential and it will not impact your participation in savings group in any way. We do not anticipate any risks from participating in this research.

**All of your information and interview responses will be kept confidential**, which means they will only be reported together with responses of others, as part of a larger report. Your name or other identifying information will not be attached to your responses in any report. After the report is prepared your name and other personal information will be removed before the data and papers is handed over to CARE.

**The participation in the study is completely volunteer and you have the right to withdraw from the study at any time.** In the event you choose to withdraw from the study, your responses will be destroyed and omitted from the final report. Neither your responses nor declining to provide responses will have any effect on your ability to participate in a village savings program.

We will be very grateful to all the participants who take time off their busy schedule to participant in this study. The participants will be compensated for their local transportation. They monetary compensation for each participant will be around 2 dollars. We assure that all the personal information about the participants will be kept confidential.”

We would be audio recording the responses and taking photographs of the participants.

Your participation will help CARE improve its savings group and you will also get a chance to know how the things are working in other savings groups in your community.

Focus Group Discussion participants who would be traveling to the selected location would be reimbursed travel costs which will be around 2 dollars.

You can contact the research team at any time. The main researchers conducting this study is Abhishek Sharma – [as3626@cornell.edu](mailto:as3626@cornell.edu) Phone Number - +1 (607) 262-0717, Cornell University; Hongdi Zhao – [h3399@cornell.edu](mailto:h3399@cornell.edu) - +1 (347) 610-0832, Cornell University

Maureen Kwilasa and Benta Kayuni are other facilitators from CARE for this research. You can also ask them any question at any point of time.

- The interviewer should mention to the participants that the whole process will take 20-30 minutes.

It is important that the interviewer explains the rights of the participants and get the consent form signed at this point. He/she should also be careful of that the rights of the participants are not violated at any point during the process.

**PART ONE - PERSONAL DETAILS**

<b>Sr. No.</b>	<b>QUESTION</b>	<b>Corresponding Evaluation Question</b>	<b>CODE</b>
1.1	Name of the participant	General Information	
1.2	Age of the participant	General Information	1. 18 to 35 years
			2. 36 to 50 years
			3. Greater than 50 years
1.3	Gender of the participant	General Information	1. Female
			2. Male
			3. Other
1.4	Religion of the participant	General Information	1. Christian
			2. Muslim
			3. Other
1.5	Residence - Ward	General Information	
	Residence - Village	General Information	
1.6	What is the highest level of education you have completed?	Will lead to the analysis of the following two questions. This question will help us understand if there is any difference of credit needs among people with different educational background.  2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	1. No Education
			2. Up to primary
			3. Up to secondary
			4. Above secondary
1.7	Land holding	2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	1. Less equal to 2.2 acres
			2. 2.2 to 50 acres
			3. Greater than 50 acres

1.8	What are the top three sources of income for your family?	<p>If there are multiple sources of income of a family and they are well-off then they might not be dependent on savings group for agricultural credit. This question will help us reflect on that.</p> <p>2. LIKELY EFFECTS</p> <p>a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers?</p> <p>b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)</p>	1. Self-employment in agriculture - Growing and selling crops, vegetables etc.
			2. Self-employment in animal husbandry (production and selling of milk, meat, wool etc.)
			3. Self-employment in Business (selling ready-made goods, shops, manufacturing, services etc.)
			4. Service – Regular job (teacher, peon, government service, service for someone etc.)
			5. Labor (for someone) (agricultural labor, laying down bricks, construction work, road construction or some other of the like
			6. Others (mention)

## PART TWO – SAVINGS GROUPS

Sr. No.	QUESTION	Corresponding Evaluation Question	CODE
2.1	Are you participating in any savings group?	General Information	1. Yes
			2. No
<p>If the answer to this question is YES ask question 2.2 to 2.10</p> <p>If the answer to this question is NO jump to PART 2.11.</p>			
2.2	Which savings group are you part of?	General Information. Will help us segregate the data based on the type of savings group people are part of.	1. VSLA
			2. VICOBA

			3. Other
2.3	What is the name of your savings group?	General Information	
2.4	Since when are you participating in this savings group?	It is related to people's eligibility to take loans and also related to power dynamics and knowledge about the savings groups. Old members could be getting more loans than the newer ones.  2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	1. Less than 3 years 2. 3 to 5 years 3. Greater than 5 years
2.5	When was your savings group started?	General Information.	1. Less than 3 year old 2. 3 to 5 year old 3. Greater than 5 years
2.6	How many cycles has your savings group completed?	General Information.	1. Less or equal to three 2. Three to five 3. Greater than five
2.7	How much money do you have in your savings group?	2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	
2.8	What is the maximum loan that you can take from your savings group?	2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	1. Zero to one (one included) 2. One to two (two included) 3. Two to three (three included) 4. Three to four (four included) 5. Greater than four

2.9	In last two years how many times you have taken loan from your savings group?	2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	1. Zero to three (three included)
			2. Three to six (six included)
			3. Greater than six

2.10	Corresponding Evaluation Question				2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)
LOAN	WHEN	WHAT PURPOSE	HOW MUCH	What did this allow you to do? (Notes: what is the limitation of this loan?)	
Loan 1					
Loan 2					
Loan 3					
Loan 4					
Loan 5					
Loan 6					
Loan 7					
Loan 8					

Sr. No.	QUESTION	Corresponding Evaluation Question	CODE
2.11	Why you do not participate in the savings group?	2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	Open Ended

### PART THREE - AGRICULTURE

Sr. No.	QUESTION	Corresponding Evaluation Question	CODE
3.1	What are the crops that you have planted in last four agricultural seasons?	2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers?	1. Paddy
			2. Maize
			3. Sorghum

		b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	4. Finger Millet 5. Beans 6. Peas 7. Cowpeas 8. Irish Potatoes 9. Sweet Potatoes 10. Cassava 11. Tobacco 12. Tomatoes 13. Simsim 14. Cotton 15. Sunflower 16. Barley 17. Groundnuts 18. Onion 19. Other vegetables
3.2	How far is your agricultural land from the nearest market?	2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	1. Zero to Twenty Kilometers 2. Twenty to Forty Kilometers 3. Greater than forty Kilometers

3.3	Can you help us understand the money that you spend on various stages in agriculture?									<b>Corresponding Evaluation Question</b>
<b>SEASON</b>	<b>Crop</b>	<b>Seeds</b>	<b>Labor</b>	<b>Fertilizers</b>	<b>Pesticides</b>	<b>Irrigation</b>	<b>Transportation</b>	<b>Others</b>	<b>Total</b>	2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers?



	savings group? If yes, what are those practices?	b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	
3.7	How much money do you spend in new agricultural practices?	2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	Open Ended
3.8	Has using new practices help you increase your income? (If yes, How and What are those changes?)	2. LIKELY EFFECTS a. Are VSLAs and VICOBAAs associated with addressing the agricultural credit needs of farmers? b. Are VSLAs and VICOBAAs associated with investment in highly productive agriculture? (If so, how? If not, why not?)	Open Ended

## APPENDIX D – FOCUS GROUP PROTOCOL

### Focus Group Protocol CARE-Cornell Collaboration Research in Tanzania

Date:  
Site:

Facilitator:  
Note Taker:

#### Introduction

- Facilitator will introduce the herself/team to the participants in the focus group.
- He/she will speak about the purpose of this session and how the data is going to be used. The following script can be used for it:

*“Thank you for agreeing to participate in this study, which will take place from 19<sup>th</sup> June, 2017 to 8<sup>th</sup> August, 2017. My name is Maureen, I am the facilitator for our focus group discussion today, and I am from CARE Tanzania. The other two friends are Abhishek Sharma and Hongdi Zhao from Cornell University in the United States. They are both pursuing their Master of Public Administration at Cornell. We have one more colleague here today with us. Her name is Benta Kayuni, from CARE Tanzania headquarter in Dar Es Salaam.*

*CARE International is a global confederation of 14 member organizations working together to end poverty. In 2016, CARE worked in 94 countries around the world, implementing 962 poverty-fighting development and humanitarian aid projects, to reach more than 80 million people directly and 256 million people indirectly.*

***The purpose of this study is to help CARE Tanzania, CARE U.S.A, and CARE-Cornell better understand 1) The CARE’s Village Savings & Loan Associations program and the VICOBA groups and to 2) understand the ability of both the programs to address the capital needs of the agricultural farmers.***

***The research will be used to help CARE reflect upon the strengths and weaknesses of VSLAs and to inform government departments/ministries in laying down guidelines for the saving groups.***

*You are welcome to ask questions or raise concerns at any time about the nature of the study or the methods we are using. All your information and interview responses will be kept confidential, which means they will only be reported together with responses of others, as part of a larger report. Your name or other identifying information will not be attached to your responses in any report. You have the right to withdraw from the study at any time. In case you choose to withdraw from the study, your responses will be destroyed and omitted from the final report. Neither your responses nor declining to provide responses will have any effect on your ability to participate in a village savings program. Though non-identifying quotes from you may be used in the final report, your name and other identifying information will be kept anonymous.*

We want to ask you some simple questions about the savings group that you are part of. The questions will be based on your experiences of being part of the savings groups or why you are not part of savings group. In the focus group discussion, we would ask you to discuss amongst yourself the experiences of your savings group. There are now right and wrong answers here. In the personal interviews would ask you about the financial expenditure that you are incurring

in the agriculture. Both focus group discussion and personal interview would be conducted by trained facilitators and we assure you that your information will be kept confidential and it will not impact your participation in savings group in any way. We do not anticipate any risks from participating in this research.

**All of your information and interview responses will be kept confidential**, which means they will only reported together with responses of others, as part of a larger report. Your name or other identifying information will not be attached to your responses in any report. After the report is prepared your name and other personal information will be removed before the data and papers is handed over to CARE.

**The participation in the study is completely volunteer and you have the right to withdraw from the study at any time.** In the event you choose to withdraw from the study, your responses will be destroyed and omitted from the final report. Neither your responses nor declining to provide responses will have any effect on your ability to participate in a village savings program.

We will be very grateful to all the participants who take time off their busy schedule to participant in this study. The participants will be compensated for their local transportation. They monetary compensation for each participant will be around 2 dollars. We assure that all the personal information about the participants will be kept confidential.”

We would be audio recording the responses and taking photographs of the participants.

Your participation will help CARE improve its savings group and you will also get a chance to know how the things are working in other savings groups in your community.

Focus Group Discussion participants who would be traveling to the selected location would be reimbursed travel costs which will be around 2 dollars.

You can contact the research team at any time. The main researchers conducting this study is Abhishek Sharma – [as3626@cornell.edu](mailto:as3626@cornell.edu) Phone Number - +1 (607) 262-0717, Cornell University; Hongdi Zhao – [h3399@cornell.edu](mailto:h3399@cornell.edu) - +1 (347) 610-0832, Cornell University

Maureen Kwilasa and Benta Kayuni are other facilitators from CARE for this research. You can also ask them any question at any point of time.

- The facilitator should mention to the participants that the whole process will take 60-90 minutes.
- It is important that the facilitator explains the rights of the participants and get the consent form signed at this point. He/she should also be careful of that the rights of the participants are not violated at any point during the process.

## Focus Group Questions

Focus Group Questions	Corresponding Evaluation Questions	Notes for the Facilitator
1. Can you briefly introduce yourself to everybody (Name, which village, which savings groups, how long have you participated in savings group)?	1. PRACTICES a. Who is participating?	Do not forget to mention the heads that we need in this question: <ol style="list-style-type: none"> <li>1. Name</li> <li>2. Village</li> <li>3. Which savings group</li> <li>4. For how long he/she has participated in the savings group</li> </ol> Note taker should capture names and connect names to comments in notes.
2. How would you describe your savings group?	1. PRACTICES b. How and why are they participating?	Probe the participants to reflect on the general understanding regarding this.
2.1 What was your personal reason for participating in savings group?	1. PRACTICES b. How and why are they participating?	Probe the participants to reflect on their reason for participation.
2.2 How did you get started with the savings group? What sorts of things do you do as part of the savings group?	1. PRACTICES b. How and why are they participating?	The question intends to know the process of formation of savings group Is it the NGO? Some political party Or general information regarding the groups that they have got which has motivated them to form the group (neighbor, friend, family member etc.)
2.3 How was your savings group formed?	1. PRACTICES b. How and why are they participating? d. What is the governance structure?	This question is different from question 2.2 as it intends to know the actual process which includes the process of mobilization and training that they might have received
2.4 What types of people are in your savings group? A. Is it mostly women or men? B. What types of jobs do they do?	1. PRACTICES a. Who is participating c. Does participation work differently for men and women?	Ask the participants to reflect upon the following heads A. Gender B. Social background C. Economic background D. Occupational background
3. Are you aware of other savings group? If yes, please briefly describe. Are they the	1. PRACTICES b. How and why are they participating?	Intended to know the different types of groups that are prevalent on the field

same as or different from yours?		
3.1 Why would you participate in VSLA/VICOBA instead of VICOBA/VSLA?	1. PRACTICES b. How and why are they participating?	Before this question, facilitator should describe VSLA and VICOBA briefly to the participants. Should be asked only if the participants are aware of other types of savings groups.
4. Does your (VICOBA) savings group operate alone, or does it work with other (VICOBA) savings groups? If so, how?	1. PRACTICES d. What is the governance structure?	For VICOBA focus groups only
5. How does your savings group function?	1. PRACTICES d. What is the governance structure?	Open ended question which expects them to reflect upon the functioning of the group. Once this question has been answered the facilitator is expected to probe using questions 6.1 to 6.9.
5.1 How do you choose the leader of your savings group?	1. PRACTICES d. What is the governance structure?	Probe further if there are any criteria for choosing the leader.
5.2 Does the leadership change?	1. PRACTICES d. What is the governance structure?	-
5.3 Where do you conduct the meetings of savings group?	1. PRACTICES d. What is the governance structure?	Probe if the meeting is conducted at one place/house of leader or chairperson.
5.4 How do you decide whom to give loan?	1. PRACTICES d. What is the governance structure?	Probe if there are any criteria for giving the loan.
5.5 If two or more people want to have a loan at the same time, which is more than the money the savings group has, how do you decide whom to give the loan?	1. PRACTICES d. What is the governance structure?	Probe if there are any pre-decided criteria in such a case. It is intended to know how do they manage such a case in the absence of such criteria.
5.6 If a person is unable to repay the loan, what are the steps that a group takes?	1. PRACTICES d. What is the governance structure?	It is intended to know how do they manage such a case.
5.7 What is the rate of interest and why?	1. PRACTICES d. What is the governance structure?	Why is important because we want to know how people arrive at a particular-rate of interest.
5.8 Do you have a bank account for your savings group?	1. PRACTICES d. What is the governance structure?	-

6.1 From your experience, what are the challenges about being in a savings group?	1. PRACTICES d. What is the governance structure?	Important for the facilitator to get two to three strengths and weaknesses from the participants.
6.2 From your experience, what are the good things about being in a savings group?	1. PRACTICES d. What is the governance structure?	-
7.1 If changes could be made in how your savings group is run, would you suggest changes? If so, what changes would you suggest?	1. PRACTICES d. What is the governance structure?	-

Thank you very much for taking the time to participate in this focus group.

## APPENDIX E – CONSENT FORM

### Informed Consent Form

Thank you for agreeing to participate in this study, which will take place from 19<sup>th</sup> June, 2017 to 8<sup>th</sup> August, 2017. This form explains the purpose of this study, describes what you are asked to do, and explains your rights as a study participant.

**The purpose of this study is** to help CARE U.S.A, CARE Tanzania, and CARE-Cornell better understand 1) The CARE's Village Savings & Loan Associations program and the VICOBA groups and to 2) understand the ability of both the programs to address the capital needs of the agricultural farmers. **The research will be used** to help CARE reflect upon the strengths and weaknesses of VSLAs and to inform government departments/ministries in laying down guidelines for the saving groups. **The methods that will be used** to meet this purpose include interviews.

We want ask you some simple questions about the savings group that you are part of. The questions will be based on your experiences of being part of the savings groups or why you are not part of savings group. In the focus group discussion, we would ask you to discuss amongst yourself the experiences of your savings group. There are now right and wrong answers here. In the personal interviews would ask you about the financial expenditure that you are incurring in the agriculture. Both focus group discussion and personal interview would be conducted by trained facilitators and we assure you that your information will be kept confidential and it will not impact your participation in savings group in any way.

We do not anticipate any risks from participating in this research. Your participation will help CARE improve its savings group and you will also get a chance to know how the things are working in other savings groups in your community. Focus Group Discussion participants who would be traveling to the selected location would be reimbursed travel costs which will be around 2 dollars.

#### Audio Recording

**Please sign below if you are willing to have this interview audio recorded. You may still participate in this study if you are not willing to have the interview recorded.**

- I do not want to have this interview recorded.  
 I am willing to have this interview recorded

**Signed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

#### Photographs

We would want to take photographs during the meeting. The photographs may be used by CARE for publication or promotional purpose. Participants would not have right to inspect or approve the finished product (photograph in this case). Participants will not receive any financial compensation for commercial and/or non-commercial use of images.

**Please sign below if you are allowing your photograph to be taken. You may still participate in this study if you are not willing to have the photograph.**

- I do not want to have my photograph taken  
 I am willing to have my photograph taken

**Signed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Privacy/Confidentiality/Data Security**

All of your information and interview responses will be kept confidential, which means they will only reported together with responses of others, as part of a larger report. Your name or other identifying information will not be attached to your responses in any report. After the report is prepared your name and other personal information will be removed before the data and papers is handed over to CARE.

**You have the right to withdraw from the study at any time.** In the event you choose to withdraw from the study, your responses will be destroyed and omitted from the final report. Neither your responses nor declining to provide responses will have any effect on your ability to participate in a village savings program.

De-identified data from this study may be shared with the research community at large. We will remove or code any personal information that could identify you before files are shared with other researchers to ensure that, by current scientific standards and known methods, no one will be able to identify you from the information we share. Despite these measures, we cannot guarantee anonymity of your personal data. Though non-identifying quotes from you may be used in the final report, your name and other identifying information will be kept anonymous. The data will be kept by two researchers from Cornell Abhishek Sharma and Hongdi Zhao in a password protected computer. Participation in this study is completely voluntary.

You are welcome to ask questions or raise concerns at any time about the nature of the study or the methods we are using. The main researchers conducting this study is  
Abhishek Sharma – [as3626@cornell.edu](mailto:as3626@cornell.edu) Phone Number - +1 (607) 262-0717, Cornell University  
Hongdi Zhao – [h399@cornell.edu](mailto:h399@cornell.edu) - +1 (347) 610-0832, Cornell University

Maureen Kwilasa and Benta Kayuni are other facilitators from CARE for this research. You can also ask them any question at any point of time. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) for Human Participants at 607-255-6182 or access their website at <http://www.irb.cornell.edu>. You may also report your concerns or complaints anonymously through Ethicspoint online at [www.hotline.cornell.edu](http://www.hotline.cornell.edu) or by calling toll free at 1-866-293-3077. Ethicspoint is an independent organization that serves as a liaison between the University and the person bringing the complaint so that anonymity can be ensured.

I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Your Signature \_\_\_\_\_ Date \_\_\_\_\_

Your Name (printed) \_\_\_\_\_

Signature of person obtaining consent \_\_\_\_\_ Date \_\_\_\_\_

Printed name of person obtaining consent \_\_\_\_\_