A Case Study: Exploring the Influence of the Informal Financial Sector on Food Security Among Smallholder Farmers in Uganda, Greater Luweero.

By Angella Nannozi

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Dedication

I dedicate this Thesis to: Mr. Kasirye Emmanuel Kyagaba, Mrs. Kasirye Gladys Babirye, my siblings, Mirembe Angel and in loving memory of Babi Angie-Blessing.

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Abstract

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Food insecurity is a global challenge especially to smallholder farmers. Yet, besides operating in the informal economy, many have limited access to finance. This qualitative study, therefore, will explore the influence of the informal financial sector (IFS) on food security among smallholder farmers in Uganda. The sustainable livelihood approach and food sovereignty were relied on as theoretical frameworks. Nineteen participants were interviewed, and four focus group discussions were held in 2019. An analytical framework was developed from the field study to aid in analyzing data. The findings reveal that the IFS enhances food security by providing households with access to mostly financial and social capital, which assist in financing activities along the agricultural value chain. The study further found that informal financial groups increase cash at households' disposal to invest in income—generating activities and consumption. The study recommends support from government and NGOs to the informal financial sector.

December 18, 2019.

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Acronyms

ACODE: Advocates Coalition for Development and Environment

AFAAS: African Forum for Agricultural Advisory Services

AFNs: Alternative Food Networks

BOU: Bank of Uganda

CARE: Cooperative for Assistance and Relief Everywhere

CBS PEWOSA: Central Broad Casting Project to Empower Women through Savings and

Loan associations.

CSAs: Community Supported Agriculture schemes

CSBAG: The Civil Society Budget Advocacy Group

FAO: The Food and Agriculture Organization

FSIN: Food Security Information Network

GDP: Gross Domestic Product

GHI: Global Hunger Index

IFAD: International Fund for Agricultural Development

IFGs: Informal Financial Groups

IFS: Informal Financial Sector

ILO: International Labour Office

MAAIF: Ministry of Agriculture, Animal Industry and Fisheries

NAADS: National Agricultural Advisory Services

NDP II: Second National Development Plan

NGOs: Non-Government Organizations

NUCAFE: National Union for Coffee Agribusinesses and Farm Enterprises

ROSCAs: Rotating Savings and Credit Associations

SHF: Smallholder Farmers

SILCs: Savings and Internal Lending communities

SMU: Saint Mary's University

UBOS: Uganda Bureau of Statistics

UGX: Ugandan Shillings

UN: United Nations

UNDP: United Nations Development Programme

UNICEF: United Nations Children's Fund

VSLAs: Village Savings and Lending Associations

WFP: World Food Programme

WHO: World Health Organization

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background to the study

This chapter presents the background to the study by showing the prevalence of food insecurity worldwide and at the national level of Uganda. It also presents the problem statement, the research objectives and the significance of the study.

The Food and Agriculture Organization (FAO) has defined food security as when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Food security mainly focuses on four indicators: food availability, food access, food utilization and stability (FAO, 2018). Food is a fundamental human right, and yet many people around the world go hungry every day. The rate at which people are undernourished worldwide is increasing. It is estimated to have reached 821 million people in 2017, which is one person out of nine globally, and the situation is even worse in the global south. In Uganda, where the agriculture systems applied depend on weather conditions that highly fluctuate as opposed to irrigation and where the majority of the population depend on agriculture for livelihood, food security is particularly challenging (FAO, 2018).

One hundred thirteen million people in 53 countries experienced high levels of food insecurity in the world's most severe food crises in 2018. Nearly two thirds facing acute hunger were concentrated in eight countries: Afghanistan, the Democratic Republic of Congo, Ethiopia, Nigeria, South Sudan and Yemen (FSIN,2019). More than half of the

population acutely suffering from food insecurity live in 33 countries of Africa, seven countries in the Middle East, and four countries in South and South-East Asia. Among the African countries, East Africa, which includes Uganda, Tanzania, Kenya, Rwanda and South Sudan, had the highest number of acutely food insecure people, estimated at 28.6 million, followed by southern Africa (23.3 million) and West Africa and the Sahel at 11.2 million (FSIN, 2019).

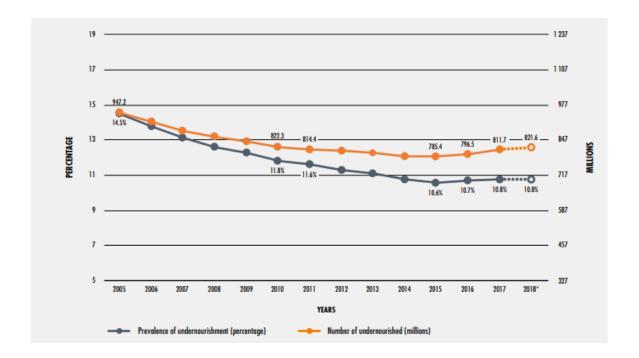


Figure 1. Number of undernourished people in the world. Note. Reproduced from The State of Food Security and Nutrition in the World (p.6), by FAO, IFAD, UNICEF, WFP & WHO, 2019.

The global number of people who are undernourished in the world was declining from 2005-2011. It remained slightly unchanged from 2015-2018. However, since 2012, the trend in food insecurity, considering the number of undernourished, has been slowly rising and according to FAO, IFAD, UNICEF, WFP & WHO (2019):

"Conflict and climate variability and extremes are exacerbating the trends in food insecurity. The uneven pace of economic recovery and continuing poor performance in many countries... are also undermining efforts to end hunger and malnutrition. Episodes of financial stress, elevated trade tensions and tightening financial conditions are also contributing to uncertain global economic prospects (p.xv).

From the graph above, in 2018 over 820 million people in the world were affected by hunger. Food insecurity, which leads to stunted growth among children, wasting, anemia, overweight, obesity, affects the ability of households to work and if it persists, it can cause death. Therefore, there is an urgent need for measures that can sustainably ensure food security, especially among developing countries.



Figure 2. Distribution of undernourishment in the world (in millions) in 2018. Note. Reproduced from *The State of Food Security and Nutrition in the World* (p.14), by FAO, IFAD, UNICEF, WFP & WHO, 2019.

More than half of the undernourished (513.9 million) are from Asia, 256.1 million are from Africa, 42.5 million people are estimated to be from Latin America and the Caribbean, 2.6 million people from Oceania, Northern America and Europe, and the 6.5 million people from elsewhere. The distribution of food insecure people in the world is further analyzed in Figure 3 below.

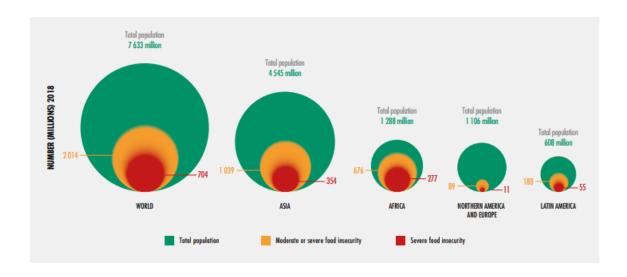


Figure 3. The concentration and distribution of food insecurity by severity across the regions of the world. Note. Reproduced from The State of Food Security and Nutrition in the World (p.20), by FAO, IFAD, UNICEF, WFP & WHO, 2019.

From Figure 3, it is clear that food insecurity, moderate and severe is higher in Africa, where half of the continent's population is either moderately food insecure or severely food insecure, compared to the rest of the world. Latin America comes next, with around 30 percent of the continent's population affected by either moderate or severe food insecurity. The third continent suffering from food insecurity is Asia, with 23 percent of the population, and then Northern America and Europe, with 8 percent of the total population suffering from moderate or severity of food insecurity. In developing economies

where the economies have slowed down or contracted, hunger continues to be on a rise (FAO, IFAD, UNICEF, WFP & WHO, 2019).

The integrated food security phase classification (IPC), a tool used to understand acute and chronic food insecurity and malnutrition (FAO, 2018), reveals that in Uganda 69 percent of the total population is minimally food insecure (IPC Phase 1). The population in this category is food secure to some extent. They have access to some food both from farming harvests and the market. 26 percent of the population is facing stressed food insecurity (IPC Phase 2). The population under this category has minimum food consumption and is unable to afford some essential non-food expenditures. 5 percent of the total population in the country is in crisis (IPC Phase 3). The population under this category has widening food consumption gaps with a deteriorating dietary diversity and high malnutrition rate. All regions in the country have a stressed population in terms of food security (Integrated Phase Classification, 2017). Whereas there has been a decrease in the reported figures of the population that is in crisis (5 percent in 2017 to 1 percent in 2019) and the population facing stressed food insecurity (26 percent in 2017 to 13 percent in 2019), there has been an increase in the total population in the country that is minimally food insecure (IPC Phase 1) from 69 percent in 2017 to 86 percent in 2019 (FAO, IFAD, UNICEF, WFP & WHO, 2019). There is still more to be done to achieve zero hunger. As part of this, the study explores the potential of the informal financial sector to help achieve food security among low-income earners.

The Global Hunger Index (2018), reported that in Africa, hunger is extremely alarming in the Central African Republic. In Uganda the level of hunger was classified as

'serious' according to the GHI measures. Uganda ranked 105th out of 119 countries that were evaluated with a 31.2 score. The proportion of the undernourished in the population was at 41.4 percent in 2018, greater than that of 2010, which was 30.9 percent. The prevalence of wasting in children under five years of age was at 3.6 percent in 2018, lower than the 2010 number of 4.8 percent. The prevalence of stunting in children under the age of five was at 28.9 percent in 2018 compared to 33.7 percent in 2010 and under the age of five, the mortality rate was at 5.3 percent in 2018 compared to 8.1 percent in 2010.

The hunger situation calls for action to ensure food security; no child should die of hunger, no child should suffer from acute malnutrition or chronic malnutrition, no person should be undernourished when the country Uganda has the potential to produce enough food for everyone given the country's comparative agricultural advantage of fertile soils, two major seasons in the year, and availability of fresh water to sustain agricultural activities compared to other African countries (MAAIF, 2017). This potential can be maximized by granting farmers, especially smallholder farmers, as they are the majority: adequate access to financial services, biodiversity friendly technology, market services and quality inputs. (MAAIF, 2017; NDP II, 2015; CSBAG, 2014).

Furthermore, increased food production may not be the sole solution to food insecurity, because there is plenty of food produced by industrialized food corporations that can feed the world (Holt-Giménez, Shattuck, Altieri, Herren, & Gliessman, 2012). However, this may not apply in Africa where the agriculture sector employs the majority of the population and where small-scale farming is the primarily source of food access. Small-scale farmers' incomes and food production can be increased if their agricultural

output is increased as well (Burney, 2014). This can result in an overall improvement of food security in Sub-Saharan Africa.

1.2 Problem Statement

"Food is our most basic need, such an obvious need that it often escapes our close attention until it is not there or until we consume an unhealthy mix of it" (Tansey and Worsley, 1995, p. 2). This quote illustrates how food, a fundamental human right, can easily be overlooked. Yet the lack of food or consumption of unhealthy food has upshots, which may include illness, death and many other consequences. Food insecurity is high among the population that depends on subsistence farming for livelihood (FAO, 2018). To address this challenge, strategies sought should aim at ensuring stability in food access and availability among smallholder farmers who are the majority not only in Uganda but also in many other developing nations (NDP II, 2015; MAAIF, 2017; UBOS, 2012).

Apart from the impact of weather changes, pest or disease outbreaks and a limited access to the market, the other contributor to food insecurity is low access to financial services by the small-scale farmers. In fact, many households who are predominantly engaged in farming or animal breeding have limited access to financial services (Karlan, Savonitto, Thuysbaert & Udrya, 2017). Yet, access to financial resources can contribute to increased food production and increased income thereby contributing to food security (Burney, 2014; Ocaya, 2011; NDP II,2015). Smallholder farmers rarely benefit from government agricultural programs because they engage in a range of activities that are not considered viable ventures (CSBAG, 2014). Microfinance institutions in general do not reach the rural and urban poor and tend to prefer high stock turnover businesses over the

risky farming activities (Burney, 2014). In fact, it is still a challenge for the formal financial sector to engage farming households, especially small-scale farmers, because it is difficult for such institutions to assess and conceptualize the risks associated with small-scale farming. What is more, there is only limited insurance protection for price volatility, changes in trade policies, drought, flood, diseases and dumping that is available for small-scale farmers (Ocaya, 2011).

Limited access to formal financial services for small-scale farming has increased the importance of informal financial groups among the poor (Yusuf, Ijaiya & Ijaiya, 2009). At present, there are only a few studies that examine how the informal financial sector influences food security in Uganda. The current study tries to address this problem. Focusing specifically on informal financial groups like VSLAs, SILCs and ROSCAs, this study explores the informal financial sector's influence in achieving food security among smallholder farmers.

1.3 The objective and research questions of the study

The purpose of this study is to explore the influence of the informal financial sector on food security among smallholder farmers of Uganda in greater Luweero. The following questions were investigated:

- i. What services are provided by the informal financial sector in Uganda?
- ii. What is the impact of the informal financial sector in Uganda?
- iii. How does the informal financial sector contribute to food security in Uganda among smallholder farmers?

1.4 Significance of the study

This study can provide a basis for development organizations that are aiming to achieve the Sustainable Development Goals, such as zero hunger (SDG 2), no poverty (SDG 1), and responsible consumption and production (SDG 12), in designing programs and projects that can improve the livelihoods of the low-income earners. The study can be used in policy formulations that seek to improve access to financial and market resources in the agriculture sector. In addition, it is a call for intervention on the side of the government to provide subsidized inputs, value addition initiatives, infrastructures like storage facilities at regional levels and transport means, which can support smallholder farmers in gaining access to markets for their farm products. It could also encourage the government to take a more active role in the national food system.

1.5 Conclusion

The general introduction section of the thesis presents the prevalence of food insecurity in the world with a detailed focus on Uganda. It indicates the food insecurity in the country using different scales by FAO's IPC and GHI. It also emphasizes that limited access to financial services by smallholder farmers is one of the factors that have led to persistent food insecurity among subsistence farmers. The section also clearly states the purpose of the study, which is to explore the ways the informal financial sector influences food security among smallholder farmers in Uganda. The IFS focus for this study is on the Village Savings and Lending Associations (VSLAs), Savings and Internal Lending communities (SILCs), and Rotating Savings and Credit Associations (ROSCAs).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the discussions and perspectives of different authors on the study topic. Included in this chapter are the definitions of key concepts—to provide a clear meaning of the terms used in the study; – a theoretical framework review of the sustainable livelihood approach, and an assessment of the alternative food networks and food sovereignty as a critique to food security. The literature on the informal financial sector, the nexus between the informal financial sector and food security, and the thesis statement as well are presented in this chapter.

2.2 Definitions of key concepts

The informal financial sector: This is the sector that provides financial services. That are not regulated and controlled by the state regulatory institutions. The informal financial activity may take the form of groups of individuals sharing a common bond like ethnic, residential or occupational (Germidis, Kessler & Meghir, 1991, p. 48). The informal financial groups are organized mutually and subject to rules and regulations of functioning which are laid and agreed upon between the members in a group.

By informal, this study intends not to mean unorganized, but rather the sector that carries out their activities with no regulations from a government regulatory body and no

central bank depository fund required. Some informal groups register at a district level, although this implies not that they are regulated by the central bank.

Some of the informal financial groups are created under the supervision of NGOs, others self-replicate. NGOs come up with different names for the methodologies and approaches that they use for developmental purposes. For example, Caritas' SILCs and CARE's VSLAs all have the same objective of providing financial services to those with limited access to these services. This study focused on the Village Savings and Loan Associations (VSLAs), Savings and Internal Lending Communities (SILCs), and Rotating Savings and Credit Associations (ROSCAs).

Rotating Savings and Credit Associations (ROSCAS): These informal financial groups provide an opportunity for the members to save and distribute the accumulated savings at a time to a member; the cycle continues until every member receives the agreed fixed amount. ROSCAs have existed for many decades across the world (Hsu, 2012). Money savers in these groups earn no interest on their deposits. The ROSCAs do not provide means of borrowing at will; one lottery selected member can keep the money collected for each meeting. These groups multiply without external facilitation (Germidis, Kessler & Meghir, 1991, p. 100: Bouman, 1995, p.371). The frequency of the meeting and the fixed contributions are agreed upon by members of the group, often though the meetings are on a weekly basis.

Village Savings and Loan Association (VSLAs): This is a project that was started by CARE International but widely adopted by many NGOs and community-based organizations, like CBS PEWOSA. These have many similarities with the SILCs except

that VSLAs have their savings in the form of stamps, members buy shares in terms of stamps, for example; a stamp can be 5000 UGX implying that members save in notes divisible by 5,000 (1 CAD =2828.82 UGX according to BOU October 24, 2019 rates. So, 5000 is around 1.77 CAD). Whereas in SILCs members can save any amount of money they have at a time, the savings amounts are not fixed by the number of stamps. To illustrate this, a member can save 5900 UGX if that is what they have at the moment (Caritas, 2019). The NGO usually provides training and a safe metallic box for safety, which is usually opened by three keys, held by three different members. VSLAs were introduced in Uganda in 1998 (CARE, 2014). These self-help groups tailor financial products like saving, lending and social funds to their members who are mainly farmers. Members contribute their savings to a common pool, and they usually meet weekly, fortnight or monthly. Members of the groups can then borrow funds at interest rates usually between 2 percent-10 percent per month (Musinguzi, 2015). At the end of the cycle which can be one year, savings and interest earned are distributed among members according to each ones' contribution. Members of the group can now use the funds to invest in different activities like farming, payoff school fees due and these financial groups at times self-replicate without external assistance (CARE, 2014).

Savings and Internal Lending Communities (SILCs): This is a project started by Catholic Relief Services and Caritas as a basis to increase low-income households' incomes through access to self-managed money savings groups (Asombobillah, 2011). As stated above, the SILCs have many similarities with the VSLAs. Members pool savings together, although in these groups savings are not redistributed there and then as it is in ROSCAs. Members accumulate their savings until the end of the cycle, during the process any

member who wishes to borrow can make a request through the chairperson. Lending continues until the agreed time when funds are distributed among members with interest earned from giving out loans. Members choose amongst themselves in a community those that they can trust to be with in the financial group. Because repayment of loans depends on the trust other members have in each other, the moral pressure compels members to do their obligations, since no collateral is required in processing loans. To avoid over borrowing in these financial groups, loans are given out depending on someone's accumulated savings. Some financial groups had it in the constitution that the maximum amount extended as a loan to a member should not exceed 200% of a member's savings.

Unlike the strategies laid by Government and MFIs which most times offer platforms for only credit services as a source of finance for investment to commercial farmers, leaving out savings which is a crucial source of finance for investment, besides being risky fee (Karlan *et al.*, 2017), the informal financial groups tend to close that gap and offer a saving platform and social fund.

Food security: is the situation that exists when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active healthy life (FAO, IFAD, UNICEF, WFP & WHO, 2018). Or "food security means having adequate supplies of affordable food throughout the year to ensure a healthy and productive life" (Naylor, 2014. p. 7)

Food insecurity: Food insecurity refers to the lack of secure access to enough amounts of safe and nutritious food for normal growth and development and an active and healthy life (FSIN, 2019).

Smallholder farmers: Smallholder farmers are households involved in agricultural activities like crop production and livestock rearing, usually on three acres of land or less (Ministry of Agriculture and Animal Industry and Fishery (MAAIF)). This kind of farming depends highly on family labor, casual labor and often not mechanized, they produce principally for household consumption, and if there is a surplus, it is then sold off in the markets, they usually grow more than one crop, or and rear some livestock as a way of mitigating the agricultural risks like pest outbreak.

2.3 Theoretical framework review

Theoretical framework about food security especially those that emphasize the role of smallholder farmers in reducing food insecurity and the resources they need, are discussed in this section. These included: food sovereignty—a critique of food security approach which started as a movement by small-scale farmers (La Via Campesina), the second theoretical review is the sustainable livelihood approach reviewed from works of (Ellis, 2003) & Serrat, 2017). In regard to the sustainable livelihood approach, the informal financial groups are presented as the inventive solution that needs to be strengthened by communities, NGOs and the government in improving households' livelihood. The different resources needed for a livelihood under this approach include; natural resources, physical capital, human capital, financial capital and social capital, and the third theoretical framework that is presented in the study is the alternative food networks approach.

2.3.1 Food Sovereignty as a critique of food security

Food sovereignty, a concept that came about largely because of the inadequacy of the food security framework to defend the interests of peasants, smallholder farmers and rural communities—is a movement that has gained momentum in food debates both in the global North and global South (Menser, 2015, p.60). Food security approach allowed for the economic position of the small farmers to be undermined. For example, corporations advocating the use of genetically modified seeds leading to loss of seed sovereignty by the small-scale farmers. Besides the expensive maintenance required of small-scale farmers to grow the genetically modified organisms, which leads to continuous exploitation of farmers as they have to rely on corporations' prescribed inputs (Paull, 2015), like: herbicides, fertilizers, insecticides, and seeds.

Furthermore, promoting multinational corporations, which enjoy economies of scale to compete with the farmers' produce on local markets without tariffs imposed on trade encourages dumping in developing economies. Food security, based on market access only is riskier for developing economies (Pechlaner & Otero, 2010). When the market is the sole provider of food, low-income earners are prone to food insecurity since any changes in the market forces impact negatively on the livelihood of the smallholder farmers.

This study contends with Menser's (2015) argument that since both concepts (food sovereignty and food security) aim at eliminating hunger, food sovereignty can be the 'means component' missing in the framework of food security. Therefore, this study emphasizes that food sovereignty as a concept that focuses on the right of each state and

community to have control over own food production and determine the appropriate food system while considering the environmental, cultural and social concerns (Declaration of Nyeleni, 2007) —can be adapted as an approach to ensuring food security.

In this regard, Menser (2015) argues that food sovereignty is the medium by which food security can best guarantee the right to food. And as Martiniello (2015) asserts food sovereignty has progressively advanced a new set of ideas and practices related to territory, locality, localization of economies and agro-ecological practices that need to be considered by states. Therefore, focusing on smallholder farmers in Uganda and the challenges they face, the study further argues that through access to informal finance, small-scale farming can aid in achieving food security.

2.3.2 Sustainable livelihood approach

This approach focuses on strengthening households' invented solutions to improving their livelihood (Serrat, 2017). This study analyzed the productive resources that are accessed by households through their participation in the informal financial sector for food production and trade as important factors in ensuring food access. The resources which are detailed by the framework include natural resources like forests, land, water and environment, financial capital (access to money, savings, social funds and loans), human capital (ability to work, education, skills and knowledge to carry out a task), physical capital (storage facilities, roads, tools and technology) and social capital (networks and associations that aim at helping each other) (Serrat, 2017; Ellis, 2003).

This approach informs awareness of the asset status of households as fundamental to the understanding of the options open to them to pursue a living. In this regard, the assets that households are able to access and use from the informal financial groups in achieving food security. Factors that modify access to the five main resources are also analyzed in the livelihood approach. For example, identifying policy and institutions that block or boost people's ability to construct improved livelihoods which might include culture norms—land tenure system, government—centralized state rules and regulations, and institutions and policies—community based natural resource management policies and institutions (Serrat, 2017).

Additionally, the livelihood approach also links to the concept of vulnerability, defined as a high degree of exposure to risk, shocks and stress and proneness to food insecurity (Serrat, 2017). Vulnerability threats such as market price fluctuations, sudden disasters like flood or drought or pest and disease outbreaks can negatively impact the food security of smallholder farmers. Therefore, any initiative that can boost household resilience to such threats is important to support for the sake of households' livelihood.

2.3.3 Alternative food networks (AFNs)

Alternative food networks focus on food production and how people can access food through the local networks especially for households who are less engaged in agriculture as an economic activity (Jarosz, 2008). There is a rise in demand for short food supply chains, a food system where the consumers can interact and establish direct relationships with the producers of food. Such movements have been named the alternative food networks. People who are concerned with moral consumption, consumers feel the

need to relate to local food producers who want a better price for the surplus food produced (Maye and Kirwan, 2010, p.1). AFNs are characterized by diversity, local markets, quality and fresh food produce compared with the global food system which is characterized by monoculture, quantity, manufactured and processed food and hypermarkets. Alternative food networks (AFNs) constitute of fair trade, organic farming, and community-supported agriculture (CSA) schemes, which can be equated to small scale farming practiced in many developing countries (Zebre, 2014).

It is important to note that such movements are on a rise in the global North, because of the focus on re-embedding agricultural production into the social context, seeking to link more directly the sites of production and consumption bringing the producers close to the consumers, while emphasizing the moral economy, the collective way of sharing food as a community and to mainly challenge the global food system. However, the transformative role of the alternative food networks is limited considering the global food system in which they operate in the global North (Zebre, 2014); this is evident in the affordability of products marketed and sold under the label of social justice, fairness, ethical consumption, organic, biodiversity conservation, as these products turn out to be more expensive than products for many middle- and low-income earners. As a result, debates have increased that question whether the AFNs really aim at challenging the free market food system or seek to serve the niche markets (especially associated with class, higher income earners and middle-income earners) and compete favorably with the conventional food networks in the global North.

While it may be an alternative in the global North, local food networks are the major source of food in the global South. Thus, a short food supply chain or local food networks would be preferable to alternative food networks considering the context of the discussion. However, AFNs have been developed as an approach to the food system to mean the same concept. Therefore, since smallholder farmers in developing countries produce primarily for their household food consumption, to maintain the short food supply chain, which is now an alternative in the global North to ensuring food security, there is the need for smallholder farmers to access resources to boost their farm efficiency and income generation. The principles promoted under AFNs are in line with the interests promoted through food sovereignty movement. In fact, food sovereignty is considered an alternative food system to the corporate food regime. Thus, the study relies on food sovereignty critique to food security.

2.4 The informal financial sector

Informal finance is defined as non-bank financial services which include; saving, lending and insurance, which is outside the officially recognized financial sector and which are not regulated by the monetary body (Hsu, 2012). The sector is usually by and for marginalized groups, though it is important to note that not all actors in the informal sector are marginalized (Cozzens & Sutz, 2012), and employed in the agricultural sector.

In China, informal financial transactions were found to be fundamental in increasing domestic consumption. The informal financial sector provided over 30 to 40 percent of financing to small and medium enterprises which account for 60 percent of China's GDP (Hsu, 2012). However, the informal financial sector's impact on development

in many developing economies is difficult to determine because the information is often not available (ILO, 2015). In Sub Saharan Africa, including Uganda, the informal sector employs more than the formal sector and many households employed in the informal economy rely on the informal financial sector for financial services.

There are several factors that push people to the informal financial sector, included among which is that formal financial providers are not operating in some rural and periurban areas for some reason. Another factor is the poorly designed interventions by the government with little agricultural extension support and limited funds to small-scale farming. The government, rather, aims at enforcing rules, regulations and laws, than teaching and funding projects aimed at sensitizing people about better agricultural practices and the rules and regulations (CSBAG, 2018).

In providing financial services, the promissory features of transactions must be honored to operate smoothly. For formal financial providers, come up with strategies to see that the money from their customers who deposit is always available when they wish to withdraw and earn interest from the loans issued. To ensure the promissory feature between the formal financial institutions and loan applicants, banks evaluate for the credit worthiness and require their customers to present collateral security, just in case, a customer is unable to repay a given amount of loan plus interest (Goodland, Onumah, Amadi, & Griffith, 1999). Many low-income earners, however, have no collateral to pledge to acquire loans, have not established the creditworthiness required by the formal financial institutions. In some cases, some financial institutions can be so far from households' reach.

2.4.1 Microcredit institutions and informal financial groups

It is important to note that the informal financial sector has for long been mistaken with and equated to the micro-lending organizations or the micro-credit associations which have been reviewed and found to increase people's indebtedness, besides having little impact or perhaps negative impact on households' livelihood (Bateman & Chang, 2009). Many of the microcredit institutions mobilize not saving of funds by households; they rather, extend credit services mostly to households (Karlan et al., 2017)). The confusion between the informal financial groups and microcredit institutions creates the wrong impression to many readers who may not have had a chance to interact with the different microfinance institutions. To rectify this misunderstanding, it is worth noting that microfinance and micro-lending organizations are formal or semi-formal institutions that are, at times, regulated by a state regulatory body like BOU. Micro-credit associations are not owned by the members they serve, whereas the informal financial groups discussed in this study are owned by the members who mutually agree on how the group will be operated. The major aim of the informal financial groups is to ease access to finance, as opposed to the MFIs which may aim at making profits. In addition, the minimal operating costs of the informal financial groups are borne by the members, whereas in micro-lending associations the operational costs are incurred by organizations that are extending the financial services to the communities (Germidis, Kessler & Meghir, 1991).

The above description provides the differences between the informal financial groups and the micro-credit institutions that were critiqued by Bateman and Chang. However, there are some lessons that can be assessed in line with the informal financial

groups in this study. The critical evaluations of the critiques are explored in chapter 5 basing on the field study findings.

2.5 Nexus between the IFS and food security in developing countries

Low levels of finance in agriculture and food insecurity are interrelated (FAO, IFAD, UNICEF, WFP & WHO, 2019). This is so, because access to finance can boost food production and productivity. Agriculture is a major sector to many African countries, it contributes significantly to GDP (FAO, 2018) and most of the countries' population derive their livelihood from agriculture. Yet funding to the sector is minimal in many developing economies. This is articulated by the following:

Government spending on agriculture compared to agriculture's contribution to the total economy has declined by 37 percent, the ratio fell from 0.42 in 2001 to 0.26 worldwide in 2017. In addition, aid to agriculture in developing countries fell from nearly 25 percent of all donors' sector- allocable aid in the mid-1980s to only 5 percent in 2017, representing a decrease of \$12.6 billion. (Report of the Secretary-General on SDG progress, 2019, p.8)

This illustrates a sharp decline in funding to the agriculture sector. More to that, in Uganda the funding has for two decades remained below 5 percent of the national budget allocation of resources and benefits (CSBAG, 2018).

Food insecurity is closely aligned with poverty (Ocaya, 2011). Households are able to reduce poverty and food insecurity when they can produce enough food and have the income to enable them to afford the food types they cannot grow. Thus, if community

members can generate income from their agricultural activities and increased food production, hunger and poverty can be reduced among smallholder farmers in the informal economy.

If small-scale farmers have an opportunity to access saving and loan services to acquire inputs needed for better yields, to invest in irrigation and to pay casual laborers this can strengthen their resilience and boost increased agricultural output. From increased production, smallholder farmers can have enough food to feed their families and to sell to the market. It is in the informal financial groups that most small farmers in Uganda are able to access financial services. Furthermore, in informal financial groups, members share knowledge about better practices that can boost income generation and better practices on how to improve food production or risk mitigating strategies. These financial groups act as safety nets by sharing food amongst members that experience hardships in accessing food in the absence of any formal food assistance during times of scarcity. Furthermore, diversification which is a common risk mitigation strategy among small-scale farmers (Binns, Dixon & Nel, 2012) can be promoted if households have access to finances. Thus, through the informal financial sector, households have the opportunity to invest in other activities. For example, investment in trading activities which can contribute to food security through increased incomes.

Another key aspect in the informal financial groups is social capital which provides networks for marketing the farm products. The bargaining power of food producers can be increased if members decide to sell to the market as a group. Thus, the smallholder farmers can get fairer prices for their food supplies in the market to cover other expenses in the

household setting. With access to the different resources, the main argument of this study is that these groups can contribute to reduction of food insecurity among the smallholder farmers with limited access to finances.

2.6 Sustainable Development Goals

This study is in line with achieving SDG 2, which is to end hunger, achieve food security and improved nutrition and promote sustainable agriculture. However, food security is closely linked with other Sustainable Development Goals. For example, Burney, notes that there is an overlap between food insecurity and low income (2014). This implies that families that are food insecure, are most of the time also poor households. In 2010, the World Bank measurements of poverty were used in calculating the economic access to food (Naylor, 2014). Holt-Giménez, Shattuck, Altieri, Herren, & Gliessman, 2012, also note that hunger is caused by poverty. The interconnectedness between food security and other SDGs, makes food security an essential goal because some relations with other goals are causal, repercussion and overlapping. In addition, food insecurity affects people's health. Malnutrition, including obesity and overweight, was found to be a major cause of diseases in the world and is at most time caused by food insecurity (FAO, 2018). Thirdly, the quality of education (SDG 4), can be affected by hunger. People cannot do much on empty stomachs, students and pupils cannot concentrate in class if they are hungry. Thus, food insecurity has a negative impact on the quality of education too (FAO, IFAD, UNICEF, WFP & WHO, 2019). Finally, food insecurity triggering violence; people who are distressed by hunger can destabilize peace in a region, in search for food. All this reveals how important it is to ensure food security (FAO, IFAD, UNICEF, WFP & WHO, 2018).

This study focused on small-scale farming, a practice that has gained recognition in biodiversity conservation and has come to be presented as one of the responsible consumption and production practices (SDG 12) (Winters, 2018). Clean water and sanitation (SDG 6) is also a major component in ensuring food and nutrition security at food consumption levels and food productions levels. Climate changes have great devastating effects on the livelihoods of households, especially farmers (Winters, 2018). Floods, droughts, and heat waves reduce the productivity of farmers (Naylor, 2014). Hence, any factor that affects farmers' productivity negatively, contributes to the unending poverty, hunger among families that depend on agriculture for a livelihood.

2.7 Thesis statement

The study explores the influence of the informal financial sector on food security among smallholder farmers in Uganda. The major argument of the study is that the IFS contributes to food security because it provides the members (smallholder farmers and small entrepreneurs) within the informal financial groups access to sources of funds that can finance the non-farm and agricultural activities. And since, access to food widely depends on food production, market access and food transfers (FAO, 2018). It is believed that the IFS aids in achieving increased food production, increased incomes and food transfers within the informal financial groups.

2.8 Conclusion

The literature reviewed reveals that the nature of the informal financial sector that is studied; it's relevance in the development of different economies and in reducing food

insecurity. It critically presents the setbacks of the micro-credit associations and formal financial institutions. The major theoretical frameworks that guided this study and applied to the case study are: food sovereignty as a critique for food security—emphasizing the role of small-scale farmers where lands are arable to produce and determine their foods. And the sustainable livelihood approach, which looks at the resources necessary in household's lives. This section of the thesis also revealed the interconnectedness of food security (SDG 2) with other SDGs, thereby emphasizing the need to achieve zero hunger.

CHAPTER 3

AGRICULTURE SECTOR IN UGANDA

3.1 Farming in Uganda

This chapter presents the major economic and social activity in Uganda and the key players in the agriculture sector. It also shows the current farming activities, kinds of farming and the evolving discussion around urban agriculture in the country.

In Uganda the Agriculture sector is as central to the economy's growth as it is with many African countries especially Sub-Saharan Africa, where it remains the predominant sector of employment. The agriculture sector is the main source of income to many households, it employs over 70 percent of the labor force. It contributes to half of Uganda's export earnings especially from coffee (CSBAG, 2018). Additionally, according to the Ministry for Agriculture, Animal Industry and Fisheries (MAAIF, 2017), the agriculture sector has for the last two years contributed about 25 per cent of the Gross Domestic Product (GDP).

The Agriculture sector comprises different kinds of farming. First crop production, which is about the different cash crops and food crops that are grown in the country. The major cash crops for the country include: coffee, tea, cotton, tobacco and sugarcane. Crops grown primarily for consumption include Plantain (Matooke), maize, yams, millet, sorghum, rice, cassava, sweet potatoes, pumpkins, beans, groundnuts and many others. Different regions in the country have different staple foods and different kinds of soils; thus, food crops vary according to region. Secondly, livestock production is common. The

livestock reared include cattle, goats, sheep, pigs, rabbit keeping, and poultry for production of meat, milk, beef, pork and eggs. The third category is that of fruits and vegetable production. The most common fruits include jackfruit, passion fruit, sour sop, mangoes, watermelons, pineapples, guavas, pawpaw, oranges, avocado and many more. The other category of farming is fishing, which is practiced around the open water bodies usually in freshwater lakes, rivers and commercial fish farming in ponds. Along the agricultural value chain, there are different activities that occur for example meat preparation & processing, fish processing & preservation, edible oils & fats production, dairy production, grain milling, bakery production, sugar processing, coffee processing, tea processing, animal feed production, beer production and so many more (UBOS, 2012).

Farming activities in Uganda vary according to different regions. In Luweero for example, households who are engaged in agriculture in 2013 were estimated at 85 percent and were involved in both crop and animal husbandry, whereas in some regions, farmers may rely more on livestock, like it is in the Northern region of Uganda. Livestock rearing activities in the Luweero include poultry rearing, piggery and cattle rearing. The main crops grown in Luweero include cassava, sweet potatoes, Pineapples, tomatoes, mangoes, matooke, maize, beans, cabbage, passion fruits, greens and vegetables, fish farming and horticulture in some parts, oranges and coffee among others (Namara, *et al.*, 2013).

3.2.1 Small-scale farming

The proportion of small-scale farmers in terms of food produced in many countries in the global South ranges from 40 to 85 percent compared to 10 percent in Europe (FAO, 2018). In Uganda most of the population lives in rural areas estimated at 77 percent where

the major economic activity is agriculture (World Bank, 2018). The agriculture sector in Uganda is dominated by smallholder farmers who produce food for subsistence. According to Government of Uganda, Ministry of Finance, Planning and Economic Development in the budget speech for fiscal year 2018/19, it was estimated that more than 69 percent of Ugandan households are engaged in subsistence farming/small-scale farming. Smallholder farmers usually carry out farming on 3 acres of land or less (MAAIF, 2017). This kind of farming depends on family and casual labor and often, activities are not mechanized. Members in this category produce principally for their household consumption, and if there is a surplus, it is sold off in the markets. They usually grow more than one crop or rear some livestock as a way of having a variety of foods for consumption and as a way to mitigate the agricultural risks like pest outbreak.

As noted by Moyo (2016), there are different categories of small scale production: entirely subsistence farmers, who are often poor family households producing primarily for consumption, semi—subsistence farmers—they often produce for the own consumption and the surplus sold to the market, and finally the market oriented farmers—the smallholder farmers who majorly produce to sell to the market and some smallholder farmers in many communities are casual workers on established farms. Or as observed by Burney (2014), some smallholder farmers are net consumers—they consume all they produce. Other smallholder farmers are net producers, producing food principally for sale. For example, they may grow one cash crop like coffee and purchase food consumed at home from the sale. Some marginal net producers may produce food crops and cash crops for sale and some for household consumption. The categories are further affected by other factors year after year. For example, due to the low production of cash crops caused by pest-outbreak

in the previous season, some farmers may be frustrated and resort to food crops in the next season. Smallholder farmers often practice mixed farming, where they grow more than one food or cash crop and rear animal. It is also important to note how this is relevant to agrobiodiversity conservation. However, not all smallholder farmers practice mixed farming.

According to the NDP II (2015), the smallholder farmers who are predominantly in the informal agricultural value chain are the key players in achieving zero hunger (Sustainable Development Goal 2). It makes sense since they are the majority of the country's population. However, access to finances and markets by this group (small-scale farmers) is limited, leading to minimal investment and a failure to fully tap into smallholder farmers' potential to contributing to zero-hunger.

Moyo, 2016, notes that family farms or what is best known as small-scale farms are indeed the major contributors to the agriculture sector growth and food production in sub Saharan Africa. However, the value of small-scale farming is considered insignificant, since most of the production is for consumption and it never goes through the market, that to "developers" is trivial. Thus, smallholder farmers' contribution to GDP, food security and employment is largely un-quantified and underestimated leading to justification for mostly large-scale farming by international and national agencies. Agriculture development that prioritizes the needs of smallholder farmers is widely framed as a societal goal by the national governments and international agencies, but it remains an elusive goal (Isgren, 2018). Many "developmental agencies" like the World Bank, IFAD, and government of Uganda, finance large-scale farming projects, some of which have facilitated displacement of many small-scale farmers (Doss, *et al.*, 2014). The IFAD asserted that for so many years, studies have shown that smallholder agriculture has a large impact on economic growth

and poverty reduction, yet, in the agencies' analysis, a small fraction is attributable to the economic growth and poverty reduction (IFAD, 2011). Such an assertion is not only biased but seems to lack the analysis of the realities of the smallholder farmers in many developing countries. Smallholder farmers in Uganda and many developing economies have been left to forge their growth with limited support from the government (Busingye, 2017). In addition, De Schutter 2011, notes that the agriculture sector was largely abandoned in the 1990s, the state institutions that were directing its development were dismantled. The support to farmers seized, all assistance to the sector significantly declined and the result was rural poverty of many small-scale farmers who resorted to subsistence farming. Since, small-scale farmers have limited exit strategies into other livelihood options (Fridell, 2014) After that, governments became almost irrelevant to the lives of many small-scale farmers (De Schutter, 2011). However, the government remains the primary player in shaping the agriculture sector (Fridell, 2014). Examples of institutions that were closed in Uganda include the Uganda Cooperative Bank and the Greenland Bank, both closed in 1999 by the Central Bank—Bank of Uganda.

The second category of farming is the medium scale farming, where the scale of production is between 5-15 acres of land (MAAIF, 2017). It is estimated to be more than 12 percent of farmers in Uganda; some employ machines on their farms, others depend on casual labor as a source of labor especially during the times of cultivating, weeding and harvesting (NDP II, 2015). Many institutions with access to land carry out this kind of farming like secondary schools and tertiary institutions. Medium-scale farmers often times carry out mixed farming where they rear some animals while growing some crops on the same piece of land.

3.2.2 Large-scale farming

The other category of farming in Uganda is large-scale farming, which is less than 9 percent of agricultural production in the country (MAAIF, 2017). Large scale farming/industrial farming in Uganda is labor intensive. The major focus of this category farming is to sell to the local or export markets. Examples in Uganda include; large plantations of sugarcanes, tea plantations, horticultural products, dairy farms and coffee plantations.

Norton (2014) notes that there are two parallel agriculture value chains that exist in many developing countries. One is the formal which is often characterized by large scale farming, farmers' cooperatives and wide access to both national and export markets. The second value chain is informal, which is characterized by small- scale farming, flooded by middlemen and limited market opportunities. This is to further emphasize that strategies are needed to connect small farmers to potential markets. For example, through developing the road structure in all areas of the country.

3.3 Urban agriculture

There is a rapid growth of cities across the continent of Africa, although the rate of urbanization may vary from country to country, it is estimated that the rapid growth in cities across Africa is both recent and rapid (Binns, Dixon & Nel, 2012, p.146). Sub Saharan Africa is undergoing a dramatic urban transition associated with a growing trend of poverty (Haysom, 2018). The 2016 World Cities Report estimated that the urban population in

developing countries would double due to rapid urbanization. Areas covered by cities are estimated to triple by the year 2030.

Most of the time, when one mentions smallholder farmers, it is quickly linked to rural farming. Yet, in many developing countries urbanites also carry out agriculture as a source of food and income. For example, it is estimated by Kampala Capital City Authority that approximately 40 percent of the underdeveloped land in Kampala city is utilized for agriculture activities like vegetable production, livestock rearing mainly on small-scale production like poultry rearing, rabbitry, though, the productivity is deemed low. The practice of farming activities in urban areas has come to be termed "Urban Agriculture". It is mostly on a small-scale and as De Zeeuw (2004) asserts, "it is not the urban location which distinguishes urban agriculture from rural agriculture, it is because it is embedded in and interacting with the urban system." Often rural and urban agriculture attract informal finance because of the uncertainty around the agricultural sector. Thus, both rural and urban agriculture have limited access to finance.

There is no doubt that the rate of urbanization is high in many developing countries. However, the fact that more than half of the population in many developing countries still live in rural areas cannot be ignored (The World Cities Report, 2016). The interrelations that exist between the urban and rural areas also strengthen the fact that increasing food production among the rural and urban sector is relevant to contributing to food security. Furthermore, as noted by Binns, Dixon & Nel (2012), many people living in the cities of developing countries maintain a strong relationship with the village of their birth. When some people go for ceremonies like weddings, introductions and other traditional rituals in

their villages, they usually come back to the city with food. In Kampala city, the taxi and bus system of transportation also enables families in the villages to send food to their relatives and friends in the cities. Others go back home to get food, especially, if the village is not so far from town. And some people can be living in the urban areas but have farms in rural areas and employ workers at their farms to produce food, and during the times of harvest, they get their food for consumption from their small-plot farms. This section highlights the relevance of urban agriculture and the interrelations that exist between the urban and rural areas which require increased food production.

3.4 Agriculture financing in Uganda

The Agriculture sector, which is the most important sector in Uganda's economy, has a low growth rate estimated at less than 4 percent for over two decades since the structural adjustment programs in the 90s (CSBAG & Food Rights Alliance, 2019; Agriculture Finance Yearbook, 2015). The country's agricultural output growth is estimated at 2% per annum over the last five years, which is below the 3-5% growth rates in other East African countries. And the national budget approved to the agriculture sector has remained less than 5 percent for the last two decades (CSBAG, 2018; World Bank, 2018).

Financial services such as savings, credit, and insurance provide opportunities for improving agricultural output, food security and economic vitality at household levels (FAO, 2018). However, it has been noted that rural households who are predominantly engaged in farming or animal breeding, depending on the region, have limited access to formal financial services (Karlan *et al.*, 2017). In addition, the Financial protection forum,

Uganda (2019) note that "formal credit for agriculture production accounts only for 2.8% of the agriculture GDP. Only 6.3% of small-scale agribusiness companies have access to a loan or line of credit as opposed to 44.1% in Kenya." At the Malabo declaration in 2014, all African countries were advised that to ensure growth in the economy and food security; governments should allocate at least 10 percent of the public expenditure to agriculture and ensure efficiency and effectiveness of that spending. The Ugandan government committed itself to the declaration. However, Government funding to the Agriculture sector continues to be insignificant, for example for the past 6 financial years the budget allocation has been less than 5 percent of public expenditure (NDP11, 2015), regardless of its irrefutable contribution to the economic growth of the country and potential to achieve sustainable goal 2. Many Government arrangements to boost the agriculture sector commonly benefit large-scale farmers, for example, the Agriculture Credit Facility under the Bank of Uganda collaborating with commercial banks, offers subsidized credit benefits majorly the commercial farmers (Agricultural Finance Yearbook, 2015). As a result, many smallholder farmers face unfair competition when they produce a surplus to the market to earn revenues to pay off their household expenses.

Farmers and many unbanked households can save money for future use if institutions operate within their proximity. However, this potential is threatened by the absence of the financial institutions in many rural areas and lack of customized financial services to different groups of people. Furthermore, farmers would like to borrow money from institutions that do understand their needs: that the agricultural produce is always not as expected because it highly depends on weather conditions, and pests and disease outbreaks occur unexpectedly. The financial institutions that would give an extension for a

grace period without high penalties of not paying in time, financial institutions where collateral is not always a must, where face to face contact and familiarity matters, which is common with the informal finance sector (Hsu, 2012).

In the formal financial institutions, credit scoring ratings have to be established which is not easy to do among smallholder farmers given their inconsistent incomes. Furthermore, few customers in rural and peri-urban areas cannot guarantee recovery of the operational costs for banking institutions. Many players in the farming sector are women (among the females in the working population, 70 percent are engaged in agriculture compared to 58 percent of males) and they have limited ownership of land (UBOS, 2012).

The informal financial sector in Uganda includes Rotating Savings and Credit Associations (ROSCAs), Savings and internal Lending communities (SILCs), Village Savings and Loan associations (VSLAs), investment and saving clubs, financial services by employers. It also includes borrowing from a shop, family or friends, money lenders (FinScope III, 2013). This study focuses on the groups that are basically common in the informal economy: the ROSCAs, VSLAs, and SILCs. To ensure the food security of smallholder farmers who remain more vulnerable to food insecurity due to unstable incomes, seasonal food prices volatility, and greater dependency on own-production for food. The informal financial sector cannot be overlooked given the fact that government funding is limited as well as formal banking sector reaches not the poor who are basically farmers.

3.5 Gender and agriculture

Most of the households engaged in small-scale agriculture are female households who produce food for families and market the surplus to earn a living (Riley and Legwegoh, 2018). Palacios-Lopez *et al.*, (2017) notes that "the contribution of women to labor in African agriculture is regularly quoted in the range of 60-80 percent. The average female labor share in crop production in Uganda, Malawi, and Tanzania is slightly above 50 percent" (p.2). As emphasized at the declaration of Nyeleni (2007), it is important to recognize and respect women's roles and rights in food production, and to involve women in all decision-making bodies so as to achieve food sovereignty. However, women have limited access to formal financial support like credit services since ownership of property, which can be pledged as collateral in some cultures is limited.

The potential to increase food production and income generation is threatened by the fact that women have limited access to productive resources like land. In addition, in search of employment and decent training opportunities, women have face many barriers compared to men (Riley & Legwegoh, 2018). The gender-based discrimination in employment in many African countries has led to limited economic autonomy for women. Yet, there is a relationship between economic accessibility of foods and consumption of a variety of diets (Riley and Legwegoh, 2018). The authors note, though, that grouping households only as headed by female or male persons is a challenge in the analysis of households that are more food insecure because many other factors shape food insecurity among households. Age and economic autonomy were found to be more applicable characteristics to consider in analysis of food secure households. Categories like

households headed by young unmarried mothers, elderly female households as heads of the families in polygamous marriages, divorced career women, widowed elderly heads of households were suggested to be used in the analysis of food insecurity in line to gender. In Blantyre, for example, it was found that older women were more food secure than households headed by young mothers, whereas in different regions results maybe different depending on different factors. To achieve food sovereignty, it is important for a state to ensure equitable access to resources especially by the marginalized groups in communities

3.6 Conclusion

In the above section of the thesis, the analysis focused on the agriculture sector in Uganda, which is the main employer of majority of the population in the country. It also revealed the proportion of smallholder farmers in Uganda and the different kinds of small-scale farming. This chapter provides a description of the agricultural activities that are carried out in Uganda and shows the limited financing to the small-scale farming activities by the state.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

This chapter explains the methodology used in collecting data, the research approach that was adopted, research design, data needs, data collection methods and instruments. It also presents the sample size, the study area and the ethical considerations.

A field study was conducted in Uganda, Luweero diocese, also known as Greater Luweero in 2019 for two months. A case study approach was adopted to comprehensively capture the views of the participants (Mayoux, 2006) on the informal financial sector and how it influences food security among households. In addition, to explore the intensive links and to reveal the complexities (Gottlieb, 2006) within the IFS and food security. Given the fact that food security may not be a direct benefit from the informal financial sector, a case study was carried out to explore participants' thoughts, experiences and observations over time from interacting with the different informal financial groups. Importantly, using a case study approach allowed the researcher to collect data using a variety of research tools without restricting participants to preset responses (Yin, 2013).

4.2 Data needs and time scope

A field study was conducted to collect information that explains the activities of the informal financial sector in Luweero Diocese and the casual links between the informal financial sector and food security among households. The data collected to explore the

influence of IFS on food security was: the objectives and services offered in the informal financial groups, the investment and consumption decisions made by the informal financial group members. The research also explored the reasons to why people borrowed money from the informal financial groups, the activities in which they invested or spent the money saved, and the events in which the social funds benefited members. Since the major economic activity in the study area was farming, information about agricultural extension services was also collected.

4.3 Characteristics of the study population

Luweero Diocese, also known as Greater Luweero is a region in central Uganda comprising of three districts: Nakaseke, Nakasongola and Luwero district. The selection of Luweero Diocese as a case study is driven by the fact that the area is predominantly a rural area with few urban centers and the major economic activity is farming at small-scale. 76 percent of the households depend on subsistence farming as the main source of livelihood and 16 percent depend on employment (Namara, *et al.*, 2013 on Luweero District local government performance). In addition, the presence of the informal financial groups in the district (CARE, 2014: Caritas, 2019) was also another reason why greater Luweero was considered as the case study for this research project. The government of Uganda attempted to boost farmers' productivity through the NAADS programme in the region. However, the attempts did not yield much of the objectives, because the programme that was supposed to benefit all farming households was politicized and the beneficiaries were based on political ties with the ruling party (Namara, *et al.*, 2013). Some of the beneficiaries received poor quality agricultural inputs worse than what the farmers in the area had. This later led

to failure of the project in the region (Namara, *et al.*, 2013). This implies that the farming households have to forge their own initiatives to improve their livelihood.

4.4 Sample size and sampling techniques

Data was collected from one VSLA, four SILCs and one ROSCA, which were selected with the help of a community informant in Luweero Diocese. All the selected financial groups are informal and presented a diverse way of carrying out different activities, which richly informed the study. Furthermore, participants were purposively selected to enable close focus on the cases and issues of interest (Mayoux, 2006).

Table 4. Summary of number of interviews and focus group discussions.

| Informal financial groups | Participants for | Number of focus group | |
|--------------------------------|------------------|------------------------------|--|
| | interviews | discussions with the members | |
| VSLAs | 3 participants | 1 focus group discussion | |
| 4 SILCs | 10 participants | 3 focus group discussions | |
| ROSCAs | 2 participants | N/A | |
| Formal financial institutions | 2 participants | N/A | |
| Agricultural extension workers | 2 participants | N/A | |
| Total | 19 interviews | 4 focus group discussions | |

Note. Data derived from the field study conducted by the author in 2019.

Nineteen interviews were carried out with different participants, who were: members of the different informal financial groups, formal financial institution workers,

and agricultural extension workers. Four focus group discussions with members of the groups were held in Luweero diocese. Two trainings facilitated by Caritas for SILC members were also attended, one for soil management practices and the other about challenges faced by farmers and to device the way forward.

4.5 Research techniques and data instruments

Different research techniques were used to collect data to ensure triangulation. Information was obtained from multiple sources, like the informal financial group members, agricultural extension workers, and formal financial institution workers using different research techniques (interviews, observation, document evidence review and focus group discussion). In addition, different research tools were employed to reduce the potential of investigator bias and to cover a broader range of historical issues (Yin, 2013) on the influence of the informal financial sector and food security

4.5.1 Interviews

The interviews lasted 30 minutes on average and focused on how the smallholder farmers and other group members value the informal financial groups, and if they think participation in the informal financial groups does / not contribute to food security. To build rapport with the participants, the researcher first engaged in unstructured conversations with the group members (Mayoux, 2004). However, to stay focused on the study topic and allow participants to provide their different views on the subject, an open interview guide was used. Notes were taken during the different interviews with participants and, where permission was granted, audios recordings were made.

The table below presents the summary of the interview participants in regard to their gender, district, the year their informal financial group was founded, and the total members in the group.

Table 5. Summary of interview participants.

| Groups | Gender | District | Members in the group | Year founded |
|----------------------------|--------|----------|----------------------|--------------|
| CBS PEWOSA VSLA | | Nakaseke | 50 members | 2014 |
| Participant 1 | Female | | | |
| Participant 2 | Male | | | |
| Participant 3 | Female | | | |
| 2 SILCs | | Nakaseke | 30 members | 2017 |
| Participant 4 | Female | | | |
| Participant 5 | Male | | | |
| ROSCA | | Nakaseke | 11 members | 2018 |
| Participant 6 | Male | | | |
| Participant 7 | Male | | | |
| Kasana Luweero SILC | | Luweero | 26 members | Dec 2017 |
| Participant 8 | Male | | | |
| Participant 9 | Female | | | |
| Participant 10 | Female | | | |
| Caritas extension workers | | Luweero | N/A | N/A |
| | | Luwcero | 14/7 | 14/7 |
| Participant 11 | Male | | | |
| Participant 12 | Male | | | |
| Cooperative society Ltd | | Luweero | N/A | N/A |
| Participant 13 | Male | | | |
| Commercial Bank | | Luweero | N/A | N/A |
| Participant 14 | Male | | | |
| Farmers' Saving Group SILC | | Nakaseke | 20 members | 2015 |
| Participant 15 | Male | | | |
| Participant 16 | Female | | | |
| Participant 17 | Male | | | |
| Participant 18 | Male | | | |
| Participant 19 | Female | | | |

Note. Data derived from the field study conducted by the author in 2019.

4.5.2 Direct observations

The second research technique applied during the field study was direct observations during meetings that the researcher attended, and trainings organized for farmers in financial groups by Caritas. Interviews were often after the members' weekly meetings; this provided an opportunity to observe the interpersonal behavior within the financial groups since the researcher could attend their meetings. Observations focused on issues such as, how the financial groups operate, and how different decisions were made in the group meetings. In the field study, the researcher attended two training sessions that were facilitated by Caritas Kasana-Luweero for farmers in different SILCs and was able to observe the activities that went on during the sessions (soil management practice training and the round table discussion). Notes were taken during the observations and, with consent from financial group members, pictures were also taken.

4.5.3 Focus group discussions

Focus group discussions were used to seek clarity of issues that had emerged from the interviews and observations in members' periodic meetings (Yin, 2013). Information from focus group discussions helped in generating the analytical framework which was used in analyzing data. Research questions in all focus group discussions were used to collect data from participants, and notes were taken as the discussions were held.

Table 6. Summary of focus group discussions

| | Group Discussions | Members present | |
|---|---|----------------------|--|
| 1 | Kijaguzo Parish SILC groups | more than 15 members | |
| 2 | Kasana Luweero Caritas staff SILC | 6 members | |
| 3 | Semuto with colleagues in (VSLA) | 3 members | |
| 4 | Mawaale (Butekanga Farmers group) | 9 members | |
| | Round table discussion and soil management practices training | More than 40 members | |

Note. Data derived from the field study conducted by the author in 2019.

4.5.4 Documentary evidence

In this study, different reports were reviewed to examine evidence from multiple sources. Documentary evidence was used as a research tool because many events can be presented in reports and there is a possibility to retrieve important past information (Yin, 2013). Reports and important documents from Caritas-Kasana Luweero for the round table discussion that was held in July 2019 were reviewed. These included the agenda of the discussion and the report on progress of implementation of strategies developed from the previous discussions. The informal financial groups' constitutions were continuously retrieved and reviewed to understand how the informal financial groups operate besides observing, interviewing and discussions. The 2019 UN report showing the progress towards the Sustainable Development Goals (SDGs) with more interest in SDG 2 and the 2019 State of Food Security and Nutrition in the World report by FAO. National newspapers were also reviewed to validate information from different sources.

4.6 Data Analysis

Data collected from the field was manually transcribed and themes for analysis were developed during & after collecting data. This implied that back and forth review of data from the field was important to establish a detailed interpretation of information and provide evidence that can support each theme (Creswell & Cresswell, 2018). To analyse the IFS in line to food production, the agricultural value analysis chain was adapted. The agricultural value chain analysis framework focuses at the range of activities that farmers engage in, in transforming agricultural products from preparation to ready-to-consume products on the market (AFAAS, 2014). Value chains are common in corporate business ventures, where things like outsourcing, vertical and horizontal supply chains are often sought to increase the competitiveness and excellence in businesses. However, in agriculture the term is articulated as:

A value chain in agriculture identifies the set of actors and activities that bring a basic agricultural product from production in the field to final consumption, where at each stage value is added to the product. A value chain can be a vertical linking or a network between various independent business organizations and can involve processing, packaging, storage, transport and distribution. (FAO, IFAD & ILO, 2010, p.2)

In this study, agricultural value chain is applied to mean a set of activities that farmers have to undertake to bring an agricultural input into a product ready for consumption. The agricultural value chains differ according to the agricultural product. For example, a dairy value chain differs from a coffee value chain. However, in this study a general pathway is considered to reveal how the IFS influences access to resources needed by farmers to

improve efficiency and productivity on their small farms. Thus, the general agricultural value chain implies: the preparation, production, harvesting, post-harvest handling, processing, packaging and marketing activities that farmers must undertake to add value to agricultural products on each stage until the product reaches the consumer. Each stage of production requires resources like finance, information, technology, knowledge (local and expert), and social networks to ensure excellence.

Furthermore, based on the evidence generated from the discussions with participants, a conceptual analytical framework was developed in chapter five to capture the different themes and sub themes from the field study. The analytical framework aimed at addressing the major research question which was: How does the informal financial sector influence food security among smallholder farmers in Luweero diocese? Furthermore, in the analysis of data, direct quotations were used to draw a picture for the reader of the different stories from the participants' experiences. To show the characteristics of the participants, Microsoft excel was used to generate graphs and charts.

4.7 Validity and ethical considerations

Participants from different informal financial groups were interviewed and observed to cross-check information accuracy and to highlight differing perspectives on the study topic, including respondents outside the informal financial groups like Caritas agricultural extension workers and formal financial institutions were interviewed (Mayoux, 2004). To ensure replicability of this study to other settings, a clear description of the informal financial groups that participated in the study is provided, the research approach and techniques for data collection are also explained.

The field study was carried out following the research ethics board guidelines from Saint Mary's University. Since this study involved interacting with human beings, approval had to be sought from the Research Ethics Board Saint Mary's University. Before going to the field, authorization was attained (REB registration number 19-073). Furthermore, the field researcher obtained participants' consent before carrying out the interviews and focus group discussions. Before attending any meetings, members of the different financial groups first agreed. After interviews, all participants were verbally thanked for accepting to be part of the study. Participants' anonymity was maintained in reporting the data findings, and photos were taken after focus group discussions only when all members consented.

4.8 Limitations of the research

Time to collect data from the different sources was limited. For example, district officers and moneylenders were not interviewed. Yet, a one-on-one interview would have revealed their perceptions on the IFGs in communities. Also, during data collection, the unexpected concern of land grabbing in the study area that was raised by members in a round table discussion, almost triggered another research objective (to find out how these land grabs happen and how such can be stopped). But it was out of the study scope.

Visiting different areas in the study area was a challenge since I had never been to Luweero diocese. Sometimes after the interviews, I had to travel for long hours. The last focus group discussion audio recordings and some pictures that I delayed to back up from the field study, could not be retrieved because the phone froze and many phone repairers

in Halifax could not fix the phone since it was Tecno (a phone made for the African market).

Fortunately, I had taken notes when we were discussing.

CHAPTER 5.

DATA PRESENTATION, ANALYSIS AND DISCUSSION

5.1 Introduction

This chapter presents the results from the field study and the interpretation of the findings. The characteristics of the participants and how the different financial groups operate are presented first, then, before giving details of the research questions, the chapter presents reasons why participants joined the different informal financial groups.

Most of the participants were farmers and those who were not full-time farmers, were at least part-time farmers. For example, some participants who were Caritas staff, teachers, and handcraft workers were rearing small livestock and producing greens and vegetables for their household consumption. Some of the smallholder participants were producing mainly for the market. For example, two of the participants were producing tomatoes for sale. However, they also grew food for their own consumption. Occasionally, some went to the market to purchase other food varieties, especially what they did not grow.

Diversification, which is common in the informal economy, was present among many group members in the different financial groups. Many members were involved in different activities for, as noted above, agriculture was not always a full-time employment activity among participants. For example, within the different financial groups, small entrepreneurs were also identified as restaurant owners, taxi drivers, Boda Boda drivers, teachers, tailors, organization staff and market vendors.

As Figure 7 shows, the total number of participants in the study were 19, of which 7 were women and 12 were men.

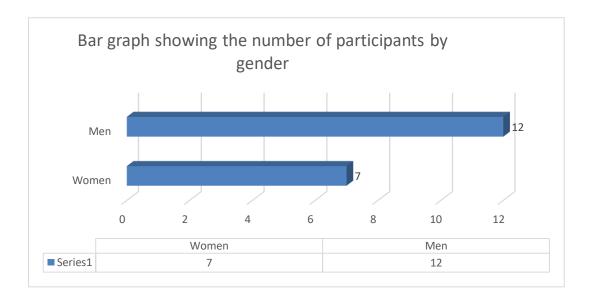


Figure 7. Graph showing the percentage of participants by gender. *Note.* Data derived from the field study conducted by the author in 2019.

The participants interviewed included 15 members from different informal financial groups, two agricultural extension workers, one employee from a cooperative society and one employee of a formal bank institution. Among the 15 informal financial group members, 7 members (47 percent) were female and 8 members (53 percent) were male as shown in Figure 8. The four other participants – one from a formal bank institution, one from a cooperative society and two agricultural extension workers – were all men.

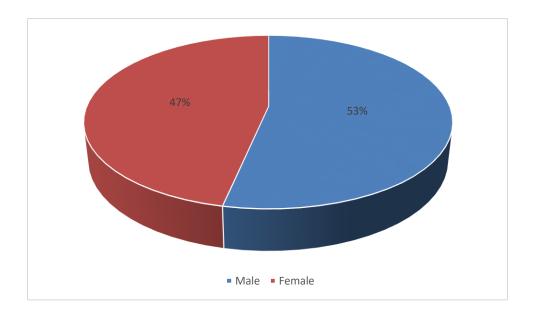


Figure 8. Showing participants from the informal financial groups regarding gender. *Note*. Data derived from the field study conducted by the author in 2019.

Four focus group discussions were held; one with members from a Village Savings and Lending Association (VSLA), three with Savings and Internal Lending Communities (SILCs) and a value chain round table discussion that was organized by Caritas Kasana Luweero. This discussion provided a platform that brought agricultural value-chain stakeholders from different nodes to coordinate processes aimed at resolving value-chain challenges with the purpose of enhancing value-chain competitiveness and meeting consumer needs (Caritas, 2019).

5.2 The informal financial groups and how they operate

Many informal financial groups are founded to serve financially excluded groups of individuals. The informal financial groups are mostly rural based; while some operate in urban areas, they are generally more important in rural areas (Dimitri Germidis, Kessler &

Mehir, 1991). There is diversity in the ways in which different groups operate; every financial group is unique in its operations (ILO, 2015). For example, all the groups had different maximum and minimum saving amounts: some financial groups had no limits on the amount to be saved by a member and they also had different interest rates, some offering small loans at zero interest while others offered loans at 3 percent. There was a financial group that charged 5 percent loan interest per month, of which 2.5 percent went to the financial group and 2.5 percent to the person who borrowed the money. Savings, loans and social fund transactions were always carried out in a transparent way, in front of all members present. The relevance of the different interest rates is expounded in the analysis of the microcredit institutions and the IFS.

Most of the financial groups with twenty plus members were registered at the district level. It was a common observation that as the number of members increased, strategies were sought to safeguard against fraud or theft. People were concerned about the enforcement of the law in the case of a breach of contract. Registering informal financial groups is important to protect the members of these groups because if the financial group is not registered at the district level and a member commits fraud, it may be difficult for the group to sue such a member. Now, this does not imply that the unregistered financial groups are extra-legal, but that it may be difficult to seek enforcement of any member's obligation in the courts of law. For unregistered informal financial groups, such cases can be resolved easily by members themselves and with the help of some local authority. There are a number of different reasons why informal financial groups register at district level. For example, since some groups open up savings accounts with formal financial institutions to

secure members' savings, one of the requirements of opening up a group account is the certificate of registration from the district.

The registered informal financial groups, which were mainly the SILCs and VSLAs, had a constitution to govern the operations of the group activities and a committee of leaders. By contrast, the unregistered groups, which were mainly ROSCAs, had only two leaders – the treasurer and the chairperson – and they agreed upon the rules and regulations orally. The degree of informality varied with the different financial groups. For example, from the data collected, one can easily conclude that ROSCAs were more informal than the VSLAs and SILCs. The degree of informality was higher in ROSCAs because, in contrast to the SILCs and VSLAs, they operated with no constitution, with no board of leaders and had no detailed bookkeeping.

These self-help financial groups with saving, lending, and social funds activities for their members, with rotating or non-rotating funds, all increase households' capacity to absorb vulnerability, shocks and the ability of the participating members to build on their wealth. The lending capacity of the informal financial groups is usually built on members' savings and small amounts of fines. For instance, members in ROSCAs contribute a fixed amount, every specified period. In the ROSCA studied, the members would save 5,000 UGX every day. After ten days a member would receive the accumulated fund in accordance with the terms of the financial group. Every member would continue to contribute the fixed amount until the end of the cycle. The cycle would end when every member has received the equal amount. This form of pooling resources is based on the concept of balanced reciprocity. Members agree on the amount of money to be saved based

on their capacities. This implies that each member has access to a substantial sum of money at a given time which exceeds the amount they would be able to save on their own. Furthermore, informal financial groups motivate and promote awareness to the group members that they have the potential to save funds from their different sources of income.

Figure 9: Summary of the services offered by the different informal financial groups

| Services in the informal financial groups | VSLAs | SILCs | ROSCAs |
|---|----------|----------|----------|
| Financial services (Savings, Loans, earned | ✓ | ✓ | √ |
| interest) | | | |
| Training (such as: soil management, | ✓ | ✓ | X |
| financial literacy) | | | |
| Social capital (such as: social fund, | ✓ | ✓ | ✓ |
| networking) | | | |
| Equipment & Infrastructure access (like | X | ✓ | X |
| Storage facilities, trucks) | | | |
| Collective actions (marketing, labour, | ✓ | ✓ | X |
| investing activities like events management,) | | | |

[✓] This implies that the service is available in the financial group.

Note. Adapted from the Field Study in Luweero Diocese by the Author, 2019.

X This implies that the services were not available in the financial group.

5.3 Reasons for joining the different informal financial groups?

Many participants were concerned about spending money unnecessarily. As Goodland, Onumah, Amadi, & Griffith (1999) analyzed, members in such informal financial groups often save to reduce their personal avoidable consumption and the consumption by others, such as husbands, wives, relatives, and to prevent theft. Members were also concerned about accumulating their wealth through increasing their investments and earning an interest on their savings in the financial groups.

Many participants were motivated to borrow from within the financial groups because these groups did not have the same bureaucracy as formal institutions. Additionally, the lack of formal financial providers within their proximity and the presence of social capital within the groups – the fact that the group can be with you through times of joy and sadness – was also a strong motivator that many participants gladly emphasized. Others recognized the improvement in the standards of living of members that were saving money in the financial groups, which greatly inspired them to join the groups.

The importance of the informal financial sector can be highlighted in relation to a few questions. For example, what happens if the person has no collateral assets like land, motor vehicles, or no monthly paying job? This is an important question because a lack of collateral assets is common among smallholder farmers and entrepreneurs. The informal financial sector's remedy is mutual trust; members forming a group with the people they can trust or rely on. Financial group members are the owners/shareholders of the services being offered to them. This motivates them to deposit at every agreed time so as to

accumulate money that can be lent to themselves. They come up with rules and regulations to ensure that the group continues to operate.

Another question may be: why do smallholder farmers and entrepreneurs need the loans in the first place? To respond to this concern, any economic activity needs finances to boost its productivity and profitability. And if there are no incentives present for the farmers to save, borrow and mitigate risks, then they are doomed to be trapped in poverty. (How the funds are used is explored in Section 5.6.)

Therefore, households who live in peri-urban areas, rural and remote areas require tailored financial services which are often provided by the informal financial sector. Transactions are small but can be impactful to someone who is short of liquid money. Nevertheless, in case a member needs a large sum of money as a loan, depending on that member's saving capacity and trustworthiness, the group can act as a guarantor for such a member to access more finances from a larger financial institution without collateral pledges.

5.4 Government interventions and formal financial institutions in the study area

As Akram-Lodhi, 2013, clearly indicates, to achieve global food sovereignty, it requires and should start with state interventions like stabilizing prices and governing markets to ban dumping, investing in employment generation and so on. However, in times of market liberalization and deregulation, reluctant governments offer little support to small-scale farming activities (Fox and Vorley, 2006). Yet, many developed capitalist countries that promote free trade, market liberalization and deregulation have continuously

been protective when it comes to the agriculture sector (Pechlaner & Otero, 2010; Clapp, 2014). Following the global food price crisis from 2007-2008, many developed and wealthier developing countries leased and acquired large tracts of land in developing countries at lower rates for leases and cheap labor to secure their control over food supply in their economies (Doss, *et al.*, 2014). If developed economies believed in market liberalization for even the agricultural products which play a primary role in sustaining life, it would not have been necessary to resort to production of food. This is aimed at emphasizing the relevance of state interventions in the agriculture sector. The international food supply chain leads to the flooding of local markets with low value foods, making it hard for smallholder farmers to compete effectively without government interventions. To make matters worse, many of the few interventions of subsidized inputs and credit end up benefiting mainly the large-scale farmers and processors (CSBAG, 2014).

In the agricultural value chain discussion that was organized by Caritas Kasana Luweero, the government officials that were present proved the point that government assistance is often limited. A member raised a concern of how the government officials confiscated farmers' coffee beans because they were dried the wrong way (according to the district representatives; coffee beans that are sun dried are supposed to be placed on an open constructed tile patio/ tarpaulin but some farmers dry it from the ground). The woman who raised this concern asked the representatives about how they were helping coffee farmers to know how to dry the coffee beans the right way, and whether they were planning to support farmers with subsidized equipment. To everyone's surprise, the representative's reply was focused on the legality of confiscating the coffee beans. He said, "What we are doing is legal; we have to confiscate all bad coffee". Many other issues like land grabbing

were raised and never addressed (another woman raised a concern, that they were in the process of losing their land to "an investor") but the representatives from the government did not even ask for the details of the nature of land grabbing. Such a prominent issue was not addressed nor did the government show interest in seeking strategies to stop land grabbing. Most of the smallholder farmers have insecure land rights and are not protected by the land governance systems which claim to protect communal land interests and criminalize illegal evictions (Doss, *et al.*, 2014). Furthermore, government institutions have been identified to be responsible for much of the procurement of large tracts of land for "investors" which displace many households (Doss, *et al.*, 2014).

The Agricultural Credit Facility an initiative by the BOU to fund agricultural activities was administered through the commercial banks. Few smallholder farmers would access the finances due to the setting of the commercial banks and high interest rates plus other costs that must be incurred to acquire a loan (CSBAG, 2014). In the commercial banks the government had no control over the costs charged by the banks. That is why earlier this year, 2019, the government was reviewing the implementation of the program to be facilitated by the Uganda Development Bank (Ladu in Daily monitor, April 29, 2019). This is expected to have little impact, considering that the Uganda Development Bank has not established branches in many regions. Furthermore, information is not always delivered to all the beneficiaries along the agricultural value chain (NDP, 2015; CSBAG, 2014). It is also worth to note here that large scale farms although may face challenges, some are favored by the government policies and at times have a ready market for their products. For example, in the study area, a farm that had full time employees with proper book keeping, state of art equipment and infrastructures was owned by a politician with a ready market

from the UN for their farm products and Kampala town business entrepreneurs came to the farm to purchase the products.

Formal financial institutions' agricultural services tend to benefit the wealthier and formally employed households in the community, who can exploit their better connections and provide secure collateral to the loans they acquire. This was evident with a financial institution in greater Luweero that was studied. When the credit appraiser asked the smallholder farmer who was interested in acquiring an agricultural loan, whether they were employed so that they are given a salary loan that takes a few days. Among the requirements the smallholder farmer was asked to present were: a financeable business proposal as per bank criteria for the agricultural activity that they were getting involved in, farming experience of at least 2 production cycle of the project to be financed by the loan and the farm records for that period. Collateral was also a requirement or 30 percent of the loan amount to be on their savings account. This further proved how it is hard for a smallholder farmer to acquire a loan from the bank as opposed to other formal economic activities. The farming sector is considered risky and not lucrative. However, it is the major economic activity of most of the country's population. In this regard, it is not intended to recommend financial institutions not to carry out thorough checks, but rather to show how bureaucratic the formal financial institutions can be and how majority of the households may opt to the IFS.

The financial cooperatives in the area were willing to offer credit services to members in the informal financial groups. Collaborative efforts were established in situations where the financial group could act as the collateral for a member to acquire a bigger loan from financial institutions.

The government role of offering agricultural extension services had become an NGO responsibility, and subsidized inputs are often offered by NGOs. This was asserted by the participants in the focus group discussions that the government no longer offers agricultural extension services to farmers and that the inputs from the district were of low quality because the growth rate was low.

A table below shows the challenges faced by the small-scale farmers in accessing financial services from formal financial institution and how the informal financial groups address the challenges.

Table 10. Challenges of formal finance and how the IFS addresses the challenges.

| Challenges faced by SHFs in accessing formal financial services | Solutions presented by the IFS |
|--|---|
| The process of acquiring a loan is bureaucratic and takes more time. | Members can easily acquire a loan. |
| A financeable agricultural business plan is required or collateral to secure a loan. | Members need a guarantor who has to be a group member to acquire a loan. |
| In some areas, smallholder farmers have to move long distances in search for financial services. | Members form financial groups within walkable distances in their communities. |

| The language used in by bankers is English, yet some farmers are not conversant with the language and to some, such an ambiance may represent a certain class that they perceive not theirs. | In the informal financial groups, members use their native languages and feel at ease to talk to other members. |
|--|---|
| There are no interest free loans and some costs are hidden to customers | There is transparency in operations and some short-term loans are interest free |
| The terms and conditions of loans may change depending on the economic factors. | The terms and conditions are agreed upon by all members and only change at the end of the financial year. |

Note. Data derived from the field study conducted by the author in 2019.

5.5 Microcredit institutions and informal financial groups

As noted in chapter 2, that an assessment of the critiques of the MFIs was to be explored regarding the IFS, this section presents a brief analysis with respect to the findings. Basing on Bateman &Chang's (2009) arguments, presented here below are the critical evaluations of the critiques.

One of the most critical observation is that the interest rates on loans issued out by microcredit institutions are usurious. Whereas this may be true with some of the informal financial groups that charge 10% interest per month as noted by some scholars such as (Le Polain, Sterck, & Nyssens, 2018). From the field, the data collected revealed that the informal financial groups had a range of interest rates from 5% and below which is minimal. For, example, one VSLA charged a 3% interest rate per month and the group was considering of reducing it by 0.5% to 2.5% so that it is not a burden to members to repay

loans. One SILC charged 5% interest rate on loans, but 2.5% (half of the interest amount) belongs to the whole group whereas 2.5% is added to the loan applicant accumulated savings. Another SILC charged 4% per month. It is important to note that some of the groups had a minimum amount, a member would even borrow with zero interest charged for a month. As for ROSCAs, no interest is charged on the rotating credit among members. Notably, absence of high interest rates in the case study area, refutes not the presence of high interests in some other regions such as regions studied by Le Polain, Sterck, & Nyssens, 2018. However, the concern of high interest rates with in some IFGs remains an open issue that can be evaluated and acted upon by members within the informal financial sector, since they are the owners of the benefits that accrue from the financial services offered in the financial groups.

Furthermore, considering the related costs that loan applicants must incur before acquiring a loan, it is no surprise that people can continuously acquire loans from the informal financial groups even when banks or MFIs are within their proximity. These other costs may include: loan application fee which is not charged within the informal financial groups. Producing legal documents for ownership of collateral or a business plan that is financeable, which is also not required in the IFS. Transportation costs to go to the financial institution; in the informal financial groups, meetings are often within walkable distances. Some MFIs are dependent on donor support, others rely mostly on the profits they make on transactions they carryout, therefore high interest rates may be charged to customers to recover the operational costs and earn a profit from transactions.

Another critique is that micro-lending organizations finance microenterprises that ineffectively compete and hinder industrial upgrading. This draws attention to the fact that most of the members in the informal sector, farm for subsistence purposes which are equally important to finance as other profit generating activities. Additionally, it was noted by Batemen & Chang, 2009, that microfinance institutions fail to connect their clients with the rest of the enterprise sector. The informal financial groups that were studied focused more on collective actions rather than competitiveness, and connecting farmers to local, regional and national markets. This can be illustrated from meetings and discussions that members participated in, to determine the collective ways of marketing their produce. Ways were sought by different farmers in the SILCs in Luweero to find ways of obtaining a certification for fair trade and rain forest products. Collective actions like use of the storage facilities by all farmers in the SILCs were emphasized. In the VSLA, participants revealed how they benefited from collective labor provided by fellow members in the financial groups.

It was also observed that microfinance transactions are so tiny to bring about end to poverty. This relates to some informal financial groups as the transactions that go on are so small though owned by the group members. Notably, small transactions are better than access to no financial services. And as noted by Goodland, Onumah, Amadi, & Griffith (1999), such transactions may appear small to the outsiders, but they are an essential component to members' livelihood and accumulate over time.

Both vertical and the horizontal connections that were seen missing in the microcredit institutions as critically observed by Bateman and Chang (2009) for a

successful local economic and enterprise development were present among the informal financial groups. In the value chain round table discussion facilitated by Caritas –Luweero, farmers in the different SILCs were brought together with different agricultural service providers and potential buyers of their produce like NUCAFE and Kyagalanyi coffee limited Uganda. Trainings are also offered to these financial groups by the NGOs. For example, financial literacy and soil management trainings were offered by CBS PEWOSA and Caritas Kasana-Luweero to the members in different informal financial groups.

It may be challenging for micro-credit institutions to extend micro-loans without clients pledging collateral. If such is done, some households may view such loans as grants. The gap of having no collateral to pledge and the risk of failure to repay loans by the clients within micro-credit arrangements is filled by the IFS. Since, members are the shareholders, they feel obliged to repay the loans (Goodland, Onumah, Amadi, & Griffith, 1999). Moreover, in the informal financial groups, loans are extended to members according to their capacity to repay (this is determined by a member's accumulated savings) and since members have been in the groups and know how the funds accumulate to extend loans, they feel compelled to repay their debt. Additionally, because they belong to this society/group, members feel the obligation to fulfil their duties as well laid in the group's constitution than in arrangements by a corporation aimed at profiting from the financial services.

5.6 The informal financial groups contribution to food security

Although the main objective of informal financial groups is to offer financial services, the findings of the study reveal that the informal financial groups promote a

number of different activities and have several objectives, some of which lead to food security, as discussed below. Figure.10 illustrates how the different informal financial activities which include savings, social fund, collective investments, knowledge sharing, training within the financial groups and networking contribute to food security. Food production is one way of having access to food, this was analyzed using the agricultural value chain analysis (AFAAS, 2014). Expounding on members' experiences, analysis was established to explain how finances and support from the groups aid in each food production activity. Secondly, people can access food from the market which requires income, thus in the analysis, it is shown how participants were able to build on their income investments and consumption decisions. Thirdly, with in the financial groups, members transfer food during times of harvest and to members who may be facing a food shortage. The sustainable livelihood approach was also used in analyzing how the informal financial groups enhance food security through access to resources needed to sustain a livelihood.

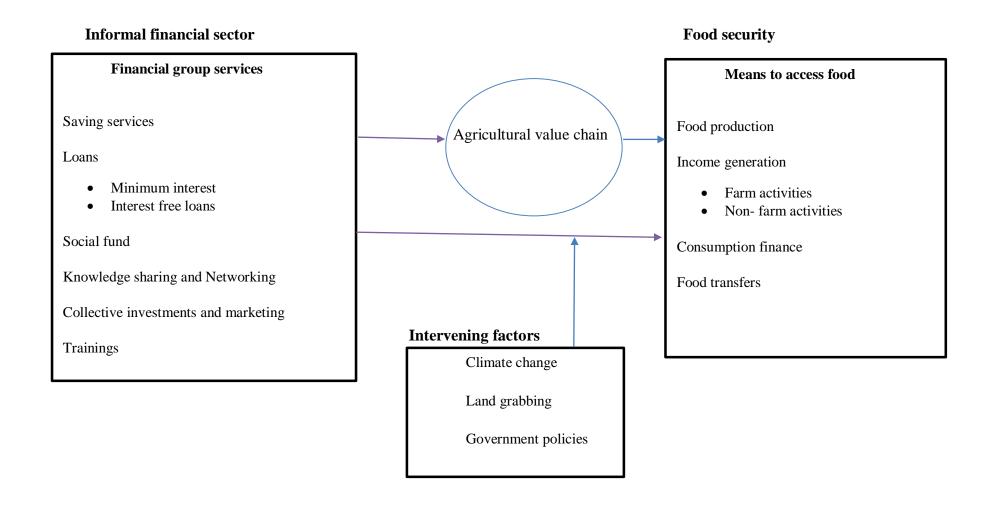


Figure 11. Ways in which the IFS services contribute to food security among the participants. Note. Adapted from the Field Study in Luweero diocese, by the Author, 2019.

Figure. 10 illustrates the major ways in which the IFGs can contribute to food security among households. However, some of the hidden ways may be captured in the figure above. For example, when the food vendors'/ restaurant owners have access to finances and can purchase a variety of food. In a way, this contributes to accessibility of food through bringing a variety of foods closer to community members. The modifying factors represent the factors that can affect the contributions of the informal financial groups to food security, mostly, because the financial group members have limited control over such factors like weather fluctuations and pest outbreak. When analyzing the food production, the agricultural value chain analysis is further discussed and used to illustrate how funding from the IFS can finance activities along the value chain.

5.6.1 Food production

As a way of ensuring food security, food production at local levels also contributes to food sovereignty, where households have the right to determine their culturally appropriate food for consumption. It further brings closer the consumers and suppliers of food in an area, something that has gained attention as AFNs in the present global food networks (discussed in chapter 2; alternative food networks).

It is a consent that food insecurity goes beyond food availability. However, as Fox and Vorley (2006) asserted that the global food supply system is characterized by instability, over supply of commodities, stiff global competition. All which have a great effect on prices of different commodities in different countries. When prices drastically fluctuate, it affects many households especially those employed within the informal sector, who have no job security and assured periodic income and even those employed but earning low wages/salaries may find it hard to cope during such times. But with own food production such a shock may have minimal impact on the livelihood

of households, although it may greatly affect the household's incomes. For example, during the global food crisis in 2006-2008, many households who were producing their food, were not so much distressed by the economic shock (Doss, *et al.*, 2014).

Food production is a process, it involves a number of activities from preparing for crops or livestock, to actual food that is consumed. But the process also requires that finances and other services like labor are invested in every stage of producing food. The different ways how finances accessed by informal financial group members are used, are discussed below.

The figure below provides a snapshot of the different activities involved in the agricultural value chain, followed by an explanation on how smallholder farmers use the finances accessed within their financial groups at different stages of food production.

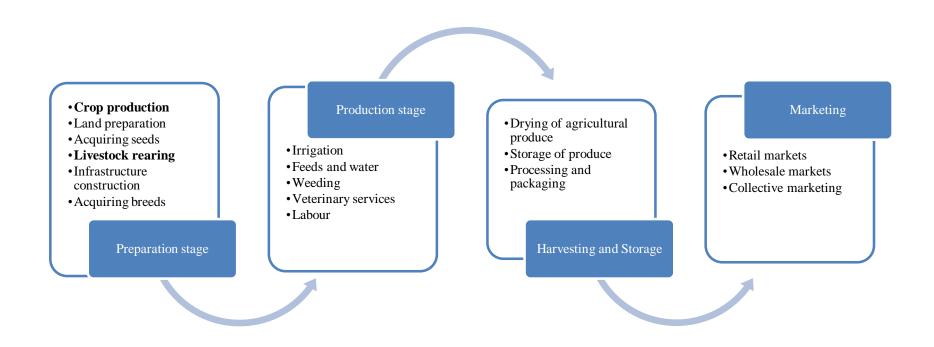


Figure 12. Agricultural value chain

Note. Adapted from the Field Study in Luweero Diocese and Kasana Luweero Caritas Value Chain Round Table Discussion, by the Author, 2019.

With participation in the informal financial groups, members have access to financial and support services to aid in every activity along the agricultural value chain, from preparation like purchase of inputs to production activities like weeding, feeding and irrigation to processing and accessing the markets. NGOs providing support services like financial literacy trainings on how to manage personal finances and agricultural extension services, found it easy to provide these services to group members other than individual farmers. There are economies of scale in terms of low costs to be incurred in extending such services to members in groups. This can be illustrated by the agricultural extension workers from an NGO assertion that:

It is easy and cost effective for us to provide services to farmers like training within groups, such as this soil management training that we have just held. (Participant 11, 2019, see Table 5.)

Preparation activities

This stage involves several activities which require capital in form of wage payments, infrastructure construction and trainings for both crop and animal husbandry. This can be illustrated from a participant's response when showing the piggery project who said:

With finances from the financial group, I was able to buy the materials that were used in construction of this piggery house, members also helped me with the construction and to get these good breeds of pigs, I used my accumulated savings from the group. (Participant 16. 2019, see Table 5.)

In the focus group discussions, many participants emphasized how they get their farm inputs for crop production and livestock rearing from the funds they get from the financial groups. Other examples to explain how the informal financial groups aid in the food preproduction activities were soil testing, seeds and breed selection, which are discussed hereunder:

Soil testing: members were trained on the soil pH, which is measuring the acidity and alkalinity of soil. Some of the informal financial groups were given soil testing kits by Caritas. Trainings were also held to inform farmers about the macro soil nutrients that are needed for the different crop production, in particular, nitrogen, potassium and phosphorus. This was aimed at helping farmers apply the appropriate fertilizers rather than just using any fertilizers on the market. Furthermore, members were trained on how to make and apply organic manure to the different crop types from kitchen wastes, cattle manure and poultry droppings. For coffee and Matooke plantations which are the major cash and food crops respectively, farmers were also trained on the appropriate spacing.

A participant from one of the SILCs said:

There was a great difference between my harvest before testing the soil and after soil testing. When I applied the appropriate fertilizers, my yields increased greatly. (Participant 5, 2019, see Table 5.)

Seeds and breed selection: Participants asserted that they got connections for genuine seed providers and training on how to store seedlings, how to test and know the fake seeds within their financial groups. To test for genuine seeds, farmers were encouraged to carry

out an experiment for 5 days, where they get a sample of seeds and put in a bowl or wet sponge to determine the germination rate before planting the seeds. In case the germination rate is very low, such seeds would not be considered for planting. As well as dealing with fake input suppliers, which number to contact. As for livestock rearing, members could easily get knowledge on the best breeds that can fit in the given conditions from agricultural extension workers of Caritas.

Production activities

This stage involves a number of activities, depending on the kind of farming one is involved in. For example, with livestock rearing, animals require a clean shelter, feeds and water, veterinary services and investment in the different tools and equipment needed.

This can be well illustrated from a response by a small-scale farmer participant who said:

I rear poultry, I try to make a budget for the money what I will need to buy the feeds and set that money aside, however, sometimes the prices may shoot high or I may use the money for other things. So, what I do is to call my two children in town to lend me some money, in cases when they do not have, I then borrow from one of the financial groups I save with. (Participant 19, 2019, see Table 5.)

In the above case, through participation in the IFG, the participant was in position to purchase feeds when they ran out of cash. That was one example of the many participants' stories on increased access to animal feeds.

Another smallholder farmer's response was:

I saved money with the IFG for a year with a goal of purchasing a big water tank so that my children didn't have to walk long distances to collect water after school. I use the water mainly for domestic consumption, poultry, cows and goats. Although, there times when the water is all used up and we have to collect from the wells, it still takes us through a long period of time. (Participant 11, 2019, see Table 5.)

Food security does not only emphasize availability, access, stability and utilization of food but also access to clean water. If with the household's participation in the IFGs, some members can ease access to water, then that is another way of ensuring food security among the households. In the above case, still focusing on the production of food activities, farmers need access to water for their subsistence or commercial farming. Others could afford veterinary services using the funds obtained from the informal financial groups.

Crop production also involves several activities to ensure a good harvest. For example, irrigation of crops, this requires equipment and access to water. Such equipment can be purchased using the funds from the informal financial groups. Other products and services that can easily be accessed, include; fertilizers, organic manure and this could easily be transferred among the group members especially livestock farmers to crop production farmers. And vice versa, some crop residues can also be used as animal feeds.

Sustaining crops until the harvest time also requires weeding or slashing which can be provided by family members. However, there times when households may hire casual laborers and pay them wages. The wages can be from sale of certain farm products, some participants revealed that they sometimes borrow from the informal financial groups to pay off labor costs.

Harvesting and storage facilities

The informal financial groups members have access to more than financial services, as the findings suggested even access to collective labor and other services. The participants in the SILCs revealed that they got training on post-harvest handling from Caritas-Kasana Luweero and emphasized how they would also access the storage facilities that were constructed for farmers by Caritas. Other participants jubilantly emphasized how the group members helped them in times of harvest.

One of the commercial smallholder farmers said:

There is a time when I grew beans and the output was marvelous. But I didn't have casual laborers to help me with harvesting. With my family members, I couldn't harvest in time as big rains were coming. I raised my concern in the group meeting and some members offered to help me, I just had to provide them with refreshments. To hire casual labor would have cost me so much. (Participant 2, 2019, see Table 5.)

In the value chain round table, where farmers were discussing the challenges they face and ways forward to address the challenges, one member said:

Many individual farmers lack storage facilities and drying equipment, moreover, the old government storage facilities do not function ever since the cooperatives were closed. It is the storage facilities, maize processing mill and transport trucks by Caritas Kasana that are functioning, and these are open to SILC members. (Value chain round table, 2019)

Indeed, the facilities in some districts were established by NGOs and could be accessed by members in the different financial groups. For example, KALUDO food bank in Luweero district was established by Kasana Luweero Caritas to store farmers grain food crops (Maize and beans) in times of plenty and to encourage collective and bulk sales. Such services were easily available to farmers within the different SILCs. Storage facilities are important; in times of surplus the farmers can have a place to store the agricultural produce, this insulates farmers against the reduced prices resulting from over supply. In addition, it equally protects the consumers of food products during times of scarcity and provides an assurance to farmers of a fair return on the agricultural products they sell. This can also boost food sovereignty in different regions of the country.

Access to markets

Regional markets and food processors have the potential to reduce on food wastage and increase households' incomes because most of the agricultural produce is perishable and with no arrangements for proper storage, farmers' produce may be wasted. However, such arrangements to preserve farm produce or buy off the surplus from farmers are not available in many regions of Uganda. With liberalization of the markets where the governments have limited or no control over the price fluctuations, any factor that affect the global prices affects the producers. Farmers continuously receive little earnings from their produce partly because of not having more control over the value addition chain of

the farm produce. An example here is the "coffee paradox", where prices and profits are rising in the consuming countries whereas the revenues generated from coffee by the producer countries are reducing (O'Connor, 2014). The more farmers add value to their agricultural products, the more they would benefit and earn more income from their farming activities. For example, a farmer generates more income from selling dried or roasted coffee beans than selling undried coffee beans.

With no interventions from the government, farmers viewed collective marketing as a strategy to promote marketing. In every focus group discussion that was held, participants emphasized the importance of selling farm products in bulk and as a group. Some financial groups organize it in a way that they even appoint a marketing personnel who will be responsible for looking for the best deals for the different products, this was evident in one of the SILC groups, which had a marketing personnel. As a group, farmers can be in position to set and get favorable prices for their output. For example, the East African green council was identified as a potential marketing platform for farmers that were growing greens and food crops. However, it was encouraged that the supply of such products could be sustained through implementation of collective action plans.

It was further emphasized that collective action plans can improve the position of farmers in existing markets and aid in gaining access to new markets like fair trade opportunities that were identified by employees from National Union for Coffee Agribusinesses and Farm Enterprises (NUCAFE) and Kyagalanyi coffee limited in charge of sustainable development and marketing services. The employees informed the members that were present at the value chain round table discussion about the premium prices offered by fair

trade and rain forest and how to utilize such opportunities. Additionally, members were informed on how the informal financial groups could transform into cooperatives and how to acquire a certification for fair trade and rain forest. These arrangements were still in planning phases, as members were advised to form a committee to follow up the matter.

Participation in the financial groups can act as a price shock mechanism to a certain extent to mitigate the risk of losses due to changes in prices. With drastic changes in the prices of food commodities and with no regulation from the state to set price floors and price ceilings, farmers need to apply their own mechanisms to avoid losses on their farm produce. To illustrate the above concern, a quotation from one of the farmers who was present in the value chain round table discussion is presented:

Fellow farmers, if you save and can easily borrow from the financial groups where you are a member. It minimizes on the chances of selling your produce at low prices to middle traders because you are desperate for cash. During the price shocks we can use the storage facilities so that we sell our products at a fair market value. Last season I waited and sold my maize at 1,000 UGX per kilogram, a higher price compared to others who sold at 200 UGX per kilogram. (Value chain round table, 2019)

The storage facilities that the participant was referring to are the warehouses and food banks constructed by Caritas-Kasana Luweero members in the different SILCs and other farmers within the proximity. Although, this may apply more to grain foods and cash crops like coffee, maize and beans. It still contributes to incomes and stability of food consumption of some smallholder farmers. With perishable produce like vegetables and greens the study

area did not have the collective storage facility. Such farmers would sell their products at lower prices in case of urgent cash.

5.6.2 Non-farm income opportunities and investments

Some participants were involved in non-farm activities, for example, some were tailors, teachers, retail shop attendants, food vendors, transport service providers like taximen and boda boda men (motorcycles used for transport services are called boda bodas). However, it is important to note that many people operating in the informal economy tend to have multiple sources of income. In fact, Goodland, Onumah, Amadi, & Griffith (1999), assert that small enterprise owners that were considered non-farmers, were found to have more interest in farming and earned a significant amount of income from farming just as the smallholder farmers earned. This implies and proves the diversification of investments by low income earners. And this diversification is not limited to only agricultural activities of growing different crops and rearing animals but also other ventures. As noted in the literature review chapter, that increasing food production is not the only way to increase food security, but even increased income can improve food security of the household. In as much as majority of the informal financial group members are involved in agriculture, this does not stop them from diversifying their sources of income. Most of the participants had small-scale farms and other ventures.

Furthermore, small-scale farming and non-farm informal activities also have the potential to generate employment opportunities to members in the community. This further contributes to the potential of community members to purchase food. Besides, when

households increase investments in other activities, this increases their disposable income thus increasing their capacity to afford food.

5.6.3 Collective investments

The different financial groups had collective investments, for example, the VSLA and a SILC had a chairs and tents project to generate money for all members, they offer events management services like: catering services, tents and chairs to anyone having a function at a cost (it can be a group member or any other person in the community). The funds that are collected are invested in more assets to generate group incomes and a percentage may be shared among the group members at the end of the financial year. Thus, members receive their accumulated money savings, plus interest earned during the year plus the share from the collective investments. This increasing the capacity of the informal financial group members to afford the different household expenses which may include food expenses.

5.6.4 Food transfers

Sharing food amongst each other in a community promotes food sovereignty because it enhances consumption of culturally accepted food by households. When members help another group member with a farm activity for example, harvesting, they will be given some of the harvest to go home with, as an act of appreciation. Additionally, in times of hunger for some members, the relationships within the groups may also help members get food from those with more food. Even in times of celebrations, members can

contribute food for the event. This may not stand as a sustainable way to food security, however it also counts as a source of food among households.

5.6.5 Consumption finance

Whereas many participants saved for future investments. For example, purchasing land, adding capital in their existing investments. It is important to note that many participants had spent the funds obtained from the informal financial groups on daily expenses as well. Consumption finance is money spent on household expenses like medical bills, food expenses and school fees. This component is often disregarded in the literature as much focus is put on the investment activities. However, the cash obtained from the financial groups aids in day-to- day activities and in different ways it contributes to food security and wellbeing of the members.

As Yusuf, Ijaiya & Ijaiya (2009), observed that informal financial groups smoothened the group members' temporary shock in food consumption. It was evident from the field, as cash was availed to members for day-to-day expenses. Furthermore, since many financial groups meet on a weekly basis, members could get money to help them through a week.

One participant from a VSLA said:

It is rare to run out of cash, whether little or more money, because there is money you can borrow without interest for a month. (Participant 2, 2019, see Table 5.)

In one of the SILC group, members emphasized how access to cash for even emergency/unplanned events that happen to them in life is essential. For example;

A staff member of Kasana Luweero Caritas said:

The social fund that we collect is given to members in case of an emergency, for example, (Pointing at one member) he must go to hospital to see a doctor because he is not feeling well, so we are giving him some money to cater for the hospital bills. (Participant 9, 2019, see Table 5.)

5.6.6 Other indirect ways

In many financial groups, participants emphasized the importance of networks within their groups and how they collectively help each other. Examples of the indirect ways were helping others in use of affordable renewable sources of energy like constructing for the different members—energy saving cooking stoves, teaching members how to make charcoal briquettes from maize huskies and trainings on how to generate income. Lastly, informing group members on the sources of nutrition and how to ensure healthy food consumption, for example promoting fish farming as an affordable nutritious source of food.

In one focus group discussion with members of a SILC, members stated that:

We encourage every member in the group to have a greens and vegetables' garden.

We even make it a must to tour all the members' gardens, those who don't know

how to set up the gardens, we help them with setting up their gardens. (Participant 15, 2019, see Table 5.)

Participants were able to access information that is related to different programs/ projects happening in the community through their informal financial group meetings. Information on the weather changes, pests and disease outbreak/ control, how to solve issues like land grabbing can easily be disseminated to groups of households who have a periodic meeting time.

5. 7 Data interpretation in line with the theoretical frameworks

Data findings revealed that farmers accessing financial services and other services, boosts food production and productivity which ensures food sovereignty especially among subsistence farmers and local communities. Considering the sustainable livelihood approach, presence of some of the important resources that members have access to because of their membership

5.7.1 Food sovereignty as a means to food security

In chapter 2, food sovereignty is presented as a critique of food security because whereas food security aims at all people having adequate access to nutritious and healthy food at all times (FAO, 2018), it does not present how that can be achieved. Food sovereignty on the other hand, gives and provides guidelines on how states, communities and peoples should determine their food for consumption. Food sovereignty started as a movement that aimed at challenging corporate food supply chains that promote food dumping in agricultural economies, reclaiming farmers' sovereignty over seeds, promoting

culturally acceptable foods among communities, promoting ecological agricultural systems, reminding states that they should support agricultural activities in the countries and developing agricultural policies that ensure human dignity among other principles (Beuchelt & Virchow, 2012; Akram-Lodhi, 2013). Therefore, since both concepts aim at ensuring the human right to adequate and culturally acceptable nutritious food in a sustainable manner among peoples, this study notes that food sovereignty can complement food security. By food sovereignty being the missing means of achieving food security as articulated by Menser, 2015. Instead of presenting the two concepts as competing ideologies, it is much better to harmonize them. Especially, by promoting the role of smallholder farmers and boosting their productivity, this can lead to reduction in hunger and poverty among the small-scale food producers who happen to be the majority of the developing countries' population and more vulnerable to food insecurity (FAO, 2018).

Findings from the field indicate the sharing of knowledge within the informal financial groups among members, and this promotes the use of local knowledge integrated within scientific research as a principle of food sovereignty. Furthermore, food sharing from the farmers' season produce among members in IFGs is an important feature available within the informal financial groups and it encourages the localization of food systems as an important factor that the food sovereignty movement tends to promote. It is common knowledge that state support to the agriculture sector in many developing countries declined and, in some countries, collapsed following the structural adjustment policies. However, this study emphasizes the role of state in providing subsidized agricultural inputs and equipment to farmers especially small-scale farmers who have limited livelihood alternatives. Supporting smallholder farmers can increase responsible production of food

and consumption. This is so, because, often majority of the smallholder farmers undertake more than one farming activity. Importantly, this contributes to ecological food production, an important component of food sovereignty with states' support programmes. The role played by the informal financial groups is to provide access and a platform to productive resources like social capital which promotes collaborative efforts among communities. In order to achieve food sovereignty, collective actions are key in communities, for example, in determining and influencing agricultural policies. With an enabling environment, partly provided by the IFGs, farmers' and communities' food sovereignty can lead to food security. Farmers' freedom to choose which agricultural system to use in producing food and to have control of which crops to grow and breeds to keep can be strengthened by their membership in the IFGs.

5.7.2 Sustainable livelihood approach

Based on the sustainable livelihood approach, which focuses on the resources needed for a sustainable livelihood: physical capital, natural capital, social capital, financial and human capital (Serrat, 2017). The informal financial groups as a strategy to improve people's livelihoods provide their members with access to mostly financial and social capital and these were elaborated in earlier sections of this chapter. With access to the two capitals: financial and social capital, members' access to other resources of livelihood is relatively boosted. As emphasized by Neumeier (2011), collective actions have tangible and intangible livelihood improvement impacts than individual undertakings, thus there are benefits that accrue to members who join the informal financial groups; as discussed below:

Physical capital, which is access to production and consumption assets. Members in the different financial groups, had access to storage facilities and transport services due to their participation in the informal financial groups. Caritas, Kasana Luweero constructed physical infrastructure to be used collectively by farmers in the different SILCs and Cooperatives. These infrastructures included, KALUDO food bank, a maize processing mill and transport trucks.

Human capital—which focuses on education, knowledge, skills and capacity to work (Serrat, 2017), can also be achieved within the informal financial groups. People share knowledge within the groups, attend trainings, market collectively their farm produce, some members can afford to educate their children in good schools because of their participation in the informal financial groups. In some groups, members provide labor to any member in need. Expertise from the developmental agencies like Caritas and CBS Pewosa can easily be provided to members in their financial groups.

Natural capital— biological resources of environment, water and forests can also be easily accessed, for example, some participants interviewed had bought plots of land from their savings. Therefore, at a local level, the informal financial groups can be used as a strategy to curb the problem of food insecurity among households especially among smallholder farmers who are most of the many developing countries' working population.

Intervening factors

The ways in which the IFS contributes to food security can be threatened by other factors beyond farmers' control as shown in the Figure. 9 above. These may include but

not limited to; Climate change, landslides, government policies, NGOs priorities, land grabbing and availability of the necessary support services within an area. Climate change threatens food security by affecting crop production: crops may fail because of too much rain or because of rise in temperatures, droughts bring about shortage in water which negatively impacts on both animal husbandry and crop production especially of small-scale farmers who depend on rains. According to FSIN (2019), in 2018 climate change and natural disasters such as warming climate, dry spells, floods, hurricanes pushed around 29 million people into situations of acute food insecurity and climate refugee situation. This implies that the capacities developed by communities to strengthen food security can be threatened by uncontrollable factors. However, such challenges are easily addressed as a group or community.

5.8 Challenges and limitations of the informal financial sector

ROSCAs

Since the contributions are compulsory every specified time, some members may opt out and this may affect the progress of the financial groups. Secondly, ROSCAs may be effective for traders who have a daily turnover, and not ineffective for members where agriculture is the only economic activity. Traders can easily get the specified amount in the specified time. However, subsistence farmers have variations in incomes due to seasonality nature of farming. This was evident from the members of a ROSCA, they were mostly involved in transport services and could raise the daily 5,000 UGX. On the other hand, if the members were full time farmers, this would be difficult for them in times of planting or rearing the livestock. In addition, ROSCAs make adequate sums of money available to each

member at an agreed time following the terms of the cycle (Le Polain, Sterck, & Nyssens, 2018). However, the funds do not rotate based on time of need, which may affect the effectiveness of the received funds.

Some members when they receive their share, use the funds for consumption and expense payment rather than investment opportunities. However, there are some benefits that accrue to fulfilment of paying off basic needs (for example, paying school fees for a child contributes to human development). Many news writers have noted that some households rush to the market to purchase meat because they have taken long to consume it. In a developmental perspective, such is a bad decision. Money received should be used to finance income generating activities that will build on a household's wealth. However, from a food security perspective, such a decision is necessary. This is so, because food security emphasizes dietary consumption of a variety of foods.

VSLAs and SILCs

Since these programs work almost in the same ways, challenges faced apply to both. One of the identified challenges is the fact that these informal financial groups lack long term finance options. Savings that are accumulated within the informal financial groups are shared amongst the members at the end of the financial period which is usually a year. Thus, loans extended to the members cannot exceed one year.

The other challenge is that at a point, all savings can be given out in loans and some members who may wish to borrow may end up not receiving loans when they need the money (Le Polain, Sterck, & Nyssens, 2018). This is a major challenge especially during

times of cultivation. However, VSLAs and SILCs under facilitation of NGOs tend to address this challenge by working closely with other financial institutions that can provide more funds in times of necessity. For example, SILCs would easily acquire loans at lower interest rates from cooperatives, the VSLA participants revealed that in case of shortage of funds for credit, CBS PEWOSA would provide the group with a loan which requires no collateral security, the financial groups act as the guarantor.

Safety of funds, this is a challenge to many informal financial groups. As the accumulated savings maybe in custody of a member who can easily be exposed to external threats and risks of robbery or who may be tempted to steal the money (if not trustworthy) (Le Polain, Sterck, & Nyssens, 2018). This is a threat to the success of informal financial groups if measures are not sought to address safety of funds. To address this challenge, some financial groups work hand in hand with financial institutions. For example, the VSLA and ROSCA had savings accounts with a commercial bank and SACCO in the region. Others are still practicing safety under 3 keys and lock which is a threat to members accumulated savings.

Another challenge is that the informal financial institutions have limited capacity to manage large deposits and large loans, this is supported by the fact that within some financial groups, maximum amounts are set, implying that a member cannot save money at a point exceeding the maximum limit. On the other hand, these limits are set depending on the community's ability to save and to avoid domination of most of the accumulated earned interest by the better off in the group. There is also an opportunity for the informal

financial groups to grow into semi-formal institutions, if members think they have the capacity to integrate into institutions that can manage larger transactions.

Furthermore, informal financial groups intermediate over short distances and have limits on the number of members that can be in a group. Whereas this may be true, members do not want to bring on board people they do not know very well. Since, trust and familiarity with people within the community is necessary for the success of a financial group. Also, about the limits in number of members in the financial group, VSLAs and SILCs can have more than one sub-group to accommodate members in the community who may wish to join the informal financial groups.

Some SILCs and VSLAs make it mandatory for all members to acquire loans at some point in time. This is done so that all members contribute to the interest earned by the financial group. Although, some may view this as fair, it increases the burden of the borrower who acquires a loan not out of necessity but to conform to the rules of the group. However, in some financial groups with no saving accounts in formal institutions, it was found that members encourage taking of loans to minimize the risk of fraud and theft (Le Polain, Sterck, & Nyssens, 2018). In addition, some members can borrow funds from the financial groups for nonmembers like (wives borrowing funds for their husbands who may not be members in a group). This may increase the likelihood of repaying the loan passed the agreed time resulting from a nonmember's failure to respect the rules and values of a financial group. The informal financial groups face a number of challenges like any other formal financial institutions. It is therefore necessary for the IFS to continuously seek for strategies to address the challenges.

Although the informal financial groups aim at inclusivity, this may not be achieved due to a number of factors among which may include; lack of capacity to save money every specified period of time by a household. In some instances, husbands stop their wives from joining the different financial groups because they do not want their wives to be empowered or /and do not want them to leave home for the periodic meetings in the IFGs. Some households are skeptical to join the different financial groups because of fear of default and theft of their contributions in the financial groups, this fear is even worsened by stories relating to theft in the savings groups or past experiences.

In addition, due to the necessary concept of transparency in carrying out the financial group activities, some households in the communities may not want their financial status to be known by other community households. Lastly, the presence of wrangles and grudges in the communities also may contribute to limiting the numbers of people who join the different financial groups. For example, a household may not join a financial group because their enemy or frenemy are in the financial group that they would have joined.

5.8.1 Lessons learnt and their significance

The most important issue to note is that the different informal financial groups are unique in their operations but commonly offer customized financial services to the group members. In addition, some of the informal financial groups offer services beyond financial services to the group members, such as: collective marketing services, collective labour, and social networking among others. More to that, the informal financial groups have the potential to transform into cooperatives and others can be institutionalized. Thus, the IFGs can utilize this opportunity.

As noted earlier, the benefits of the informal financial groups are enormous to communities in rural and peri-urban areas. The formal and the informal financial sectors continue to co- exist and complement each other. Based on this observation, this study finds it important for these two sectors (IFS and formal financial sector) to have more collaborative and supportive efforts, so that any gap that arises or seems missing in one sector is filled with the other. However, to the formal financial sector the motive should not be maximizing profits from the opportunities availed to them from the IFS; but rather, an act of corporate social responsibility.

Furthermore, to the NGOs that are advocating for the SDGs in line to achieving food security in communities, alleviation of poverty and promoting responsible consumption and production (SDG 2, 1 and 12 respectively); may think of initiatives like the IFGs. This implies not, that the concept should be exactly as the informal financial groups studied; but rather, the informal financial groups presented in this study can provide baselines for developing projects aiming at community development. NGOs' and CBOs' implementation plans should not be a top to bottom approach, rather a bottom to top approach is preferable and may achieve better results than projects communities view as imposed on them. In making this submission, it is necessary to emphasize that such organizations should not just introduce a project to community members and then leave that community. Many of the projects require continuous support and access to big capital investment resources that communities may not be in position to afford; such as: trucks to transport the farm produce to regional or local markets, irrigation systems, and storage facilities. For sustainability and replicability, any organization and community should note that the success of the informal groups is dependent on friendships and social ties in the community, transparency and mutual trust. This implies that the power to belong to a group or choosing group members should be left in the hands of the community members. Even though, this may be a limitation to new members in a community and to some with few or no community networks, it is crucial and important for success of the IFGs.

5.9 Conclusion

Households can reduce food insecurity amongst themselves when they can produce enough food and have enough income to enable them afford the food types they need from the market. As detailed above, the informal financial sector can help the community members in: generating income from both agricultural and non- agricultural activities, providing insurance opportunities to the un-insured agricultural sector, providing access to consumption finance and helping in creating employment opportunities to members of the community. The services offered by the IFS, with active state interventions that benefit smallholder farmers can lead to a sustainable way of food production; thus, ensuring food sovereignty as a means to food security.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the summary of the findings and literature review; it also establishes the recommendations that are deemed necessary to curb the food insecurity issue especially among the small-scale farmers. Finally, the chapter reveals areas for further study and the limitations of this study.

It is important to note that food security is a wide topic that cannot be explored in all its complexity in a master's thesis. None the less, it is worth to note that this study focused on the informal sector mainly since it is often not considered important; yet it is a source of livelihood to most of the developing countries' population.

6.2 Summary of the findings

The findings of the study revealed that the productivity of small-scale farmers can be boosted with access to savings, loan services, and social funds. Households that participate in informal financial groups have a better access to inputs needed for better yields, like small-scale irrigation which can transform into increased agricultural output. From increased production, the smallholder farmers can have enough food to feed their families and to sell to the market. Besides, with increased income, members can purchase foods that they do not produce as well as pay for other household expenses. In addition, access to social networks helps households build on their market networks and food safety

nets within the groups. These financial groups also share knowledge on the different challenges that members are facing and provide training on better practices that can boost income generation. Lastly, in cases of transitional hunger, members can access cash from the financial groups to acquire different foods rather than employing strategies that the poor households usually apply in cases of shortage like the sale of productive assets.

Based on the sustainable livelihood approach, the study findings revealed that members in the informal financial groups were able to access the financial and social capital most often, which would help households in accessing other useful resources needed in ensuring food security. Furthermore, based on food sovereignty as a means to achieving food security, small-scale farming was found relevant in letting people have control over their food production and consumption decisions that are culturally accepted, nutritious and healthy.

It has been established in chapter one and two that solving food insecurity moves beyond availability, accessibility, utilization and stabilization to even include households' access to renewable energy and clean water, as well as strategies to adapt to climate change (Naylor, 2014). IFS as a contributor to food security may not holistically solve the food insecurity issue, as it requires coordinated efforts between community members, functioning local government institutions, NGOs, and governments. However, the informal financial groups can be a basis of the interventions.

Chapters on data analysis and literature review highlighted the significance and the different ways in which the IFS contributes to food security, mainly through aiding households in increasing their production and productivity at their small-scale production

farms. It was also a key finding that members in the financial groups studied, could access the market to sell and buy different agricultural produce at fair prices due to their belonging to a specific financial group.

With the application of the agricultural value chain as an analysis tool, the study revealed how the informal financial sector finances the activities along the different agricultural value chains. In addition, the findings showed how farmers in financial groups could easily access some infrastructures like storage facilities, processing mills, transport trucks and other capital investments in agriculture that may be lacking or very expensive at the individual level. The study has also descriptively presented how the IFS can help members increase their income generation capacity and thereby ensuring access to food from the markets. How cash at hand from the financial groups contributes to solving the transitory food insecurity, which is the kind of food insecurity that happens for a short period of time due to changes in normal food availability and access. Additionally, the study has established that within the informal financial groups, members have access to social protection measures and highlighted how these networks and relations can contribute to food security and food sovereignty.

The informal financial groups were also found to encourage cooperation among people because they enhance work force assistance to members in case of need at a low cost. What is more, informal financial groups also make it is possible to engage in collective investment activities which contribute to members' accumulated savings.

Sustainable access to national, regional markets and markets beyond borders requires a continuous supply of agricultural products. This can be achieved if smallholder

farmers work in groups and have access to adequate resources. The informal financial groups can serve as more than financial service platforms for the marginalized, to even serve as platforms for marketing the different farm produce.

The informal financial groups help in: mobilizing savings, extending affordable credit to their members and members can finance different investment opportunities using these savings or loans acquired from their groups. The informal financial groups also bring people together to discuss matters that affect them individually and as a community so as to find solutions to the identified challenges. Members are also assured of access to interest free cash to use in day-to-day activities like purchasing food, farm inputs and farm equipment. There is sharing of knowledge and training within the informal financial groups which helps members to diversify their investments and promote food sovereignty with respect to food production and consumption decisions. Furthermore, the benefits of the informal financial groups are enormous as they have the potential to reach even the unbanked population and promote financial inclusion among all households.

6.3 Recommendations

The findings of this study suggest that the state should commit and play an active role in controlling the imperatives of the market. For example, MAAIF should extend subsidized equipment and inputs to smallholder farmers like, soil testing kits and irrigation systems that can boost their productivity and mitigate the effects of weather changes. Most importantly, the government should invest in equipment for communities or groups of farmers, such as, trucks to transport the agricultural produce to the processing units or to the markets.

The government should also aim at sensitizing farmers about the different programs available to them by working hand in hand with the IFS. To strengthen people's own initiatives, the government and NGOs can pattern with the informal financial groups to serve as channels to distribute subsidized credit, agricultural inputs, technology services, collective marketing, storage facilities and other agricultural extension services. Furthermore, regulations to limit the international food price volatility that affect local markets need to be enacted. In the global North, the dependency on industrial food products which are sufficient for households but may not be nutritious has led to the current resistance, in searching for local food options and short distance food systems. In the global South, where the dependency on industrial foods is relatively lower than in the global North, it is important to coordinate and support the local food supply.

As the NPA recognized, the key challenge with the smallholder farmers is the difficulty to finance the many small farming activities, especially with respect to agricultural capital investments. This challenge can be eased if different support services to the farmers are offered through these informal financial groups which are owned by the same members who would benefit from the support services. Additionally, providing market support to smallholder farmers to motivate them to produce sustainably and effectively with the assurance of availability of regional and national markets at fair prices.

Investment in value addition can contribute to the economic growth of the country and wellbeing of smallholder farmers. For many companies in industrialized economies tend to earn more from value addition of tropical commodities (Fox and Vorley, 2006) from sub Saharan Africa through branding and re-exportation. African markets are among the

leading producers of vanilla, coffee, cacao, however most of these products are exported as raw products not as finished goods. Yet, raw products fetch low prices than the finished goods. For, example, in Uganda, farmers received 14 cents per a kilo gram of the green coffee beans, yet a kilogram went for \$26.40, after being exported and processed in the supermarket chains of UK, a recorded price inflation of over 7000 percent (Fridell, 2014). This means that the countries that do so much of the work tend to earn a lower price percentage than the ones that transform the raw materials into finished goods. Thus, if the developing economies could invest in value addition to agricultural products along the agricultural value chain especially towards end of the chain, then this would (to a certain extent) contribute to increased incomes among the farmers.

Companies that process the different agricultural produce should aid in strengthening the financial support to the different farming activities along the agricultural value chain (companies that use the raw produce from farmers can invest in financing small farm activities). This can also save companies on the costs of soliciting for raw materials from different farmers, especially in Uganda, where most of the manufacturing companies depend on agricultural products as raw materials.

It has also been observed that prices of purchasing and importing food are subject to market irregularities and given the fact that food is a fundamental need of life, "any disarticulations in the supply of food pose problems and invoke reactions by the state, the market, humanitarian organizations and the households to a much more acute pitch than the other basic needs" (Crush, Frayne, & McCordic, 2018, p.3). Therefore, strategies that

can minimize the impact of the vagaries of the market like own food production need to be embraced and promoted for sustainable food security.

The IFS can address some challenges that they face within the financial groups by working together with formal financial institutions and NGOs. For example, to promote safety of funds, members can open savings accounts in formal financial institutions with more security to keep funds secure.

6.5 Areas for further study

Food safety and Food wastage management; from the field study, it was observed that some perishable agricultural products that go bad are not disposed of well. In Kampala, food waste contributes to most of the city's waste which is not managed well. Therefore, a study can be carried out to find the existing food safety and food wastage management practices and how those can be improved or replaced. Besides, food adulteration is on rise in some areas and this needs to be investigated.

Informal economy and development; during the review of literature of the informal financial sector, many authors were equating IFS to the informal economy that has not been wholly studied to establish it is irrefutable contribution to development in many developing countries.

Land grabbing; more studies need to be carried out to explore the mob land dispossessions in Uganda. And how the government is involved in its attempt to acquire large tracts of land for large scale private investments which have negatively impacted on

the livelihoods of smallholder farmers, mostly women and the vulnerable that depend on land as their source of livelihood.

Small-scale farming and environmental conservation; it is undeniable that most small-scale practices contribute to environmental conservation but since it was not in the scope of this study, it was not explored to establish the extent to which this applies in Uganda. Thus, it is an important area that could be considered for further studies.

Gender and food security; a case study needs to be carried out to find out the impact of food insecurity in line with gender, social class and age category of the different households, particularly in urban regions of Uganda since most studies focus on rural areas.

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Appendix

Interview guide

To the participants

About the financial group

- i. How often do you meet in this group?
- ii. How do you choose the members to belong to a group?
- iii. How many members are in the financial group?
- iv. What services are available to the group members?
- v. What are the objectives of the group?
- vi. How does the group operate?
- vii. What is the interest rate?
- viii. Do you feel your finances are safe with the financial group?
- ix. What inspired you to join this financial group?

Food security

- i. Do you produce food for own consumption?
- ii. Is it mainly for own production or for commercial purposes?
- iii. Market access for food consumption (affordability, distance)
- iv. Market access for the farm produce
- v. Where you worried about food to eat for the last 12 months

Informal financial groups and food security

In which ways do you think participating in the informal financial group contributes to food security?

To the extension workers

- i. What services do you provide to support farmers?
- ii. Who facilitates your services?
- iii. What is the area coverage you provide the support services?
- iv. Do you ever meet government agricultural extension workers in the field?

To the bank officials

- i. What programs do you have in place to support farmers?
- ii. What is the process a farmer must go through to acquire a loan from this financial institution?
- iii. What are the preconditions to receiving an agricultural loan if any?
- iv. What is the interest rate?

Focus groups discussion questions

The focus group discussions were led with the help of the research questions with an aim of generating themes for data analysis.

- i. What services are provided by the informal financial sector in Uganda?
- ii. What is the impact of the informal financial sector in Uganda?
- iii. How does the informal financial sector contribute to food security in Uganda among smallholder farmers?

Farming and other economic activities in the study area.

| Crop production | Livestock rearing |
|------------------------------------|------------------------|
| Tomatoes | Piggery |
| Coffee, Vanilla | Poultry |
| Beans | Cattle rearing |
| Maize | Goat rearing |
| Banana plantations | |
| Vegetables (like egg plants) | |
| Greens, mushrooms | |
| Fruits (pineapple, Pawpaw, Mangoes | , Jackfuit, Ovacados) |
| Sweet potatoes | |
| Cassava | |
| Potatoes | |
| Watermelons | |
| Passion fruits | |
| Yams | |
| Cabbage | |
| Tree plantation | |
| Sugarcanes | |
| | |
| Economic activities | |
| Occupation | |
| Traders | |
| Food vendors | |
| Taxi drivers | |
| Boda-Boda drivers | |
| Restaurant owners | |
| Teachers | |
| Tailors | |
| Secretary | |
| NGO workers | |