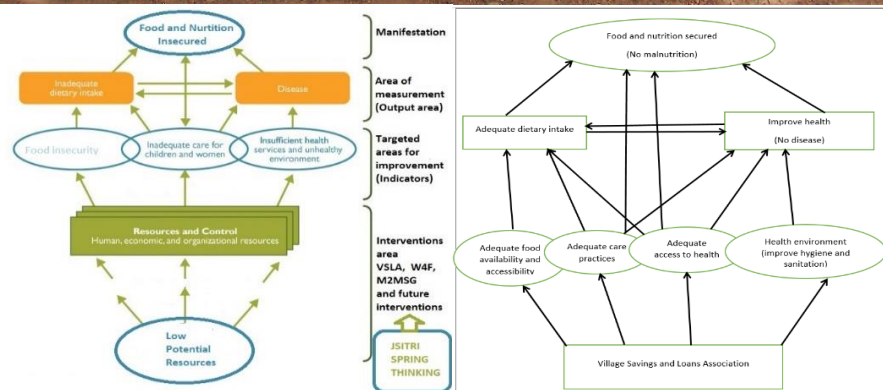


The contribution of Village Savings and Loans Associations to household food and nutrition security: The case of households in the East Mamprusi District, Ghana



A research project submitted to Van Hall Larenstein University of Applied Sciences in partial fulfilment of the requirements for the degree of Master in Management of Development, specialization Rural Development and Food Security.

By
Wilfred Apiung Akan
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Dedication

I dedicate this research work to my late mother, Ms. Juliana Apiung. You were my source of motivation, and your words still keep me going.

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List of acronyms

VSLA	Village Savings and Loans Association
SLG	Savings and Loans Groups
A4N	Agriculture for Nutrition
JSITRI	John Snow International Training and Research Institute
UNICEF	United Nations International Children Emergency Fund
ROSCA	Rotating Savings and Credit Associations
ASCA	Accumulating Savings and Credit Association
SACO	Savings and Cooperative Organisation
CARE	Cooperative for Assistance and Relief Everywhere
MMDAs	Metropolitan/Municipal and District Assemblies
NGO	Non-Governmental Organisation
CHIPS	Community Health Improvement Programme
FGD	Focus Group Discussion
DADU	District Agriculture Development Unit
SPRING	Strengthening Partnership Results and Innovation in Nutrition Globally
WIAD	Women in Agriculture Development
KII	Key Informant Interviews
CAP	Community Action Plan
GHS	Ghana Health Service
CSM	Cerebrum Spinal Meningitis

Abstract

Access to micro-credit has often been argued to be one of the effective ways of contributing to food and nutrition security. CARE International since 1994 introduced the Village Savings and Loans Association (VSLA) in Ghana. The VSLA since then, has been contributing to making some amount of micro-credit available to rural dwellers. There has been some improvement in food and nutrition security although the problem persists. Northern Region is third in the ranking of food and nutrition insecure regions in the country. The East Mamprusi District (EMD) is one of the areas in the region in which majority of its population is food and nutrition insecure. John Snow International Training and Research Institute (JSITRI) is an organisation working on food and nutrition security in the district. The organisation has been using VSLA for its food and nutrition security interventions. JSITRI however, has limited evidence on how VSLA is contributing to household food and nutrition security. The objective of this study is to assess the contribution of VSLA to household food and nutrition security. The main question this study will find answers to is how does VSLA contribute to household food and nutrition security?

The research applied a case study as a strategy to address the research objective. Primary and secondary data were used. Secondary data was gotten through desk study. Qualitative Primary data was collected through semi-structured interviews with 30 individual VSLA members using a checklist. Four focus group discussions were held with household heads, lactating mothers, farmers and opinion leaders who were all members of VSLAs. Stakeholder such as Ghana health service, department of agriculture, CARE International, JSITRI and the district assembly were interviewed as key informants. Finally, the researcher also used personal observation. All this were tools employed to help triangulate data.

The study revealed that VSLAs are usually setup for a particular purpose that is micro finance but with other functions. It was established that VSLAs had created platforms in the community where community members get information on access to health and care practice, information on agriculture and climate, and information on environmental health and sanitation. Through the VSLA platform, households now received agriculture extension service, capacity building on good agricultural practices and access to labour through the group communal labour support system. The findings also recognised that, through the VSLAs households have been able to register with the national health insurance scheme. VSLAs have also contributed to access to transportation means as some households have been able to acquire motors cycles and bicycle. Others get support from group members in times of needs. The findings further revealed that through VSLAs households have been able to build their own latrines through the knowledge they gained from training, credit facilities from the group and labour support from the group. The findings also established that interaction among group members has contributed to members gaining knowledge on complementary and exclusive breastfeeding practices. It has also affected members' decision on medical health seeking behaviour.

The findings suggest that VSLA is a useful tool that is capable of contributing to the improvement of household food and nutrition security if it is effectively implemented. To improve the effectiveness of VSLA in order for it to be used as a useful tool in the fight against food and nutrition security, the following recommendations were proposed. That, stakeholders using VSLA intermittently access their viability and build their capacities on group dynamics and conflicts management. That, in forming VSLAs, stakeholders beware of social classification and other community specific issues that will affect the operation of the VSLA and address them if possible.

Chapter one

Introduction and Background of study

1.1 Introduction

Africa is bedevilled with numerous challenges such as food insecurity, poverty, malnutrition, diseases and conflicts. Ghana, a country in Sub-Saharan Africa is not an exemption as she faces most of the challenges mentioned above. According to the global food security index, 47.8% of Ghanaians are food secured (GFSI, 2016). This means the majority of Ghanaians are likely to be malnourished since 52.2% are food insured. Food security is an essential but not satisfactory condition for nutrition (Saaka and Osman, 2013)

This study undertook a case study in Teanoba a community located in the Mamprusi East District of northern region in Ghana. The study investigated how the Village Savings and Loans Associations (VSLAs) contribute to the household food and nutrition security.

1.2 Background

1.2.1 Food and nutrition security

The food and nutrition security in East Mamprusi is very poor. Although 90% of the district population are farmers, food is not always available at the households throughout the year. The cause of non-availability of food all year round in household especial rural households are attributed to inadequate rainfall, decline in soil fertility and high cost of agro- inputs. In addition, the extension officer to farmer ration is which currently 1: 4500 is very poor as The poor food and nutrition security situation of the district is not only caused by inadequate food availability.

Food accessibility is also another factor affecting the food security situation of the district. The road network linking the rural areas to the district capital is poor. This affect food production since farmers in the rural areas where food production takes place cannot access agro-inputs. In addition, the poor nature of roads in the district affects the movement of food from areas where foodstuff are in abundance to areas where they are scarce. The district is characterised by high rate of unemployment and it has not viable industries to empower the people economically to be able to access food.

East Mamprusi District is one of the districts in the Northern Region with high levels of malnutrition. The district has no government hospital. It has four health canter and 12 Community Health Improvement Programmes (CHIPs) facilities serving over 142 communities. This affect health service accessibility and quality health care delivery since the population is more than the facilities can cater for. This district is also characterised with poor environmental hygiene and sanitation leading to the outbreak of diseases intermittently. Portable water coverage in the district is very poor as some communities in the district still drink from unhygienic sources of water. This led to water borne diseases outbreak causing high morbidity.

The poor food and nutrition security status of the district triggered the movement of many Non-Governmental Organisations (NGOs) including JSITRI in to the area. These NGOs come with various food and nutrition security intervention with different implementation strategies. Strategies such as the Village Savings and Loans (VSLA), Savings and Loans groups (SLG), New Born Mother Committees, Natural leaders and Water and Sanitation Committees are tools used to support in the improvement of the food security situation in the district.

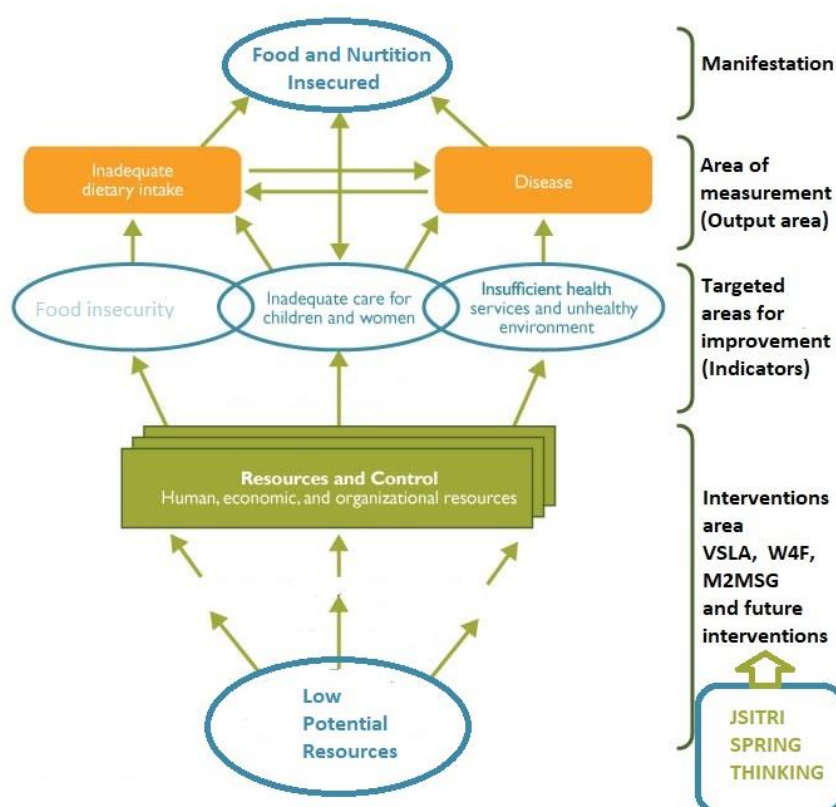
1.2.2 John Snow International Food and nutrition security project concept

John Snow International Training and Research Institute (JSITRI) is public health Non- Governmental Organisation working in the East Mamprusi District of Northern Region in Ghana. It is the implementing organisation of a food security project known as Strengthen Partnership Result and Innovation in Nutrition Globally (SPRING). The core areas of interest are promoting agriculture production, nutrition, public health, water and sanitation.

JSITRI's definition of a food and nutrition secured household is when the household has access to health care, improve care practices improve environmental health and sanitation and having food available at all times. It adopted the UNICEF 1990 malnutrition framework as strategy of fighting food and nutrition insecurity. JSITRI's view of food and nutrition secured household is when there is improvement in the underlying causes of malnutrition of the UNICEF malnutrition framework as shown in figure 1.1. Figure 1.2 shows JSITRI's approach to food and nutrition security using the UNICEF 1990 malnutrition, framework.

The SPRING project in Ghana, implemented by JSITRI has several interventions it implements in an effort to contribute to the improvement of food and nutrition security. The interventions being implemented by the project include the VSLA, Work for Food (W4F) and Mother-to-Mother Support Groups (M2MSG). The organisation seeks to contribute to food and nutrition security through the implementation of these interventions, which it believes, will have influence on the basic cause of UNICEF malnutrition framework.

Figure 1.1 SPRING approach to fighting food and nutrition insecurity adopting UNICEF 1990 malnutrition framework



Source: JSITRI, SPRING Ghana project implementation strategy (2013)

1.3 Problem Statement

JSITRI SPRING project has and is currently implementing interventions, which seek to contribute to the improvement of food and nutrition security in the East Mamprusi District. JSITRI is implementing several interventions, which include VSLA, Work for Food (W4F), and Mother-to-Mother Support Groups (M2MSG). There has been improvement in the underlying causes of food and nutrition insecurity which are, inadequate food availability and access, inadequate care practice, inadequate access to health care and poor environmental sanitation and hygiene. JSITRI has limited evidence on how the VSLA is contributing to food and nutrition security in the households. This study therefore investigated how the VSLA is contributing to the improvement of household food and nutrition security and made recommendations for improved implementation.

1.4 Research Objective

Main Objective

To assess how VSLA is contributing to household food and nutrition security and recommend to JSITRI strategies for strengthening VSLAs to become an effective tool for the fight against food and nutrition insecurity in the East Mamprusi District.

1.5 Research Questions

Main Research Question

How does Village Savings and Loans Association contribute to household food and nutrition security?

1.5.1 Specific Questions

1. What is VSLA?
2. How does VSLA contribute to household food availability?
3. How does VSLA contribute to household access to health service?
4. How does VSLA contribute to household care practices?
5. How does VSLA contribute to improve environmental sanitation and hygiene?

1.6 Organisation of the study

The study consist of eight chapters. Chapter one is the introduction. It is made up of the background to the study, problem statement, research objectives, and research questions, and organisation of study. Chapter two consist of reviewed literature, which involves, theoretical explanations of the topic, and conceptual framework, which puts the current research into perspective. Chapter three focuses on the research methodology: study area, research strategy, data source, sampling procedure and size and, data collection instruments, data analysis technique, and ethical issues. Chapter four dealt with the research findings and interpretation. While chapter five discusses the result/findings, chapter six is made up of drawn conclusions. Chapter seven dealt with recommendations for project improvement and further studies and Chapter Eight self-reflection.

Chapter Two:

Literature Review

2.1 Introduction

This chapter looks at literature related to food and nutrition security, operational definition and operationalization of food and nutrition security, the concept of VSLA, VSLA and food availability, VSLA and health access, VSLA and care practices and VSLA and environmental hygiene and sanitation, VSLA and social cohesion and summary of knowledge gap

2.2 Operational definition of terms

2.2.1 Household

For the purpose of this research, Ellis (2000) definition of household will be adopted. According to Ellis, a household is a group of people living together under the same roof, sharing a meal and other household responsibilities.

2.2.2 Food and nutrition security

According to FAO (2012), people are said to be food secured when at all times they physically, economically and socially have access to safe food, which is consumed in sufficient amount and in the right quality to satisfy, their dietary requirement and preferences, which is supported by, improve environmental sanitation, health service and care for healthy and active life. This definition will be adopted for the purpose of this study. The above definition identifies four key dimension of food security as discussed below. However, this study will concentrate much on food utilization.

2.2.3 Food availability

According to FAO (2012), food availability is defined as the ability to have enough quantities of food on a regular and consistent base, which is fundamental to the achievement of, improve nutrition. Food availability on a national or district level is taken into consideration local food production, food import, food aid and food stocks within the country or the district that is available for use.

2.2.4 Food accessibility

Food accessibility is defined as the ability to have enough physical, economic and social resource that will lead to obtaining the right foods for a nutritious diet (FAO, 2012). The availability of food in some parts of a country or a district does not mean that households or individual have enough to eat. Food accessibility includes income, expenditure and buying capacity of households or individuals.

2.2.5 Food Utilization

Food utilization according to FAO (2017) is defined as how the body makes use of the various nutrients in the food consumed. Adequate nutrients and energy intake by individuals is influenced by good care and feeding practices, how food is prepared, the diversity of the diet and distribution of food within the household. Food utilization will not be effective if there is no clean water, good environmental hygiene and sanitation and a healthy body.

2.2.6 Stability:

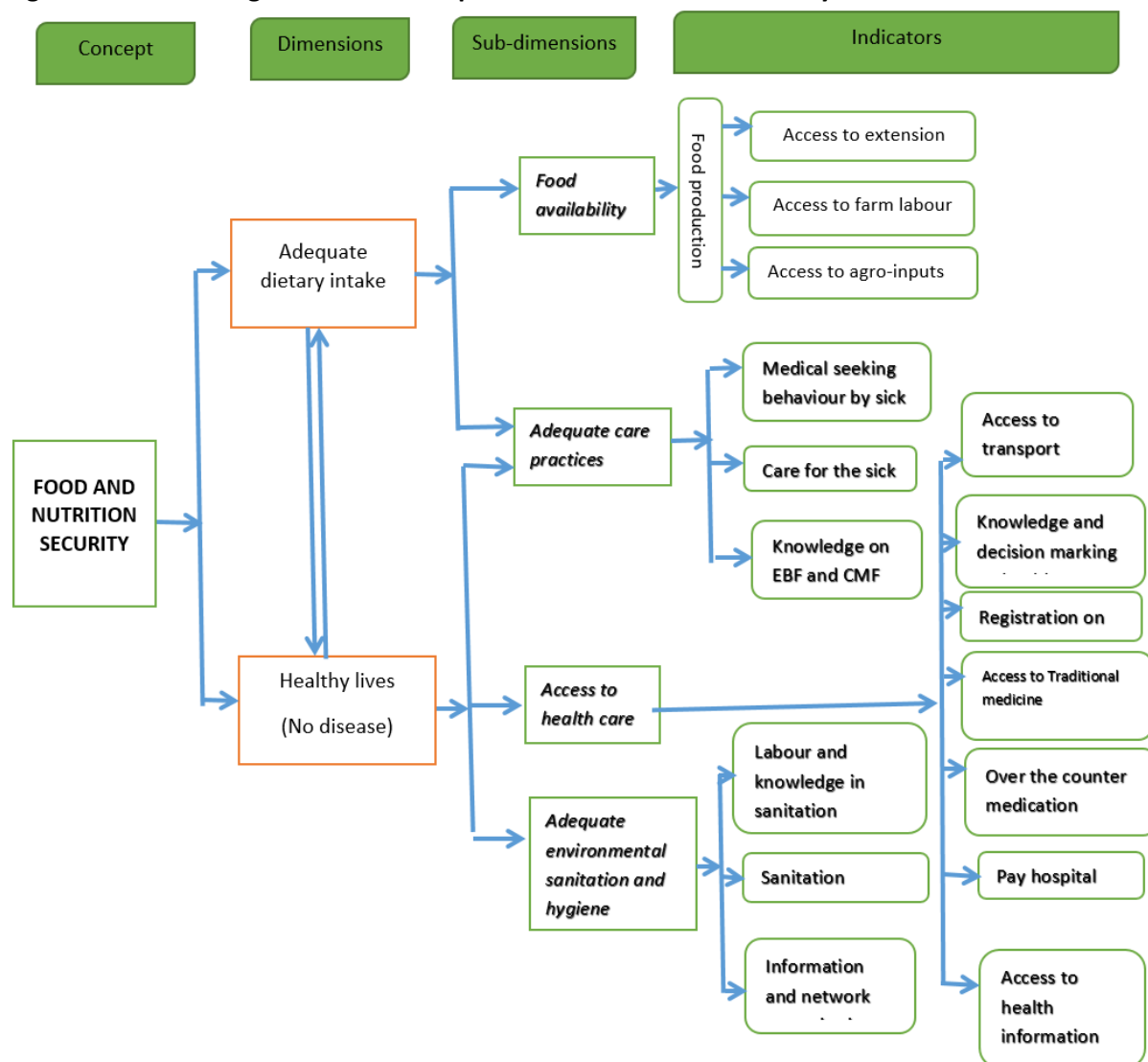
Food stability exist when a household or population at all times have access to adequate food. The population or the household should be resilient to with stand all shocks such as economic and climatic, and seasonality such as hunger gaps. If an individual's food intake is adequate today, the person is still considered to be food insecure, If he/she has inadequate access to food on a timely basis, the person risk a deterioration of his/her nutritional status. The concept of stability can therefore refer to both the availability and access dimensions of food security.

2.3 Operationalization of food and nutrition security

The concept of food and nutrition security is operationalized as shown in Figure 2.1. This study is restricted to household food utilization (Nutrition) and availability as it is been use by JSITRI in its activities implementation. JSITRI adapt and use the UNICEF 1990 malnutrition framework as it

foundation for redefining its operational food and nutrition security. This conceptual framework has adapted the UNICEF malnutrition framework and adjusted it to suit the context of the researcher. This framework will contribute to unearthing the contribution of VSLAs to household food and nutrition security in the EAST Mamprusi District. According to Saaka & Osman (2013), food security is an essential but not satisfactory condition for household nutrition. There are other factors, which influence food and nutrition security. JSITRI therefore define food and nutrition security as when a household has its members healthy and has adequate food for their dietary intake. Thus, this research adopted and modified the UNICEF 1990 malnutrition framework to study the contribution of VSLA to food and nutrition security at the household level.

Figure 2.1 Unravelling the JSITRI Concept of food and nutrition security at the household level



Source: Researcher construction, July, (2017)

2.4 State of Food security

Globally, food insecurity is one of the problems both developed, and developing countries are facing. The problem is not just about food production but it has to do with distribution and utilization (FAO, 2017). Despite it being a problem, efforts globally towards the improvement of the situation is yielding results as hunger over the world has decreased. It is estimated that the number of undernourished has reduced by 176 million over the past 10 years (FAO, 2015). However, about 800 million people in the world remain food insecure and hungry still making it a global challenge (FAO, 2017).

The food security situation of sub-Saharan Africa is not different from the world. Sub-Saharan Africa has however made progress towards a food secured continent. There has been a decline in the total number of hungry people in sub-Saharan Africa by 31 percent between 1992 and 2015. It has also been estimated that one out of four persons are malnourished as compared to one out of three persons in 1992. Food security improvement in Africa has been remarkable in West Africa. The population of West African who were hungry has reduced from 24.2 percent to 9 percent between 1990/92 and 2014/16, a reduction rate of 63 percent (FAO 2015).

Ghana is not an exception when it comes to food insecurity. About 52.2 percent of Ghanaians are food insecure and its currently ranked 78th out of 113 countries on the global food security index (GFSI, 2016). The core of the worsening food insecurity situation in the country is due to the rapid population increase and the decline in fertility of agricultural lands and productivity. Limited literature about Ghana points out that, food insecurity is concentrated in the rural areas although they are areas where food production takes place Aidoo & Tuffour, (2015) as cited in (Nkegbe et al 2017). Northern Ghana is made up of the Upper West Region, Upper East Region and Northern regions. These regions are seen to be the least developed regions in the country. Food insecurity in terms of regional distribution puts the Upper East Region in the lead with 28 percent, followed by the Upper West Region with 16 percent and Northern Region 10 percent (Nkegbe et al 2017). In the Northern Region, the East Mamprusi District is not different when it comes to food insecurity. It is estimated that about 15 percent of household in the East Mamprusi District are food insecure (WFP, 2012). East Mamprusi District is one of the districts in the region with high levels of poor nutrition indicators. In the areas of sanitation, access to health care and food insecurity it was ranked 13th out of 26 municipal and district assemblies in the region. Stunting in the district is 23%, anaemia 20%, and wasting is very high in the district (DDHS, 2016).

2.5 Concept of VSLA

Traditional saving methods such as Rotating Savings and Credit Association (ROSCA) provided community members with the avenue to save, but it did not give the opportunity to members to borrow at their own time and also they did not earn interest on their savings. At a meeting, it was only one member drawn through a lottery to keep the savings. The problem of the model is that not everybody can access loans and no interest is paid couple with documentation challenges led to a revolutionary approach to savings by introducing the VSLA system. It is now one of the most popular means of saving in the rural communities and serves as an alternative to ROSCAs (Ksoll et al. 2016).

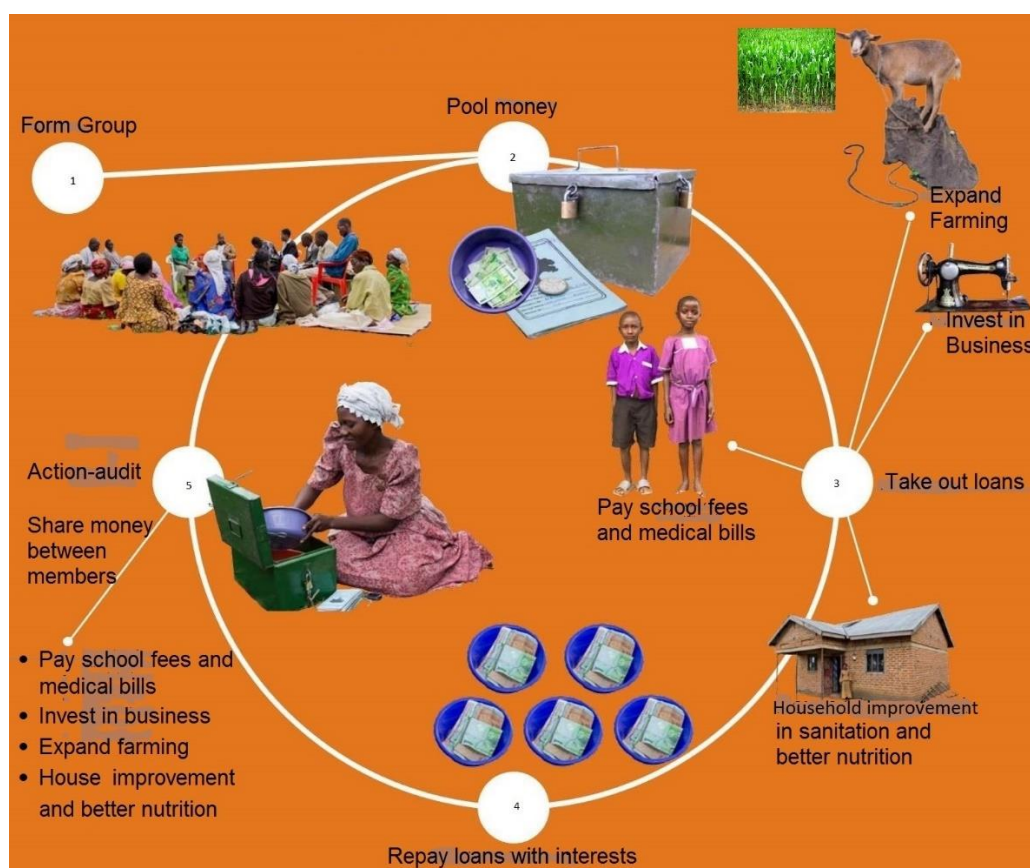
The operation of a microfinance service in Africa is considered one of the most difficult sectors in finance. It was at a point in time considered prohibitive because of high illiteracy rate, widespread of diseases such as HIV/AIDS, malaria, and lack of a uniform currency across the region. Because of these challenges, it is believed the operational cost will be high and due to diseases, families who benefit might not be able to invest into productive ventures and payback. The VSLA model suppressed most of these challenges proven to be one of the effective ways of reaching out to the un-banked rural poor better than formal microfinance institution and banks. The poor now run their own bank in their communities based on trust, networks and norms (Paschal et al. 2016).

The Village Savings and Loans Association (VSLA) is a form of community self-help group in savings and loans (microfinance) manage by group members. It provides group members with access to savings and microcredit for small-scale rural enterprises. Members are self-selected base on trust, neighbourhood, and self-governed by a five-member executive team. They meet weekly base on the day and time suitable for them and contribute (buy shares). VSLA employ the Accumulating Savings and Credit Association (ASCA) operational strategy thereby making it an ASCA, which do not borrow outside but rather mobilised its resources internally. It has networks and connects with outside organisation depending on the objective of the group. It is not the same as Savings and Cooperative Organization (SACO) because it does not receive funding from outside the group. (Allen & Staehle, 2007).

All members have equal right to take loans. However, the amount each member takes depends on the savings of the member. A member can take a loan up to three times of the member savings. The first eight weeks is solely for shares purchasing. Loans are given out in the ninth week and payment takes three months with an interest rate of mostly 10%. Groups set their repayment plan, and terms and fines are not imposed on borrowers who default in payment per the repayment plan because it might worsen the underlying causes of the person borrowing. However, every member who has a loan has to pay at the end of the cycle to help them in the share-out. (Allen& Staehle, 2007).

Group members agree on a date after a year of saving, and the interest they have made is shared among members. This is called the “auction audit” and happens when members need for money is very high. Periods such as time of paying school fees, farming season, and other pressing needs within the seasonal calendar of the community. After the auction period, group members fixed a day to start with a new cycle of contribution. Leadership might change, and some members might drop while others join. Also, some members who the group cannot trust and who always go contrary to the norms and laws of the group are expelled (Allen& Staehle, 2007).

Figure 2 .2: VSLA circle



Source: Researcher construction (July 2017)

2.6 Food Nutrition Security and VSLA

Catholic Relief Service in some countries in Central America and Nicaragua through the Agriculture for Nutrition Programme” (A4N) uses Village Savings and Loans Associations in implementing the project activities. This program seeks to improve women’s skills in five areas, which include agriculture production, marketing, savings and lending. Staff was not sure if the VSLA could be used for their programme. The programme was successful as the groups expanded from 20 to 257 groups with 3,283 members as stated by Andrew et al., (2010) cited in Hong, (2013)

Village Savings and Loans Associations in Rwanda, Tanzania, Kenya and Ethiopia is said to have contributed significantly to household food security as nutrition and health status of households is

mostly influenced by the food security situation of the households. Households, which are food insecure, have poor nutritional and health status (Doocy et al. 2005). Brannen (2010) cited in Hong (2013) in a study in Tanzania said participating in VSLA have significantly and positively increased in meal quality and influence the quantity of fish consumptions. From Rwanda, families who benefit from Red Cross Credit Programme have shown improved quality of meals and increase in fish consumptions as stated by Lacalle et al. (2008) cited in Hong (2013).

A study in the upper west region of Ghana shows that food insecurity among mothers who are not part of the VSLA system in the community is high as compared to mothers who are in VSLAs. This was because of the improvement in food access of these mothers (Abdulai et al., 2014). In an evaluation report of CARE International “PROMISE” Project, which uses the VSLA approach report’s that, all households who participated in the project have improve food access, availability, utilisation and stability. It also said access to health care service has improved and environmental sanitation and hygiene have improved (Paschal et al. 2016).

2.7 Contribution of VSLA to Environmental Hygiene and Sanitation

Population in the world that lacks good drinking water is projected to be 663 million (UNICEF/WHO, 2015). Bain et al. (2014) in a study estimated that about 1.9 billion people use water, which is contaminated with faecal matter. About one-third of world population (2.4 billion) do not have access to improved sanitation. Out of this 2.4 billion, 13% practice, open defecation and sub-Saharan Africa and Asia continue to have the lowest coverage of good sanitation facilities (UNICEF/WHO, 2015). This has contributed to the contamination of water for the about 1.9 billion people estimated by Bain et al. (2014). In a study by Freeman et al. (2014) in 19 countries, only 19% percent practice handwashing with soap.

It has been estimated that about 50% of undernutrition is linked to contaminations caused by poor environmental sanitation and hygiene and unsafe water (WHO, 2008)

Social capital in groups and communities is very crucial in maintaining environmental hygiene and sanitation in a community. There is also growing literature on practices like hand-washing improving sanitation through the use of latrines at household level and domestic hygiene practices (Cairncross et al. 2005). Environmental hygiene and sanitation are influenced through networks. Intervention, which seeks to change behaviours towards environmental hygiene and sanitation, does that through groups. Change in environmental behaviours requires educations on health, hand washing and latrines use (WHO, 2004). Groups which have connections to a source of information have education on selecting the right sanitation technology, adoption of hygiene and sanitation practices such as hand washing, latrine construction, safe storage of food and drinking water. A group member who has information on sanitation and environment shares with other members as well as their neighbours. Groups, which also receive or get information through their network or connection organise sanitation and hygiene promotion campaigns. Lobbying for subsidies on sanitation and hygiene facilities in groups is another benefit of being a group that has network and connection. Through the connection of groups, members can lobby to get loans from institutions for sanitation and hygiene practices and pay back later. Members of VSLA groups in Rwanda in the Rubengera sector in a study said VSLA contributed to sanitation and health. They said they pay their water bills and other utilities through their savings and take loans to facilitate the construction of latrines (Mubashankwaya and Manyange, 2017).

Community-led total sanitation is an intervention in the area of sanitation and health, which help communities to build their latrines. Building latrines for communities were seen not to be effective in the fight against water and sanitation problems. Community members are mobilised into groups of ‘Natural Leaders’ and sanitation committees to facilitate the process (Plan, 2013). According to Jung et al. (2017) improvement of community and household, sanitation can either be through group or community-wide approach where community members come together to undertake activities that contribute to improvement in sanitation. It was established that, open defecation eradication and public faecal sludge could be through neighbourhood committees formed with the objective of

undertaking such exercise. This improvement comes because of the trust and solidarity members in the group or community have for each other. Income levels and social standing in the community also influence sanitation and hygiene in Ghana in the rural areas. Household members in groups get the group support during the construction of their latrines.

2.8 Contribution of VSLA to health care practices

Communities with high social capital have improved the status of health as compared to communities with low social capital. This was proven by a study, which tried to find out how wealth and social capital can improve health. There was marginal growth in development in a community with high wealth with less social capital as compared to the community with less wealth but high social capital. However, the community with less wealth but high social capital had a high level of health improvement than communities with high income but low social capital. This was because of a change in behaviour towards the eating habits as groups and community members reminded each other on the dangers associated with bad eating habits (OCED 2010). Groups can influence health of an individual in three ways. These are through access to relevant health information, informal support, and facilitate lobbying in well-organised groups (Rocco & Suhrcke 2012). People participating in social events either formal or informal groups have access to information at low cost.

Various studies have ascertained that there is a high level of relationship between a resource in social capital especially networks and the health status of people in groups or community (Eriksson, 2011). Social support of various forms have the potential of stimulating health through the 'buffering factors' for stress and depression, and this is gotten through social networks (Bartley, 2004). Another way by which Social capital through social networks contributes to health is through social influences. Group members influence each other's behaviours such as eating habits, diet preparation and feeding practice for children is documented in public health promotion of which nutrition is included (Eriksson, 2011). Also, new skills on diet preparation, feeding methods, and child hygiene are learnt through opportunities provided by social participation. Being part of a group and social belongingness contributes to the health in a sense that, group membership can provide you with health-related resource and access to health service. Belonging to a group in a community and holding a leadership position in a group makes one have more opportunities than others in the same environment, and it improves status. Social status is believed to have a positive correlation with health status as the feeling of being privileged contributes to stress reduction (Marmot, 2005).

Social capital also functions as a mediator between income variation and health. This according to Eriksson, (2011) in a study found that life expectancy is longer and health is better in a society where the degree of variation of income levels are very minimal as they all have access to same quality health care and no stress of not meeting the financial needs.

Despite the positive influence of social capital on health, it also has negatives. According to Eriksson (2011), social capital can affect health negatively by increasing the level of stress due to high demands on the provider. Social influence might also be affected by the solidarity and norms within the group. This may lead to influencing a group or community members behaviours regarding health. This behaviour can be either health enhancing or health damaging, subject to the norms in the network. In a group or society where norms and solidarity are very strong, there is the likelihood of strong social control. Strong social control rewards obedient members and punished deviant members.

2.9 Contribution of VSLA on food Availability

Barnes (2001) finds that participation in Zambuko Trust in Zimbabwe has a positive impact on the frequency at which food is consumed in extremely poor households as well as on the quality of food. Specifically, participation has led to a positive impact on the consumption of high protein foods (meat, fish, chicken and milk). McNelly and Dunford (1999) also found that children of participants of the Lower Pra Rural Bank Credit program in Ghana experience significant improvements in feeding frequency compared to children of non-clients. VSLA facilitate labour access by group members since they support each other to work. Also, the groups undertake share-out during the raining season to

boost farmer's ability to increase production. Farmer's ability to buy more agro-inputs during the raining season is given a boost since they have more money at hand. This money becomes an asset which they can use it to reduce their livelihood risk by increasing their farm production which is their main source of livelihood. (Mubashankwaya and Manyange, 2017). Furthermore, saving is an asset, which can be used to reduce livelihood risks.

2.10 Contribution of VSLA to health care Access

Social capital facilitates income equality which has a positive influence on health. Turner (2003) in a study found that income equality does not only increase social cohesion in society but also it influences investment in health care and housing which influence the health of individual and communities as a whole. Findings of a study by Kawachi & Kennedy (2001) cited in Eriksson (2011), shows communities with a high level of social capital are more successful in fighting for their share of government development initiatives in health through political influence. A study by Fenenga et al. (2015) in Ghana found that the extended family system which is still a social capital in Ghana offer both education and social support to family members in time of need for their health care. Collectively extended family function as a group and members enjoy the benefits of being part of it. In Africa, social capital influences educational level of group and community members. This is because they have access to information, which they teach each other and try to understand what the information is all about (Cramm and Nieboer 2011). Also, a study in Rwanda concluded that VSLAs contribute to the health improvement of the group members. This is because members have access to money, which they use to register for their health insurance thereby giving them access to health care (Mubashankwaya and Manyange, 2017).

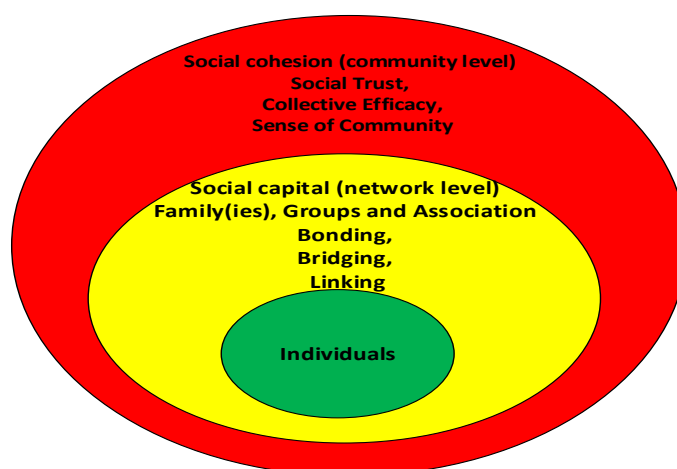
2.11 Social cohesion and VSLA

According to Larsen (2016), social cohesion is defined as a common moral in community held by citizens of a country, a town, a community, a family and a group, which enable them to trust each other. The common moral, which enable people to trust each other facilitate their well-being, reduce differences and reduce ostracism. One's well-being is taken care of by others and marginalisation and ostracism is reduced, enabling members to have a sense of belonging (Larsen, 2016). Social cohesion in Ghanaian communities is very high as the extended family system is still respected. The extended family system makes it easy as family members trace their relatives to their current location. Social integration at the community and household level promote social cohesion. Family, group and community members who are well integrated see themselves as family and for that matter build some level of trust among each other (Fenenga et al. (2015). VSLA is a self-help group formed out of the trust members have for each other. Because it is more of a micro finance group, members should have trust for each other before they form the group. CARE International in their project evaluation reported stated that 10% of the communities in which they implement VSLAs fail because the communities lack social cohesion since it is divided on political, ethnic and religious lines (CARE, 2017). Social cohesion is also affected by social classification and poor integration of community members. Social class lead to the segregation of community/ family members. In Groups, social class affect the participation of the vulnerable. The Vulnerable in the society are always voiceless because majority listen to the influential ones in the group. Effective social cohesion has a great potential of contributing to food and nutrition security if, community members assist and support each other.

Therefore in this study, the individual is treated as the smallest unit of social capital followed by the household, the group and the community as a whole. However, the study will treat the network, bonding, linking and bridging social capital within the group (VSLA). Individuals are in the innermost circle and are bound by household or family. The individual and the family are embedded in social networks and structure which in this study is the VSLA, and finally, this is all embedded in the community, which is look at as the macro environment. Social capital therefore, operates within an individual, interpersonal networks and communities and operates differently at each stage (Flap 2004). Individual social capital in a community is likely to be affected by the level of social cohesion that

determines resource amount in a community or might also be affected by individual social capital that employs group interest strategy.

Figure 2.3: Concept of social cohesion



Source: Adopted from Kim (2013)

1.12. Summary of knowledge gaps

It has been seen throughout the literature review that micro- credit plays a significant role in the fight against food insecurity. VSLA as a micro credit group has gained strength which is commendable because of its ability to increase access to credit and savings facility by rural dwellers. This has made government and its development partners such as Non-Governmental Organisations focus on the VSLA as a useful tool that can be used to fight food insecurity and facilitate sustainable development.

The concept of food security has undergone several transformations, especially concerning definition and sub-dimension. The FAO (2012) definition has added new sub-dimensions such as environmental sanitation and hygiene, and care practices. Various studies have not shown much, how VSLA contribute to food and nutrition security with the sub-dimensions, which are projected in the FAO (2012) definition. This study therefore, looked out at how this plays out in the context of VSLA and food and nutrition security with the FAO, (2012) in mind.

The literature revealed some positive relationships between microcredit and food security but with less emphasis on environmental sanitation and hygiene and care practice. Through VSLA, household food availability and accessibility had improved as most of the literature suggests. Some literature had also suggested that through VSLA food utilisation and stability in rural communities have improved. However, few of the studies have shown how VSLA contribute to food and nutrition security with the FAO (2012) definition. It is yet to be seen if any study has adapted and operationalised the UNICEF 1990 malnutrition framework in the context of food and nutrition security. This study will therefore, look at how the VSLA contribute to household food and nutrition security to fill the gap using the East Mamprusi District as a case. The main question this study seeks to answer here is **how does VSLAs contribute to household food and nutrition security?**

Chapter Three

Research Methodology

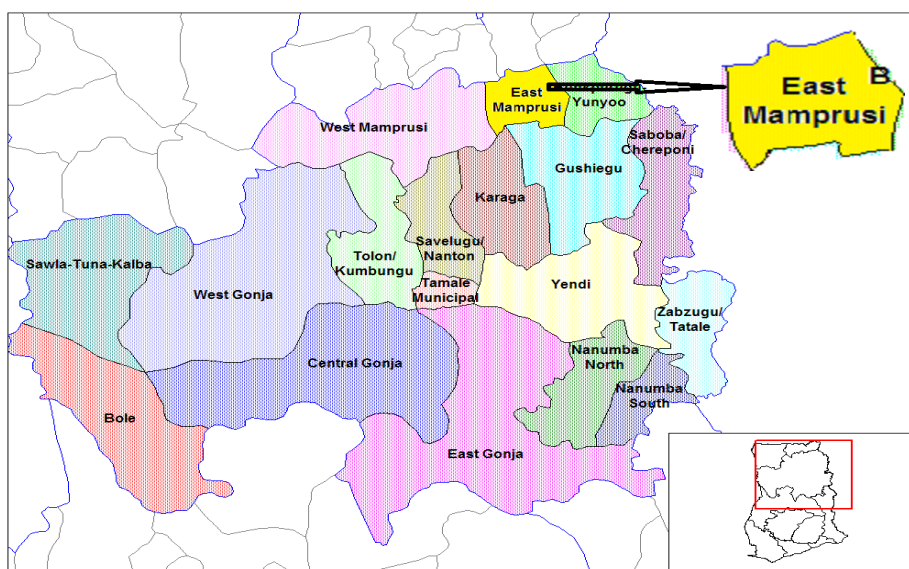
3.1 Introduction

This chapter provides information on the methodology used in this research. The chapter is divided into sub-sections; these are study area, research design, research strategy and approach, sources of data for research, data collection tools, sampling procedure and sampling size data analysis, Ethical consideration and limitations of study.

3.2 Study Area

Northern Region is one of the 10 administrative regions in Ghana. The region has 26 Metropolitan/Municipal and District Assemblies (MMDAs) and the East Mamprusi District Assembly (EMDA) is one of them with its district capital located at Gambaga. The district is characterised by woodland with tall grasses and some indigenous trees such as baobab, acacia and shea trees. The district has a population of 123,626 according to 2010 population and housing census and occupies a total land size of 3,032 square kilometres. It records between five to six months of rainfall and grasses can grow up to 3 meters. Agriculture and its related activities are the major livelihood source for the people. Teanoba is a small community located in the eastern part of the district with a population of 876 people (composite budget, 2016). Teanoba is one of the communities in which Village Savings and Loans Associations (VSLAs) have been employed by Non-Governmental Organisations (NGOs) for project implementations. VSLAs in Teanoba were formed by different organisations for different purposes and therefore they have different objectives (DCB, 2016). Malnutrition and diseases related to malnutrition in the community is on the decline although it is still one of the major problems in the community. Comparing 2006 with 2016 report from the Jawani Community Health Improvement Programme (CHIPs) facility, there is a decline in malnutrition and malnutrition related disease from 33 percent to 21 percent (DDHS, 2016)

Figure 3.1: Northern Region Map showing various districts



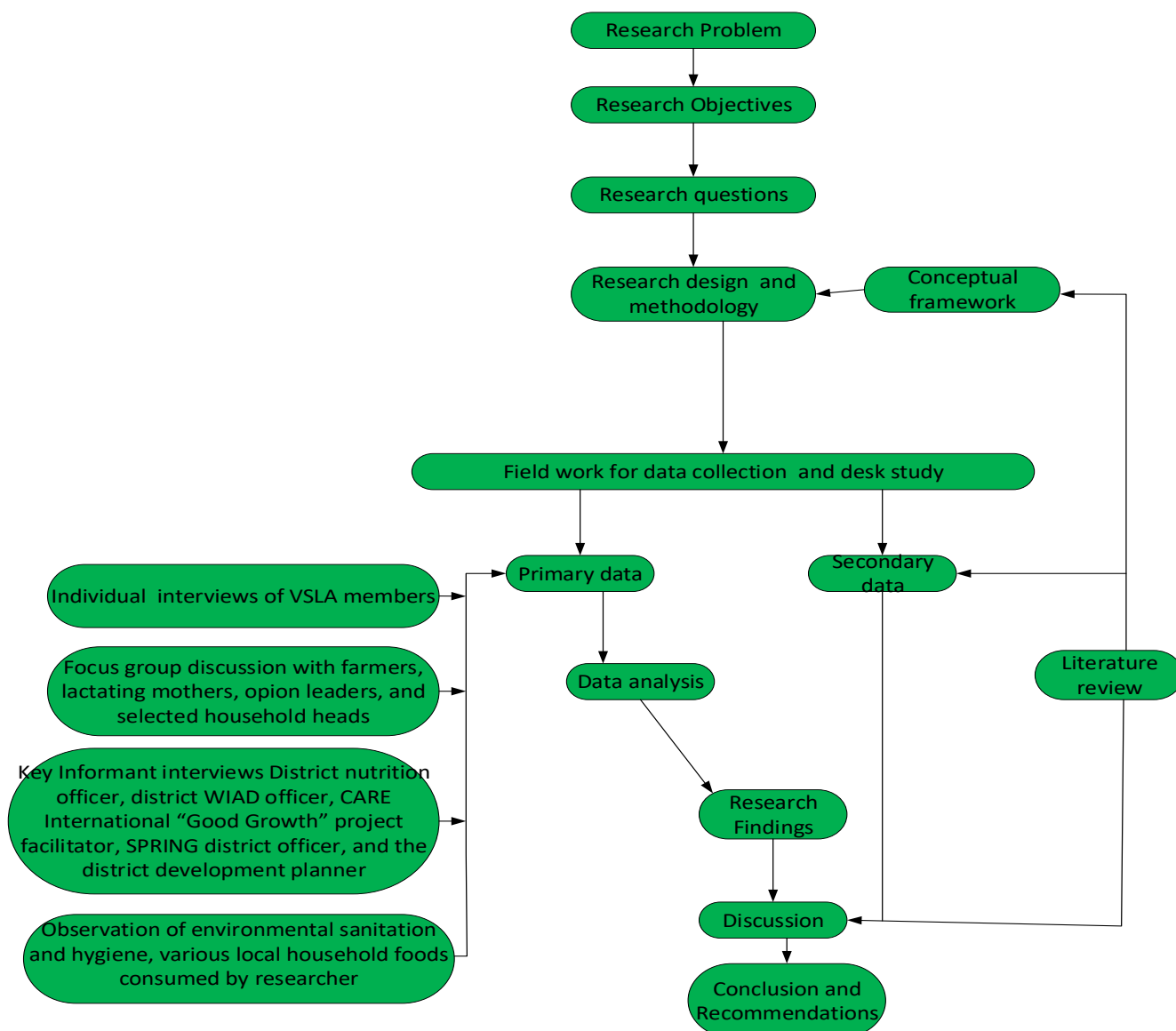
Source: District profile, 2008

3.2 Research framework.

The study emerged from a problem JSITRI as an organisation, which has been using VSLA in its fight against food and nutrition insecurity, faced. The organisation had limited evidence of its intervention on food and nutrition security and therefore wanted to know how their intervention is contributing to improving food and nutrition security. The research frame illustrated below in figure 3.2 shows the

flow chart of the study. The research started with defining the research problem, research objectives and research questions. Literature was reviewed to establish a foundation and other evidence to support the study. Data collection, analysis and interpretation formed the bases for which conclusions and recommendations were drawn.

Figure 3.2: Research framework



Source: Created by Author, July (2017)

3.3 Research Strategy and Approach

Qualitative data was collected in this study. By adopting qualitative approach, the case study strategy was employed to enable the researcher go in-depth to get a holistic view of the situation. The case study strategy was also employed to enable the researcher explore how VSLAs have contributed to food and nutrition security.

3.4 Sources of data for the research

Data was collected from primary and secondary sources for the study. Primary data was collected from the second week of July to the first week of August 2017 and secondary data in the form of literature review was collected from the second week of May to the first week of August 2017

3.4.1 Primary data

Primary data for this study included influence of VSLAs on food availability and accessibility, contribution of VSLA to household's access to health service, contribution of VSLA on care practice, and finally contribution of VSLAs to environmental hygiene and sanitation. The data from the fore mentioned variables were collected through face-to-face interviews with respondents (VSLA members), focus group discussion (FGDs), Key informants and personal observation. Data collected were coded, triangulated and analysed.

3.4.1.1 Individual interviews

Face to face, semi-structured interviews were conducted. Respondents were selected from VSLA groups in the community (procedure for selection is captured in 3.6). This was to collect data in relation to influence of VSLA on food availability and accessibility, impact of VSLA on access to health service, and contribution of VSLA to care practice. Finally, data on influence of VSLA on environmental hygiene and sanitation was also collected. Individual private interviews were conducted to get in-depth data from respondents. This approach was used to help grant confidentiality and afford the researcher opportunity to ask question, which are sensitive to individuals, and questions, which could not be asked at Focus Group Discussions (FGDs).



Photo 3.1: interview session with individual respondents

3.4.1.2 Focus Group Discussions

One focus group discussion was held for each of four focus groups conducted by the researcher in the community and the participants of the group discussions are involve in VSLAs. One FGD was held with Farmers in VSLAs to find out their impression on the contribution of VSLA on household food and nutrition security status. One FGD was also held with lactating mothers in VSLAs to get their views on how VSLAs influenced household food and nutrition status. The researcher also held FGD with selected household heads in VSLAs to get their views on the impact of VSLA on household food and nutrition security. Finally another group of people the researcher had discussions with were community opinion leaders in VSLAs to also find out their views on the impact of VSLA on the household food and nutrition security. By conducting discussions with four different focus groups, the researcher's objective was to illicit views from different groups in the community. FGDs also afforded the researcher the opportunity to get information from households, which were not represented in the individual face-to-face interviews so that their views were also included.

Furthermore, FGDs offered the researcher the opportunity to validate the data collected from individuals face-to-face interviews. It also inspired the researcher to collect more data as possible allowing fair and equal contribution of members.



Photo 3.2 FGD session with women and men (after FGD)

3.4.1.3 Key informant

Data on the involvement of various stakeholders such as officers from Women in Agriculture Development unit of the District Agriculture Development Unit (DADU), the Nutrition unit of Ghana health service in the East Mamprusi district, CARE International Good growth project, John Snow International Strengthening Partnership Result and innovations in Nutrition Globally (SPRING) project, and the District Development Planning Unit of the district assembly was collected. Data such as their contribution to nutrition through the VSLA initiative was obtained. Their opinions on how VSLAs influence household nutrition were collected, the challenges they face working with VSLAs and how to possible strengthen the VSLA for effective nutritional improvement was also obtained.



Photo 3.3: KII Interviews on top District Nutrition Officer and bottom District WIAD officer

3.4.1.4 Observation

Another method of data collection employed by the researcher was observation. Personal observation was employed to identify the effects or performance of the indicators in relation to the objective of the research. This personal observation was done alongside the face to face interviews with individuals and the FGDs. The researcher observed activity in relation to environmental hygiene and sanitation, personal hygiene, feeding practices and meals consumptions patterns. This was possible because the face-to-face interviews were done early mornings before respondents went to their farms and late in the evenings when they had returned from their farms. This therefore offered the researcher the opportunity to observe the indicators early in the morning and late in the evening.



Figure 3.4 Observation by researcher during data collection, this were not possible before VSLA

3.4.2 Secondary data

A desk study was conducted to collect secondary data through the review of literature from books, academic periodicals, research journals, publications by development organisation, past dissertation, annual reports and internet source. Desk study helped in reviewing existing theories, views of different authors, information on the subject matter and key concepts such as the VSLAs, food and nutrition security and the UNICEF malnutrition framework under the subject of study. Operationalizing and defining the key concepts used in the study was done through literature review. Oliver (2012) pointed out that, reviewing literature and collecting secondary data was to help the researcher create research in academic areas, which are of relevance to the subject of study. Using secondary data is necessary because it points out different opinions and experiences from sources of relevance (Oliver, 2012).

3.5 Data collection tools

Three sets of data collection tools were used. Check-list for individual interviews of VSLA members (Annex 1), FGD guide for FGDs(Annex3) and Key informant guide (Annex2) for Women in Agriculture Development unit (WIAD), the Nutrition Unit of Ghana Health Service, Care International Good growth Project, JSITRI and the District Development Planning Unit. A checklist was used to conduct semi-structured interviews for individual because it offered the researcher the opportunity to interact with the respondents and to make adjustments to checklist during interviews whenever the need arose. It also offered the researcher the opportunity to ask probing questions. The checklists were divided into four sections. Section one solicited data on influence of VSLAs on food availability while section two collected data on impact of VSLA on access to health service. Section three on the other hand, collected data on influence of VSLA on care practices and finally section four solicited data on the impact of VSLA on environmental hygiene and sanitation. Key Informant Interviews (KII) were used because it offered the researcher the opportunity to talk to individuals who have knowledge/experience in the subject matter through their work in that field.

Pre-testing of checklist was done after their development with a VSLA group in a different community. The pre-testing was to offer the researcher the opportunity to explore how respondents will answer the questions. During the pre-testing, some weaknesses were found and the checklist revised by the researcher accordingly. With the exception of key informant interviews, all the other interviews and discussion were all done in Mampruli the local dialect of the area.

Table 3.1: Research Question (Sub-questions) and methods used

Sub question	Methods used
What is VSLA?	Desk study
What is the contribution of VSLA to household food availability?	Semi- structure interviews of 30 respondents Focus group discussions with farmers in VSLAs, lactating mothers in VSLAs, Household heads in VSLA, and opinion leaders in VSLA Key informant interviews Observation
What is the contribution of VSLA to household access to health service?	Semi- structure interviews of 30 respondents Focus group discussions with farmers in VSLAs, lactating mothers in VSLAs, Household heads in VSLAs, and opinion leaders in VSLAs Key informant interviews Observation
What is the contribution of VSLA to care practices at the household?	Semi- structure interviews of 30 respondents Focus group discussions with farmers in VSLAs, lactating mothers in VSLAs, Household heads in VSLA, and opinion leaders in VSLAs Key informant interviews Observation
What is the contribution of VSLA to environmental sanitation and hygiene	Semi- structure interviews of 30 respondents Focus group discussions with farmers in VSLAs, lactating mothers in VSLAs, Household heads in VSLAs, and opinion leaders in VSLAs Key informant interviews Observation

Source: Researcher construction July (2017)

3.6 Sampling procedure and sample size

Purposive sampling procedure was employed during the research. Teanoba was selected because it is one of the communities, which have different groups in the district, and JSITRI SPRING project is in that community as well. At the community, purposive sampling was again used to select 6 VSLA groups out of 8 groups. The criteria for selecting the groups was based on the number of years it has existed. Groups, which have existed for 5 and above years where, selected. This was because the study wanted to understand the opinions, experience and impact of members who have participated in VSLA activities for a minimum of 5 years. According to Law et al. (2013), purposive sampling is use with the aim of understanding the opinions and experiences of a particular group or when the impact of a new NGO programme on a particular community needs to be assessed. Purposive sampling was further used to sample respondents who have been in the groups for a minimum of five years. This was a requirement for both respondents of individual interviews and participants of FGDs. In this regards,

thirty (n= 30) respondents were purposively selected and interviewed using a checklist. This is in line with Adler and Adler (2011) assertion that, graduate students undertaking a qualitative research can sample between 12 and 60 with 30 being the mean for masters students and 50 for Ph.D. students. 46 others participated in the FGDs. In all 76 respondents were recruited and these represented households. Five key Informants representing five stakeholders were also interviewed.

3.7 Data Analysis

Data checking and cleaning were done alongside data collection. Data was then sorted after which data was coded and finally analysed. Both qualitative and quantitative data were analysed by the use of narrative form and results were interpreted with the help of descriptive statistics to answer research questions. Results were further presented in tables and figures with the help of Microsoft excel. To ensure credibility of data, triangulation was employed.

3.8 Ethical considerations

Privacy and confidentiality at all times had been maintained in this research. Findings of this research depict the high level of confidentiality as no identifiable information of participants were documented in this study. Cods were assigned to interviewees and responses were only identified by the codes. The human rights of respondents with regards the choice of participation was respected. To this effect, a consent form (Annex 4) was given to those literate but to the illiterate it was read out and translated to Mampruli, the local dialect for their understanding after which they signed the consent form if they agreed before the interview was conducted. Respondent could withdraw at any time from the study without a penalty. Finally, results and discussion here are a true representation of facts as were stated by individual interviewees and focus groups.

3.9 Limitations of study

Limitations of the study were inaccessibility to community and budgetary constraints. The timing of the research was challenging as it was in the peak of the raining season. As a result, the community was not easily accessible. The community was cut off due to heavy rains and poor road network in the area. The season also resulted in an increase in the number of community visits since researcher has to go early morning and late evenings to the community as against the one visit planned. This increased the cost of data collection thereby leading to budgetary constraint. The researcher was aware that he is part of the problem owner, which therefore influenced the formulation of the problem statement, objectives, and the research questions. This however did not influence the research as the researcher remain neutral, acted impartial and independent despite the temptation to be bias.

Chapter Four

Research Findings

4.1 Introduction

This section presents the results of the study. These results are in line with the four primary objectives of the study set out in chapter one.

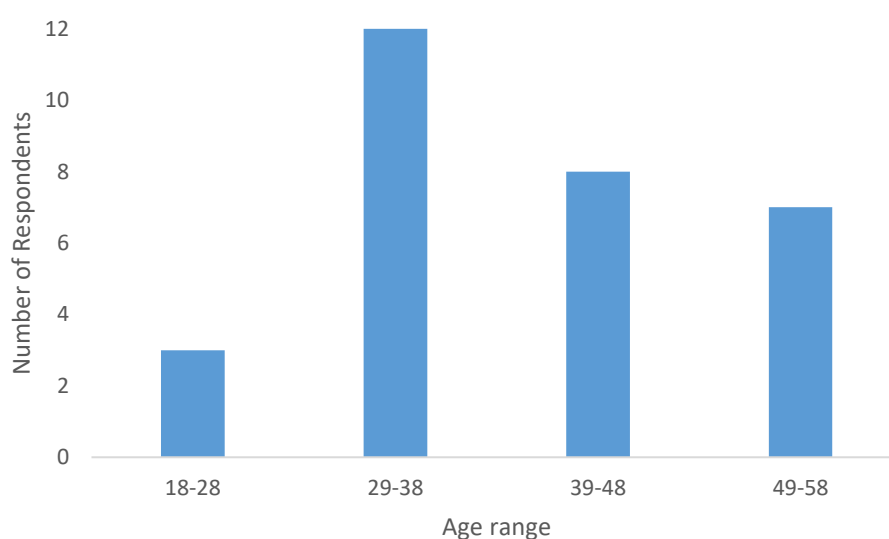
4.2 Source of primary data and response rate

Thirty (30) VSLA members, 4 focus group discussions and five key informants' interviews were conducted as stated in the methodology

4.2.1 Age of respondents in completed years

The table below shows the age distribution of respondents interviewed. Majority of the respondent were youth per the definition of youth in Ghana.

Figure 4.1: Age distribution of respondents



Source: Research field survey July (2017)

4.2.2 Sex of respondent

Females were slightly more than males as seen in the figure below. Women are said to be the majority in most VSLA groups. The table below shows the sex distribution of respondents.

Table 4.2 Sex distribution of respondents

Sex	Number of respondent
Male	14
Female	16
Total	30

Source: Researcher field survey July (2017)

4.2.3 Marital Status of Respondents

All 30 respondents at the time of the interview were married and lived with their spouses and children.

4.2.4 Educational Status of Respondents

Out of the 30 respondents interviewed, 25 of them had no formal education, and the remaining 5 had basic education. Illiteracy level among VSLA members are high.

4.2.5 Occupation of respondents

Farming is the major occupation in the community out of 30 respondent interviewed, 28 were farmers while 2 of them were traders.

4.3 What is the Contribution of VSLA to household food availability?

4.3.1 VSLA enhancing respondent's ability to produce more food

Generally, all respondents agreed that VSLAs improved their ability to produce more food as shown in table 4.1 below.

Table 4.2: VSLA enhancing respondent's ability to produce more food

Response	Number of respondents
Yes	30
No	0
Total	30

Source: Research Field survey (July 2017)

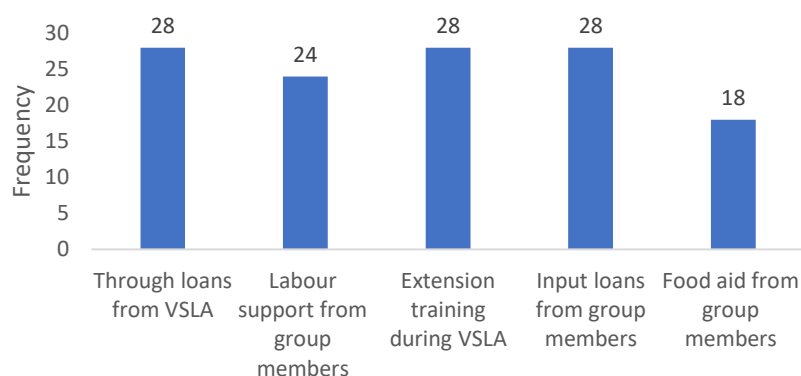
They further mentioned how VSLA enhance their ability to produce more food. Figure 4.1 below shows how respondents said VSLA had improved their ability to produce more food. From the following illustration credit from the VSLA and extension training provided to VSLA are the main influencing factors in the VSLA that facilitate VSLA contribution to respondent's ability to produce more food. Some of the interviewees could not hide their joy of what the VSLA has done for them as they made a statement like "Who were you those days to plough your farm with tractor those days and even buy "Agric people seeds". "Don't you fear"?-(Respondent 1)

It was also mentioned that through VSLA they are able to access extension service which has also contributed to their knowledge in the use of agrochemicals, which they said, has contributed to their farm output. It was however noticed that the "poor" in the group depend much on labour support from the group since their savings could not grant them the amount of loan required to under all the activities on the farm. The most revealing means through which VSLA contribute to respondents' ability to produce more food was through food aid from group members. One respondent said:

"Before some of us join the VSLA, there were times of the season when you have no food in the house for that reason we abandon farming and rather go to town begging for food. However, since I join the VSLA I do get food from those who are "better than me", and some also give input loans, which we pay, affect the season". (FGD1)

This was concurred during the FGDs with household heads who have ever experience that saying "we wish this "ADAKA BIISI" (VSLAs) were here long time, it would have prevented the disgrace some of us went through"

Figure 4.2: Means by which VSLA contribute to respondent's ability to produce food

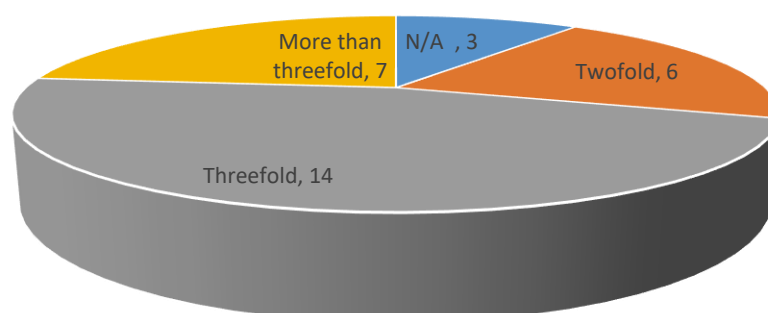


Source: Researcher field survey July (2017)

4.3.2 Establishment of networks contributing to household food availability

Majority of respondents (27) agreed that their participation in VSLA had created opportunities for them to interact with stakeholders in food production, processing and marketing. It was further said by this respondents that they never had the chance to interact with agricultural extension officers and staff of other organisations. The District Women in Agricultural Development Officer (WIAD) that because of the VSLA extension delivery has become easy confirmed this claim, and they reach out to more farmer than before. Both farm acreage and yields have increased, and respondents estimated the margin of increase between twofold and more than threefold. Figure 4.2 below shows the margin of increase as mentioned by those interviewed. Establishment of networks through VSLA platform has increase food production by more than threefold.

Figure 4.3: Margin of food production increase



Source: Researcher field survey July (2017)

Not only did VSLA facilitate the establishment of networks with Agricultural extension, but it also promotes the creation of networks with non-governmental organisation such as SPRING, RING, and CARE International. Respondents (30) mentioned that they also gain knowledge in processing foodstuffs they initially did not know how to process. Twenty-seven (27) respondents also indicated that through the networks they are able to identify market where foods are cheap.

It was mentioned during the individual interviews and concur at the both FGDs and key informants interviews that, VSLAs in the community came together and developed a Community Action Plan (CAP) and stated among other things in the CAP that the road from the district capital to the community needs to be graded. This was done because the VSLA were able to collect signatures from community member and nearby communities who use the road.

“The grading of this our road has helped in reducing the cost of food, transportation and have even saved the lives of pregnant women. “Motoking” (tricycle) was our only means of transport, and our ambulance and they “drivers” riders were charging anyhow. When they open their mouths any amount that comes they “spit it out” and when you say no he will not carry you. Now they are here, and some now beg for passengers”.-(FGD1)

VSLA facilitate the establishment of networks, which has contributed to both infrastructural, and knowledge development, which has contributed to food availability.



Photo 4.1 . An extension Officer with VSLA of fall armyworm Sensitization and group members supporting a member on the farm

4.3.3 VSLA influencing decision making towards household food availability

Decision on crops to produce on the farm at the home level is controlled by the man and decision on the type of meal to prepared rest with the woman. This according to respondents (26) influence food availability in the household. It was mentioned that men produce base on the market price of the crop the previous season without considering household level utilisation. Women, on the other hand, prepare what is available without regard to the nutritional importance. The introduction of VSLA according to respondents (27) has influenced this approach of decision making in the household. Benefits such as training on balance diet, credit availability and labour availability from the VSLA has influence such decision. Women now are economically empowered to take decisions in consultation with their husband on crops should jointly produce for household consumption. Table 4.2 below shows decisions which has been influenced by their participation in VSLA. The size of land to be put under cultivation and the type of crop to cultivate are the major decisions VSLA influence in the household. VSLA do not only affect farm size put under cultivation and crops to plant, but it also influences the meals women prepared in the house. This was buttress by a statement during the FGDs, which all applauded to that:

“The day my friend takes a loan if you are passing by his house no one will tell you that this house people have taken credit the smile around the house alone tells you what is available for dinner and the day this out community smile change is the day VSLAs do share out, the market is always full and in the evening the community change smile”.-(FGD3)

Table 4.3: Areas of decision-making VSLA influence at the household level

How VSLA influence decision making	Number of respondents
Preparation of the land	23
Deciding what crop to plant	28
Deciding what meal to be prepared	27
Deciding on the size of land (acreage)	28
Purchasing farm inputs	26

Source: Researcher field survey July (2017)

4.3.4 VSLA contributing knowledge to food availability

Knowledge in the area of food availability is one of the critical areas VSLA has contributed. Various education's VSLA facilitates include food production, food processing, quality assurance and storage. Among this, as mentioned by twenty-seven (27), the knowledge they gain most was in food production and it closely followed by storage as 25 respondents said in their submission. It was mentioned that the knowledge gain in food production and storage was through the Farmer Field and Business Schools (FFBS) organised for VSLA members by NGOs and the department of agriculture. It was mentioned by

nineteen (19) that Staff of Ghana Health Service (GHS) District Assembly and NGOs built the capacities through cooking demonstration enabling participants to convert grains and tubers at their disposal which were not used as food to food. Three major areas that have been impacted through VSLAs thus contributing to food availability are knowledge on agriculture production, knowledge on grain storage and finally knowledge on food proceeding and transformation.

4.4 What is the contribution of VSLA to household access to health care?

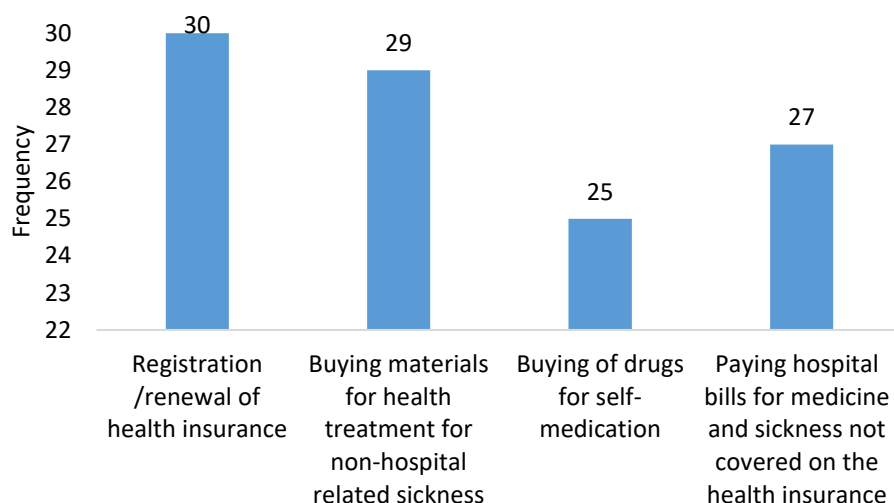
4.4.1 VSLA empowering household financially to access health care.

Families could not afford the health bills or registered family members on the national health insurance before the join VSLA. Twenty-six (29) respondents they used unqualified people and traditional indigenous methods to take care of their health before they joined VSLA. They could either not afford to go to the hospital or buy the materials a local herbalist will need before treatment is undertaken. One of the respondents said:

“Where will you get the money to go to ‘waka yiri’ ? We know the “white” medicine was good but if you know something is good, and you do not have the means to get it. What then show that it is good. But with the coming of the VSLA, we now know that is good.”- (Respondent 3)

It was a unanimous response during the FGDs that VSLA has contributed to their access to health care by empowering them financially. It was noticed in some of the constitutions of the groups that priority was given to health and education when advancing loans to group members. Figure 4.3 below shows the various ways through which VSLA contributed to household access to health care. VSLA contribute to health through empowering family to either register or renew their registration with the national health insurance scheme.

Figure 4.4: Ways through which VSLA contribute to household access to health care



Source: Researcher field survey July (2017)

4.4.2 VSLAs facilitate household access to health information.

Most rural households as mentioned by 29 respondents that they did not have access to health information. This they said was because they do not have a platform from which they will get information. With the coming of VSLA into the community access to health information as mentioned by all (30) respondents improved. It was established that they now have access to information through health staff who work with the groups on their child welfare clinics days. It was also noticed that some groups had radios, which they use to listen to particular programme. This radios it was established were given to them by the organisations that facilitated their formation. The primary source of health information

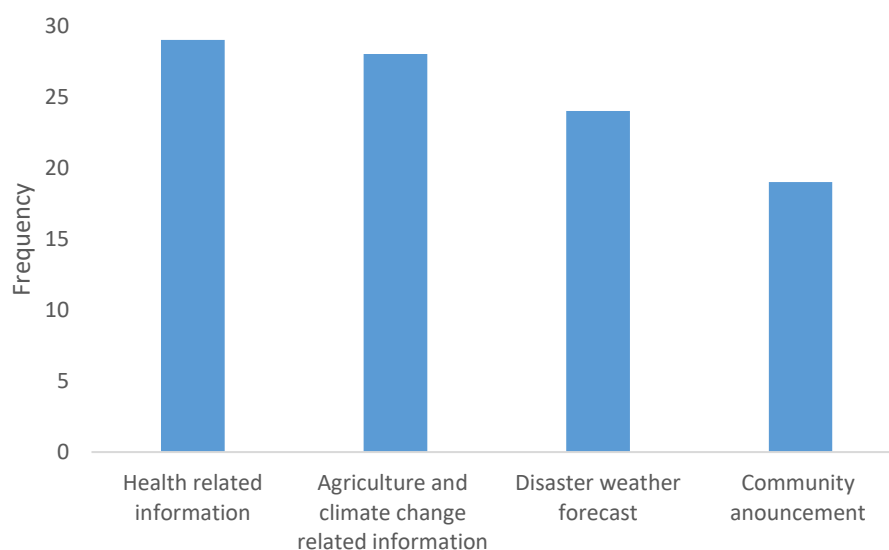
to respondents was through their VSLA meeting where staff of NGOs and staff of GHS share with them the current health-related information on their meeting days. Table 4.3 below shows the source of health information to respondents in the community while figure 4.4 shown the type of information respondent received from the VSLA during their meetings. Majority of the information received during VSLA meetings was health and agricultural related as 29, and 28 respondents mentioned it respectively.

Table 4.4: Source of health information to respondents

Information Source	Number of respondents
VSLA meeting	30
VSLA radio (given by NGO)	16
Personal Radio	3
From Community members	2

Source: Research field survey July 2017

Figure 4.5: Types of information VSLA members receive during meetings



Source: Researcher Field survey July (2017)



Photo 4.2 SPRING SBCC with VSLA group to validate a drama series the community produce on information access and the DWSO on his information-sharing visit on where to access treatment for any water born related disease

4.4.3 Contribution of VSLA to enable member's access means of transportation to health facilities

Twenty-seven (27) respondents did not have their own means of transport before joining VSLA, but after joining, they were able to acquire their own mean. Others (3) said they have either change or acquire a more advanced means of transport. Access to transport means has helped improve households' access to health facilities thereby enhancing their access to health care. Participants during the FGD said:

"We were dying because we did not have means of transport. In the whole community, it was only 'Naachinaa' who had an old motor which could not even carry him and a child, but in the case of emergency, we manage it. Not only did we not have motors and bicycles, but the road from our community to the health facilities were nasty even with the coming of "motor king" we were still suffering as they charge any amount they feel like charging and you have to pay" –(Respondent 8)

When probe further if the group will give an individual a loan amounting to the price of a motorcycle. They said no but added that because VSLA has helped them to expand their farms and also improve their harvest; they are able to buy when they sell their produce. Those group members unable to purchase borrow from other team members. Once you are a member of a VSLA, you have access to means of transport to seek health care at any point in time. Table 4.5 shows how respondent said VSLA has contributed in households' access to transportation, which influences their access to health care.

Table 4.5: VSLA contribution to household access to transport

Contribution	Number of respondents
Financial empowerment to buy own means of transport	30
Getting support from group members	27
Financial empowerment to rent means of transport	23

Source: Researcher Field Survey July 2017

4.4.4 VSLA influencing decision-making towards household access to healthcare

VSLA has influenced the decision-making in the household as households are now economically empowered to decide on which type of health care they should seek whether herbal or Orthodox. Majority of respondents (25) mentioned that VSLA has economically empowered them to decide on which health facility to attend as against five (5) respondents who said VSLA had not influenced their household decision on which type of healthcare to seek and the health centre to visit since they are believers of herbal medicine. The loans VSLA made available to household empower them economically to take independent decision on their own and with the economic empowerment household now access healthcare from the hospitals. The empowerment of household to seek medical attention serves as danger to the collapse herbalist profession.

4.4.5 VSLA contribution to Knowledge gain in the area of healthcare

Health care access is influenced by knowledge within rural dwellers. Majority (23) said that, through their participation in VSLA activities they could now identify signs and symptoms of some sickness. Seven (7) respondents said the knowledge they gain was various procedures at the hospital. It was noticed at the FGD that most people do not go the hospital because they do not know the different stages from records rooms to the dispensary because of that they delay in the hospitals. At VSLA meeting, staff of the health ministry have educated group and households on the step used at the health facility leading to consultation of a doctor and the other steps or activities to take there off. VSLA has, therefore, built the capacities of respondents and the community to identify signs of infection especially with regards to some diseases prevalent in the area among their household members and seek early medical attention.

4.5. What is the contribution of VSLA to care practice in homes?

4.5.1 VSLA influence the rate at which the sick are cared for in the household

Belonging to a VSLA in the community offer one the opportunity to have more social interactions with people. Group members visit during times of ill health give some psychological and emotional boost to the recovery process. Staff of NGOs that facilitate the VSLA the patient belong and stakeholders to that group all visit to offer moral and psychological boost. Majority of the sick people get advice during those visits as to which facility to go, especially for special attention if needed as mentioned by 23 respondent. During visit by group member's gift are bought from social fund and presented to the sick person on behalf of the group as attested by 23 VSLA group members. Environmental sanitation was another contribution VSLA support in times of sickness. Nineteen (19) respondents indicated that group members some time undertake general cleaning at the sick person's residence. During the FG, one participant said:

"For me when am sick, and people visit me and encourage me I always become strong, and some of them during their visit pray with me and give me advice on what to do. In addition, when am sick, and people visit me it makes me important, and I feel that am also important in the community for that matter I take my treatment serious so that I will get well and join the community again. When you are sick is as you are in prison you always in the room"-(Respondent 27)

VSLA facilitates access to social support for group members in times of sickness through the provision of some social service to help the sick person of the household.

4.5.2 VSLA contribute to household care practice through the provision of information influence seeking medical care behaviour

Access to information affects family health care seeking behaviours. High illiteracy rate among families in rural communities affects access to information and documentation of the right information. VSLA serves as a platform where information on care practice is shared among group members. Majority (29) of respondents heard of first aid before seeking medical treatment for the first time from VSLA platform. Information about public health disease outbreak is mostly gotten from VSLA platforms. All 30 respondents heard of Ebola outbreak, its signs, and symptoms were first heard during their VSLA meeting. Public health issues such as Cerebrum spinal meningitis (CSM), aflatoxin and malaria information are always gotten from health staff during VSLA meetings. Information on health facilities, which provide quality healthcare, is also shared on VSLA platforms. Advice from staff of GHS and NGOs during VSLA group meetings has also contributed to the improvement of household medical care seeking behaviour as stated by 25 respondents. This was corroborated during the FGD. Interview with the district nutrition officer confirms that the health promotion campaign they undertake using VSLA has influenced the rate at which household seek medical care especially pregnant women positively.

4.5.3 VSLA contribute to family care practice by facilitating learning and sharing of knowledge

Poor care practice affects both the health status and dietary intake of household members. It was observed that homes in some VSLA groups were cleaner than other households in different groups and a further observation reveal that households, which were clean, were from groups, which had sanitation as part of their objective. Before joining VSLA 25 respondents only heard of the terms exclusive breastfeeding, complementary feeding and giving of mix foods to children but never really understood them. Upon joining VSLA, they received training on Infant and Young Child Nutrition (IYCN). VSLA has also facilitated learning from colleague members, and 18 respondents acquired knowledge on food supplements such as plumpy-nuts, "Kooko Plus" and other ready to use therapeutic foods through sharing of knowledge. Pregnant and lactating mothers benefited most when it came to VSLA facilitating knowledge acquisition through sharing. This was stated during a FGD with pregnant and lactating mothers. They were many things which they were asked not to undertake because they are either pregnant or nursing a baby but with the VSLA platform, health staff and other NGOs officers

educated members on such behaviours. Some of the behaviours were dispelled including pregnant woman should not eat meat and egg. A participant during the FGD said:

“The coming of the VSLA is good, our mothers, sisters and wives are gaining some knowledge in how to keep the children and us healthy by learning from the nurses and officer who come during their meeting days. Nevertheless, the knowledge they are now gaining is becoming expensive and a burden on us. Give your pregnant wife egg, and meat once a week, your children should at least eat meat once a month. Where will we get all the money for that? You know when you take a loan from the VSLA you have to pay back, and you only qualify for a loan when you finished paying the first one. Knowledge is good but is expensive”FGD3).

This statement received applause from other participants with the group but was a confirmation of the benefit pregnant and lactating mother mention during FGD with them. It was said by the district nutrition officer that VSLA serves as a platform where practical training can be undertaken and not only training but monitoring as well. “He stated, in the VSLA there is always competition among members because no one wants to be left behind.” This means that VSLA facilitation of knowledge learning and sharing is good but comes at a cost.



Photo 4.3: VSLA leaders undergoing IYCN training and one of the trained leaders sharing with a mother

4.6. What is the contribution of VSLA to environmental hygiene and sanitation?

4.6.1 VSLA serve as a platform where knowledge is gain and shared environmental hygiene and sanitation

Education on environmental hygiene and sanitation was little among the participants. With the introduction of VSLAs platform, a lot of information is shared and learnt as shown in table 4.6 below.

Table 4.6: VSLA create platform where knowledge is gained and shared

Response	Number of respondents
I agree	29
I don't agree	1
Total	30

Source: Researcher Field work July (2017)

VSLA serve as a platform where knowledge is gained and shared. Education on personal hygiene, latrine and hand washing facilities construction were some of the knowledge they gained from training organised for VSLA members. It was observed that the households and surrounding were clean.

4.6.2 VSLA empower families economically to undertake environmental hygiene and sanitation-related activities.

Before the introduction of the VSLA, most families lacked basic sanitary facilities such as latrines, hand-washing facilities and containers for storage of water and other food staff. Twenty-seven (27) respondents practised open defecation, but with the coming of the VSLA and their participation, they gain knowledge on how to construct latrine, took loans from the group, and bought material (building and roofing) for the construction of their latrine. A few (3) respondents who had the knowledge but no resources for the construction of toilets were able to get loans from the VSLA to undertake the construction. It was also mentioned by 17 respondents that, every household now has a water storage facility, which was not the case. Table 4.7 below shows, some of the sanitation related materials acquired through VSLA economic empowerment

Table 4.7: Sanitation related materials purchase

Sanitation related materials	Frequency
Baby Diaper(Pamper)	16
Soap	30
Containers with covers for water storage	17
Clothes and sandals for household members	30
Brooms and rakes	13
Hoes, cutlass ,and pick axe	9

Source: Researcher field survey July (2017)



Photo 4.4 Cement bought with VSLA use for a concrete slab and VSLA members and the household by their latrine

4.6.3 VSLA serve as source of labour for environmental hygiene and sanitation related activities

Communal labour had die in the community before it was brought back to life with the introduction of VSLA. Twenty-eight (28) respondent mentioned that undertaking environmental hygiene and sanitation related activities you required labour support. While few (2) of the interviewees said it was not about labour, but it was about the money and skills.

At the FGD majority of participant mentioned that labour is key to improving environmental sanitation and hygiene. “We come together and construct latrines for each other because it is not one man job” a participant commented. It also provides labour to the community in case of general community environmental and sanitation work.



Photo 4.5 Group members supporting in digging of the pit for latrine construction

4.6.4 VSLA facilitate the establishment of networks in sanitation and hygiene

Through VSLA community have been able to come out with CAP, which they have used to solicit for help for their communities. It was mention by 19 respondents that VSLA has facilitated the construction of a borehole in their community through their contribution of the 10 percent that was demanded by the organisation undertaken the construction. Another example was mention by 23 respondents who said through the training they get from VSLA the community land field was cleared and the content used for the preparation of compost fertilizer for their fields. Through networking with the VSLA group in the community, the district environmental health officials have been able to profile the community's base on their problems. Through the efforts of the VSLAs in sanitation, the community is not certified as open defecation free.

Chapter Five

Research Analysis and Discussion

5.1 Introduction

This chapter presents analysis and discussion of findings of the study using supporting literature.

5.2 Source of primary data and response rate

During the data collection, checking and cleaning, none of the responses provided by the respondents was rejected. This put the response rate at 100% . This is in line with Punch (2003) who stated that a response rate for a face-to-face interview between 80% -85% is rated good and from 86% and above is very good. This is very good score of response rate thus bias is minimal. This is in line with a study by Massey & Tourangeau (2013) which found out that high level of response rate reduce bias and therefore findings of this study highly acceptable.

5.3 VSLA enhancing respondents' ability to produce more food

Food production in the community had been affected by lack of investment. It was mentioned by respondents that they ran out of ideas on how to fund their farming activities before the introduction of the VSLA. With the introduction of VSLA, financing of their farming activities has become easy. All respondents stated that they have been able to produce more since they can now afford to plough with a tractor, buy agro-inputs using credit they acquire from VSLA and good agronomic practices from peers and Agricultural extension staff. These findings are not different from Lastarria-Cornhiel (2009) findings that, VSLA members' access to credit had significantly influenced their ability to produce food because they can now invest in agro-inputs and mechanisation service. This study's findings is in line with Allen and Panetta (2010) as cited in Mohammed et al. (2016) who found that most rural dwellers who have access to financial service are able to purchase agro-inputs and contract labourers for farm activities.

VSLA did not only enhance respondents' ability to produce more food through its loan facility, but through the culture of social support for each other, has also contributed to enhance food production. The vulnerable members of the group whose savings could not grant them the required loans for all their farming activities depended on the group labour for extra support. Through the labour support, they are able to undertake some of the good agronomic practices on their farm in time. Food aid is another social support some group members benefit from. Vulnerable group members' food production was not enough to last the season, and so they were forced to abandoned their farms and sometimes families in the village and go to beg for arms in towns before they join the VSLA. However, with the coming of the VSLA, people who were formally vulnerable get support from the group when they appeal.

5.4 Establishment of networks contributing to household food availability

Establishment of networks in rural communities has been a challenge. Rural community members had no opportunity of establishing contact with stakeholders in the food production industry. It was established that farmers had problems with their crop production but did not know where to seek solution to their problems. The community in general also had challenges, which were affecting their food production and availability but did not know where to seek solutions prior to the introduction of the VSLA. The absence of a platform where farmers themselves will even meet to discuss their problems was a challenge since they were not able to get varied opinions on issues to take informed decisions. The community is under the jurisdiction of an agricultural extension officer who was hardly seen. Based on the findings in this study the introduction of VSLA in the community created a platform where group members and the community as a whole benefited. Participation of respondents in VSLA activities had created the opportunity for them to established links with agriculture extension officers, staff of both local and international NGOs, and the district assembly who are all interested in using the VSLAs for activity implementation. Benefits driven from the links respondents established in the VSLAs include access to extension service, knowledge on food processing, marketing and infrastructural

development. Majority of the respondents felt access to extension services has helped them to increase their farm out with majority recording more than threefold increase in farm output. This finding is in line with Adeoti & Olayemi (2003) study findings as cited in Balogun et al. (2016) that, farmers can achieve increase in food production by increasing the land area put under cultivation or increasing the productivity of the land with agro-inputs and timely practising of Good Agricultural Practices (GAP).

Establishment of network using VSLA platform also links respondents to other development organisation such as SPRING, RING and CARE International who provide training on food processing to VSLA groups. At the FGD it was mentioned that some grains both wild and domestic were available but not consumed in the community because community members did not know how to process them. Gaining knowledge in processing them through cooking demonstration and food bazaars organised by CARE International, and other NGOs has helped community members to start utilizing them thus, contributing to food availability. Development of CAP by groups and presenting to the assembly and asking for infrastructural development yielded a positive result as the road to the community was gravelled and graded. This is in line with Paschal et al. (2016) project evaluation report that VSLA facilitates joint community action towards community infrastructure development. Community traders and market women had contributed to the reduction of food price and influence the availability of varieties of foodstuffs in the community since market women will bring different foodstuff for sale.

5.5 VSLA influencing decision making towards household food availability

Participation in VSLA has enabled members to be more engaged in decision making than before. Key among the decisions making participation in VSLA has enabled include farm size, crops to plant, meals to prepare and purchase of farm inputs. The influence in decision-making was due to the economic empowerment VSLA has provided household members. Household crop cultivation for men was market driven and food preparation by women was based on what is available before VSLA. VSLA has changed this through the trainings organised during their meeting on balance diet, credit availability, and labour accessibility within the group. Also, members of VSLA, knowing well that they can get support in the form of loans, labour, extension service and farm implements from group members, they expand their farm size with the assurance that they will get all that is required to facilitate production. Women now take joint decisions with husbands on what crops to produce for the family consumption and what crops to produce for sale and this has solved the problem of providing less quality nutritional food for the family. These findings is in agreement with Paschal et al. (2016) report that, household members have become active in decision making with regard to their farm activities. These findings are also in agreement with Hong (2013) that micro-credit positively influence women decision-making ability both at their business level including farming and at the household level. Loans from group also help them to buy different foodstuffs for household consumption. This finding is in line with Dean & Chris (2012) that, in Uganda and Malawi, women in VSLA have increased influence over household decisions from their business to the food that will be prepared in the house. The is also not different from Paschal et al. (2016) evaluation report that, most household members participating in VSLA has gained more knowledge in food preparation through the cooking demonstration organised for VSLA and this has change their cooking habit as well as meal variety.

5.6 VSLA contributing knowledge to food availability

VSLA has a positive impact on learning and knowledge transfer between individuals. VSLA members learn from each other and benefit from other training sessions organized for the group. Various types of knowledge gained include food crops production using agro-inputs and extension knowledge, food processing and preparation. It was mentioned that community members did not know how to process some available grains for food before joining VSLA. However, with some organisations coming to the community through the VSLA platform, community member's capacities have been built on how to use some of the grains (soybean), and these available grains now serve as food. Processing of available grains to new product and selling them out also brought about improvement in income. With the

improved incomes household buy other foodstuffs lacking in the house. These finding is in line with Liverpool and Winter-Nelson (2010) that social networks indirectly affect food production by influencing household farming practice and propensity to adopt newer technology (be it in processing, cooking, farming and storage) through information shared in network.

5.7. VSLA empowering households financially to access health care

Access to health care in respondents household is mostly influenced by the ability to afford the cost of the health care services. It was noticed that respondents use to undertake self-medication or use herbs before they joined the VSLA. Apart from few respondents who had knowledge in herbs and those who had herbalist in their homes, majority of the respondent depended on what they have heard was the treatment of a particular sickness since they could not afford both the orthodox and herbal treatment cost. After joining the VSLA, they had access to loans from the groups, which enabled them to either register with or renew their subscription with National Health Insurance Scheme (NHIS). It also afforded them the ability to buy materials for traditional herbal treatment of diseases. A study in Rwanda concluded that VSLA contributes to health improvement of group members because members have access to credit which they use to registered for their health insurance thereby giving them access to health care (Mubashankwaya and Manyange, 2017) which is not different from the finding of this study. The findings also agree with Mohamed et al. (2016) who found that VSLA programme has improved health care access by enabling households to spend more on health care. It was also established that respondents had no idea that the meals of sick people are prepared specially to meet their body requirements at that time. Majority of the respondents had no money to cater for those special needs of sick relatives including feeding but after joining the VSLA, they have been empowered economically to properly and adequately care for the sick. These findings conform to Mwansakilwa et al., (2017) that participants of VSLA have the capacity to afford necessities such as access to health services, food items and school fees due to the credit and the social support they get from the groups.

5.8 VSLA facilitate household access to health information

Access to health information was a major challenge to respondents in the community. The community lack a platform where health information could be shared. This challenge ceased after the VSLA was introduced into the community. Health staff and other organisations use the VSLA as a platform to share relevant information about public health related issues. Respondents said they now have access to health information through their meetings. Through VSLA, they have access to health information from health staff. Respondents have two main sources of information, which they trust. Information gotten during VSLA meetings and information from radio programme hosted by NGOs VSLAs are working with. The major information they get from this two major sources are health related information and agricultural and climate change related information. Due to the social relation in the group, more information on health is shared. These findings are in line with Rocco & Suhrcke (2012) research findings that, social capital can influence health of individuals in three ways including access to relevant health information, informal support and facilitating lobbying in well-organised groups. Finding of this study is also similar to that of Fenenga et al (2015) which found in a study that, social capital facilitates the provision of all-inclusive information on National Health Insurance Scheme (NHIS) products, services and benefits and access to health care services

5.9 Contribution of VSLA in accessing transportation service

Walking use to be the common means of movement in the community. Although there were other means of transport, only a few could afford them in the community. Most of the respondents who participated in this study could not afford any means of transport before joining the VSLA and the road network leading to and within the community was very bad. "Our roads were very bad to the extent that you ended up walking while pulling your bicycle," a participant narrated during the FGD. Lack of access to transportation means reduced access to health care and very expensive in case of emergency. With the introduction of VSLA and community's member's participation, access to means of transportation improved. It was said that VSLA loans were not used for purchasing bicycles and motor cycle directly, but the increased investment on their farms with the VSLA loans and applying the

knowledge, they gain from extension officers led to the increase in their farm out from which they were able to sell and buy machines as means of transport. To group members who could not afford a means of transport, they get ready assistance from group members in time of need. These findings are in line with project evaluation report by Paschal et al. (2016) which found out that households had increased their physical assets base which includes bicycles, motor cycles and household cooking utensils after joining VSLA.

5.10. VSLA influencing decision-making towards household access to health care

Decision on accessing health care services by households is greatly influenced by several factors within the households, key among these factors is money. Households that have enough resources (money, support from group members and access to means of transport) could make a sound decision on the health services the household should access. A decision on the type of health care and the health facility to seek health care was also influenced by the information the household has about that health facility. Through VSLA, households had access to information on various health facilities and in case of herbal medicine the various herbal homes to visit. At VSLA meetings, members encourage each other to seek health care and suggest alternatives to group members. Household's participation in VSLA activities has affected the decision on the rate at which they visit health facilities for medical check-up because they now have access to credit and other resources such as transportation means and information on the facility to attend. These findings are in line with Karlan et al. (2017) study, which found that participation in a savings group empowers households on decision making in relation to education, health service and agricultural production. VSLA had empowered especially women more in decision-making and this was confirmed during the FGD as well as the key informant's interviews. These findings are similar to the findings of Waller (2014) that savings groups have empowered women to take independent decisions with minimal consultation with husbands when it comes to health and household upkeep. The improvement in households seeking health care due to improved affordability has reduced the incomes of traditional healers and herbalists thereby putting the profession in danger.

5.11 Knowledge gain in the area of access to health service

Respondents did not know signs and symptoms of some common sickness. The lack of this kind of knowledge affected household's access to health care service. It was established that most households lost their relatives because of not knowing what sickness they were suffering from and where to seek the right medical care for the sick. Through the training, they get from VSLA, community members have acquired knowledge on some of the signs and symptoms of some common disease. It was also established that respondents sometimes have the means to access health care, but they not having the knowledge of the hospital procedure keeps them away from going to the hospital. However, with the coming of VSLA, through questions and training, they now know the various steps at the hospital, which increased the rate at which they seek medical care. It was also mentioned at the FGDs by participants that all the dosage of medicine they get from the hospital are always written in English and sometimes at the dispensary they explain to them but by the time they get back to the house they have forgotten and this sometimes leads to over dose and wrong dosage. The negative reactions of wrong dosages discourage them from going to the hospital. However, participating in VSLA, they always have someone to explain to them during group meetings. This is not different from project evaluation report of Paschal et al. (2016) that household knowledge on signs and symptoms of common disease like malaria, diarrhoea, cholera has improved and this had led to households seeking medical care early.

5.12 VSLA improved household care for the sick

Belonging to a group in the community offers one the opportunity to interact with many people and share ideas. Membership to groups in the community influences the presence of community members at any social event in your house. Also, the level of commitment social obligations such as participating in community gathering influences the rate at which people visit you. Most respondent agreed that their social obligation in the community was very small and that was within the family but after joining the VSLA they have widen their social obligation. Through VSLA, the sick benefit from the social fund

of the VSLA, which is meant for assisting and supporting group members in time of need. Also, visits and praying with the sick person encouraged and motivated them. Visit from staff of the organisations that facilitate the formation of the groups create the opportunity for them to offer some advice or suggestions to the sick or the family to seek for better health care at specialized facilities. Majority admitted that VSLA has influence the level of care that is been given to the sick.

5.13 Medical seeking behaviour of households through information from VSLA platform

Information on care practices such as personal hygiene, exclusive breast feeding and complementary feeding help in improving the nutritional status of members of the household. Respondents mentioned that Access to information on care practices was a challenge prior to joining VSLA. Due to the difficulty in accessing information on some critical care practices, they did not undertake them in their household leading to some nutrition related sickness and deformities. Information on care practice however, improved after respondents joined VSLA. Majority of respondents did not meet their basic health and emergency needs and heard of first aid for first time on a VSLA platform. It was also mentioned that due to the presence of VSLA they now have access to public health information through health staff who work with the VSLA, which has affected, their medical care behaviour. The advice, information on health facilities and their specializations shared by health officers and NGOs staff during VSLA meeting have also changed the behaviour of respondents towards medical care. At the FGD, it was also said that information flow on care practices has improved more than before. Different VSLAs meet on different days of the week creating a situation where almost every day a group is meeting. Once information is delivered to one group it filters through to almost every community member. With access to information, and the economic empowerment VSLA has given them, their behaviour towards seeking medical care improved. These findings are similar to findings of Paschal (2016) project evaluation report which states that VSLA has contributed to access to health information in the rural areas citing information on the Ebola and, Cerebro Spinal Meningitis(CSM), diarrhoea outbreaks among others. Respondents seek medical care as and when they are not sure of their health status. This finding is also in line with Fenenga et al. (2015) conclusion that high rate of heterogeneity and social development in Ghana seem to affect the level of solidarity at the community level but social network in Ghana remain valuable for their multiple merits, which include health related information sharing, thereby persuading people to seek medical care.

5.14 VSLA contribute to household care practice by facilitating learning and sharing of knowledge

Households might not be undertaking care practices in their various household because of lack of knowledge on that care practice. Poor care practice affects both the health status and dietary intake of household members. Knowledge in exclusive breastfeeding, personal hygiene, complementary feeding and seeking medical care for the sick early contributes to improving nutritional status at the household level. It was clear that respondents did not know some of the care practices, which were being practised for healthy households. Complementary feeding, exclusive breast-feeding and mixed food feeding to children were first heard during VSLA meeting. It means these things were not practised as at the time households were not part of VSLA. Interaction with both individual respondents and FGD revealed that most households were not undertaking care practices before joining VSLAs, as a result, they did not have any knowledge of the care practices that were beneficial to both adults and children. Respondents acquired knowledge on exclusive breast-feeding and complementary feeding among others through participation in VSLA activities CARE International, implementers of the “GOOD GROWTH” project use the VSLA system. This project looks at introducing a product called “KOKO PLUS” during complementary feeding of children with the objective of improving the nutritional status of the children. CARE (2014) in their pilot project evaluation said that VSLA is a fertile ground where information on health could be propagated easily and group members will adopt it since they will want to see the effect of the information they have received. The basis for this conclusion was because they introduce the “KOKO PLUS” with some care practice training in one VSLA group and within three months, other lactating mothers who were not in the group were practising what was taught in the VSLA and even buying the product.

5.15 VSLA serves as a platform where knowledge on environmental hygiene and sanitation is gain and shared

Lack of knowledge on environmental sanitation and hygiene in households and at community level contribute to poor environmental sanitation and hygiene. Poor environmental sanitation and hygiene causes the outbreak of diseases in the community. Households experience high levels of disease infestation, which affected the food intake and their nutritional status. Members of VSLA that has sanitation as part of its objective could clearly be differentiated from members of VSLA that did not have sanitation as part of their objectives. It was seen that VSLAs implement activities to achieve the objectives for establishment, as some households were cleaner than others. Before the implementation of the VSLAs in the community, there were no platforms where community members will learn best sanitation practices. It was discovered during the interviews that whereas majority in the community did not know how to construct latrines, some few people knew the construction procedure and did not have any platform to share with people who were interested. The establishment of the VSLA created a platform where community members learn from each other. In addition, VSLA has facilitated networking of community with environmental hygiene and sanitation officers. These findings are in line with WHO (2004) that intervention, which seeks to change behaviours towards environmental hygiene and sanitation, does that through groups' education to empower the groups to undertake such initiatives

5.16 VSLA empower households economically to undertake environmental hygiene and sanitation related activities

Various equipment and materials used to support environmental hygiene and sanitation at the household level were in short supply. Promotion of handwashing with soap after visiting the toilet was not practised and the few who did, it was without soap. Cloths and sandals were luxuries to children and sometimes adults in the household. These therefore, changed personal hygiene of household members. Household members did not see the need to bath without neat clothes or without clothes at all to wear or washing hands with soap when soap is needed to wash their dirty clothes. Because of this cholera and diarrhoea, outbreaks were common in the households, which affected the health status of household members leading to malnutrition in the household. With the introduction of the VSLAs and the participation of household members, they had access to credit, which has, economically empowered them to buy sanitation related materials and undertake construction of latrines in their households. Before VSLA, very few households had latrines and hand washing facilities. Respondents interviewed had no sanitary related material or latrines in their households before VSLA. However, with the coming of VSLA, they have been able to construct latrines and handwashing facilities from the VSLA loans facility. This is in line with Plan (2013) that VSLA has facilitated the coming together of community members to promote Community Led Total Sanitation (CLTS) through the provision of credit facilities for construction of latrines, lend support to each other in building latrines and undertake communal cleaning exercise in the communities.

5.17 VSLA serves as source of labour for environmental hygiene and sanitation related activities

Communal labour in the community had faded prior to the introduction of VSLA in the community. Undertaking most of the environmental hygiene and sanitation activities required labour support, and it has to be all hands on deck approach. If one household practised environmental hygiene and sanitation, and its neighbour do not practise, it will affect the others. Latrine construction is labour intensive and households need support to undertake such a venture. It was noted during the FGD that labour is a critical need during latrine construction. Before the introduction of VSLA to the communities, it was not easy to come by labour even if there was money to pay for the labour. This was because everybody worked individually and did not see the need to support a neighbour to construct a latrine. With the introduction of VSLA and household participation, they are able to access labour from the group. It was discovered that some VSLA set up a plan to support each household to construct a latrine through group communal support. This led to all 25 members of a group owning latrines now. This support Plan (2013) that VSLA has facilitated the coming together of community

members to promote Community Led Total Sanitation (CLTS) through the provision of credit facilities for construction of latrines, lend support to each other to also undertake communal cleaning exercise.

5.18 VSLA facilitate the establishment of networks in sanitation and hygiene

Before the introduction of VSLA to the community, the community had no working relationship with the environmental and sanitation unit of the district assembly. The community did not have working relationships with NGOs in health since they did not even know them. The introduction of VSLA in the community created a platform where various organisations want to use for their activity implementation. This led to the community being connected to various organisations in water and sanitation. The community had no source of potable water and due to this connection with development organisations working with the VSLAs; the community was supported to acquire a borehole. Before the borehole was constructed, the community had to deposit a community fee of 10 percent of the total construction cost. The community had no money and had to rely on the various VSLAs for loans to meet that request. The loan was paid back but without interest as group members were not made to contribute again. These findings are in line with WHO (2014) that, environmental hygiene and sanitation are influenced through networks. Interventions, which seeks to change behaviours towards environmental hygiene and sanitation, does that through groups. Change in environmental behaviours requires educations on health, hand washing and latrines use (WHO, 2004)

Chapter Six

Conclusion

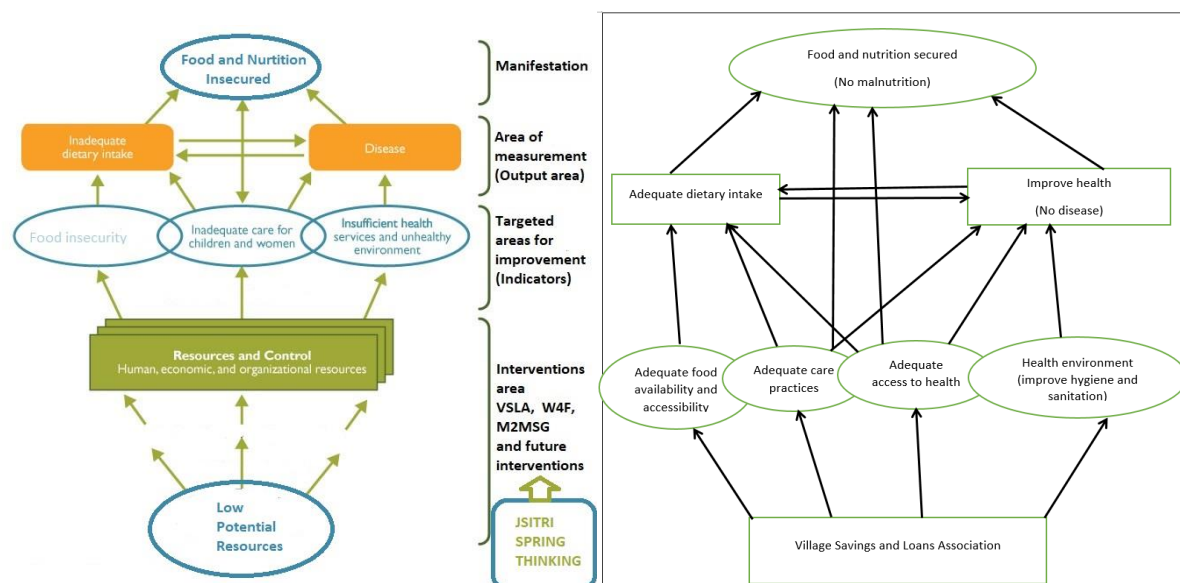
6.1 Introduction

This section looks at the conclusion drawn from the results and discussions in order to answer the main question, which is, how does VSLAs contribute to nutrition and food security? It also contains emerging surprises.

6.2 Conclusion

This research sought to establish how VSLAs contribute to nutrition and household food security improvement in the East Mamprusi district using the SPRING concept of nutrition and food security as shown in the figure 6.1 below. Food and nutrition security according to the SPRING project approach is achieved when there is improvement in the four underlying causes of malnutrition according to the UNICEF malnutrition framework. The contribution of VSLAs to household food and nutrition security is realized when VSLAs contribute to the improvement of the underlying causes of malnutrition per the UNICEF Malnutrition framework as shown in the figure 6.1 below

Figure 6.1 SPRING approach to fighting food and nutrition insecurity adopting UNICEF 1990 malnutrition framework



Source: JSITRI, SPRING Ghana project implementation strategy (2013)

Firstly, VSLA has contributed to households' food availability through facilitating credit facilities to families to expand their farm size, buying of agro-inputs and buying of foodstuff. VSLA has also facilitated family's access to extension service. Access to extension service according to the findings, has contributed to families farm outputs. It has also been established from the study that, through VSLA households get labour support on their farms thereby increasing out of the farms. Food availability has improved as households now hardly experienced food shortage. Furthermore, VSLA has positively influence decisions such as farm input purchase and size of land to put under cultivation are determined by the loans and labour support they can access from VSLA. VSLA therefore, has contributed to household food availability base on the findings above.

Secondly, the findings established that VSLA had contributed to household's access to healthcare through improving household incomes. Through the loans they access from the VSLA for Investment, households income have improved thereby enabling them to register/renew their national health insurance making them have access to improve health care. The findings also established that households through the impact of VSLAs either have acquired or can have easy access to means of

transport. This facilitates the household's access to health care since transportation was a challenge before VSLA. VSLA also contribute to household access to health service through the provision of health related information to group members. Information on health facilities with specialist, various procedures at the hospital for first timers improved the turnaround time for health care seekers. It was further established that VSLA contribute to access to health care through support in providing information especially when it comes to access to herbal health service. VSLA as a social group also influences individual's decision on access to health service. The motivation and advice given to each other during meetings influence household decision making on health. In some groups special provision are made for health care loans. VSLA also contribute to gaining knowledge in signs and symptoms of common diseases, which enabled household members to seek early medical care this therefore, contribute to household's access to health service. It can therefore, be concluded that VSLA contributes to the access to health care by household members.

Thirdly, the study found improve food varieties in the form of balance diet taken as credited to the participation of household members in VSLA. Increase in social support such as care for the sick in the household has improved due to members participation in VSLA activities. Group visits, donations and advice motivate and give the sick moral and emotional boost. VSLA created platform in the community where public health information is relayed to members. Training and interactions at VSLA levels with other VSLA group members improve knowledge in complementary feeding, exclusive breastfeeding, first aid and other Infant and Young Child Nutrition (YCN) practices. Participating in VSLAs has improved financial capabilities of most of the respondents thereby increasing the rate at which they seek medical attention. Based on the finding VSLA has contributed to care practice at the household level.

Finally, the study found that VSLA has empowered households towards environmental sanitation and hygiene. VSLA through the provision of credit and labour support has enabled households to construct latrines and handwashing facilities. VSLA has also contributed to the reduction of disease outbreak in the community and improved the environmental cleanliness through the communal labour activities they jointly undertake. VSLA training and interaction with other members had enabled majority of respondents to gain knowledge on water treatment, personal hygiene and water storage. Participation in VSLA has empowered households financially towards the purchase of sanitation related material such as water storage containers, clothes and sandals and other sanitation related equipment. VSLA has therefore contributed to household improvement in environmental hygiene and sanitation.

To answer the main research question how does VLSAs contribute to household food and nutrition security? It was finally concluded that, VSLA has contributes to household food and nutrition security through its contribution to the improvement in food availability. This was done through household access to credit, extension services, labour support, and positive influence on decision making with respect to food production and purchase. VSLA has also contributed to household food and nutrition security through its contribution to the improvement of household access to health care. Its contribution to household access to health care was through empowering households through credit and health information. It also facilitates households to have either access to transport means by buying their own or getting assistance from group members. It also contributes to household decision making on health. VSLA further, contributes to household food and nutrition security through its contribution to household care practice. VSLA does this through its impact on social support such as care for the sick, physiological and emotional boost and through the creation of platform for health information sharing. It also facilitated learning and provided households with credit, which affected the rate at which they seek medical attention. Finally, VSLA has also contributed to household food and nutrition security through its contribution to improvement in environmental sanitation and hygiene. Through credit empowerment, labour from group members and capacity building, VSLA has contributed to environmental sanitation and hygiene.

VSLAs as groups were set up for micro-credit purpose. It has however, emerge from the finding that, the benefits to individual members went beyond the objective for which they were setup. It has also been established that VSLA is a well-intended initiative and has contributed to the improvement in household nutritional status.

6.3 Surprises

6.3.1 VSLA facilitating community unity and solidarity

During the study, it was discovered that VSLA is now a tool that is facilitating community unity and solidarity. It was mentioned that, if you are in the community and you do not belong to a VSLA then you still a child. People in a group are from different sections. Any good, bad, sad or happy thing happening is shared with members. The community used to have factions, political and tribal who were not relating with one another well. This had change because at, VSLA meetings group member interact with each other and shared ideas. The VSLAs are not formed on tribal and political lines and for that matter foster integration. Private problems are sometimes shard at group meetings to seek for support and advice.

6.3.2 VSLA bring back communal labour back to community

Prior to the introduction of VSLA to the community, communal labour had faced out. It was established that, it faced out due individualism in the community. It was also established that, the community had no platform where information on communal labour was shared. VSLA groups organised communal labour to clean public places like health facilities, schools, around the bore holds and dams. A dug had been constructed in the community through communal labour, which provide animal with water early part of the dry season. Through VSLA communal labour initiative, a two-bed room house had been put up in the community to house two of the school teacher.

6.3.2 Emerging business from VSLA

It was notice during the data collection that, some women in the community were preparing “WIN-IMIX”. A product made from soybean, maize and groundnuts and used as porridge for both children and adults. The community is small and the product from one person could supply the whole community. However, it was notice that more than 10 women in the community were in the process of preparing it during the time of the data collection. The women who were processing all belong to VSLAs and said they gain the knowledge through a training that was organised for them by CARE international. They took it up as business after the training. Other members of the VSLAs own stores which they associated the capital to loans from VSLA.

6.3.4 Platform for information sharing

The community had no platform where information was shared. Through the VSLAs information, sharing has improved in the community. Information of any form is shared at VSLA meetings which is believed to have reduce the cost of sharing information and has improve the quality since there will be less distortions.

6.3.5 Platform for lobbying and advocacy

VSLAs are now platform which communities use to lobby and advocate for development. Because the VSLAs are groups and almost every household has a member in a group, a decision taken by the VSLAs means is the whole community decisions. They now have a voice, which it was establish they have benefited from this advocacy and lobby as the community road was graded in the dry season through the VSLAs effort.

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He did not believe VSLA could change his fortunes. Before he joined the VSLA in the year 2000, he had nothing apart from farmland he inherited from his father. He could not cultivate and manage one acre of the land. Two of his junior sisters had to leave home for Kumasi to seek greener pastures. He had no wife but was above the age of marriage per his community standard. He had no friends because he did not belong to any group in the community. He could not cater for himself and the rest of the family.

After he joined a VSLA in the community, he had people to interact with, and the elderly in the group supported him with various forms of advice. In the first season after joining the VSLA, his savings were not enough to qualify him for a big loan. He took 30 pesewas (3000.00 old cedis). He also received input credit from the group. He participated in his first ever extension training with the group on crop production. He was also advice to rent out part of his farmland to get additional income, which he did. "I ploughed with a tractor for the first time in my life". Through the training, credit and the input credit from group members he was able to cultivate two acres. He had a good harvest and married in the dry season. VSLA has been helping him since, and now the wife is a member of another group. She has learned how to prepare different recipes from soy during the group training. The household now also give food to some group members. His has registered his entire family members with health insurance and had roofed his house with iron sheets. He bought a motor from the sale of his farm produce and has credited the VSLA as the source of the motor. He said VSLA was the foundation of his improve farming

Source: Transcribe by Researcher from Respondent Interview

Chapter Seven

Recommendations

7.1 Introduction

This chapter looks at recommendation base on the conclusions. The recommendation are also to help answer the objective of this research which is “To assess how VSLA is contributing to household food and nutrition security and recommend to JSITRI government and other development agencies strategies for strengthening VSLAs to become an effective tool for the fight against food and nutrition insecurity in the East Mamprusi District”

7.2 Recommendations

- The VSLA methodology is an effective tool, which can be used to facilitate community and household development in any field. It is therefore recommended that, JSITRI, government and development agencies develop their development programmes and interventions around the VSLA.
- Interaction and exchange of information flow easily among people in the same social class. It is recommended that, JSITRI, government, and development agencies using or intending to use VSLAs for their programmes consider this when forming them.
- JSITRI, government and development agencies using VSLA in project implementation need to know that “poor” people need various forms of support and not just saving and loans, given that, their incomes are irregular, low and changeable. It is therefore recommended that, VSLAs are link to institution like department of agriculture, Ghana health service, district assembly, and other relevant institutions to support them after they have been formed.
- Finally, it is recommended that JSITRI government and development organisation forming and using VSLAs conduct at least yearly assessment of the group health and take necessary action base on the assessment reports.

7.3 Suggestion for further studies

For this recommendation to be implemented, it is hereby that suggested that JSITRI and interested organisations conduct research into the following areas to get other views on VSLAs contribution to the household

- The contribution of VSLA to rural enterprise development in the East Mamprusi District
- The contribution of VSLA to household gender empowerment in the East Mamprusi District.

Chapter Eight

Self-Reflection

As part of the requirement for the award of a Master of Science degree by Van Hall Larenstein University of Applied Sciences. Students are to conduct a research on a problem within their field of work or their organisation, which is related to student's specialisation. I chose to conduct my study in Teanoba community. The community is a beneficiary of JSITRI SPRING project where I work as a district coordinator. I have had little knowledge about VSLA prior to this study but not relating to food and nutrition security. I saw this as an opportunity to broaden my knowledge in the area of VSLA especially linking it to food security. Despite the fact that, I saw it as an opportunity, I knew it was going to be challenging when especially I was going to undertake qualitative which is not very familiar to me. Prior to this study, I had worked with VSLAs but not in the area of food and nutrition security. I have also not conducted a study in the subject matter. It was therefore a revelation and a challenging assignment, since I am an employee of JSITRI and at the same time a researcher. I was aware am part of the problem owner, which therefore influenced the formulation of the problem statement, objectives, and the research questions. This however did not influence the research, as I remain neutral, acted impartial and independent and collected the data from a community where I never worked.

During the desk study, it was not very easy for me to get information, which is relevant and current on the subject matter. Although I had volumes of information from books, journal, and other publication source how to judge which of them were of relevance and credible to the study. From the research design module lecture, I was able to sort out the relevant information looking at the methodologies that were applied in their data collection. Although I know there was a problem, which I have to research into, it was not easy to formulate a problem statement, which will be relevant to the study and understandable by readers. The research questions were not easy to formulate. This was because they have to be researchable and clear enough for readers to know what is expected of the work at the end. Using knowledge and experience from Dr. Marcel Put lectures during the management of development module and the mini research during the research design and implementation module, I was able to formulate my problem statement, main research question and the sub questions.

It was my first time of unravelling a concept and this was the JSTIRI concept of food and nutrition security. The JSITRI concept adapted the UNICEF malnutrition framework and modified it in their operations. I therefore have to operational food and nutrition security in the context of their operation. I also learn and improve on how checklist for individual interviews and key informants are design. In addition, knowledge on how to develop FGD guide for various stakeholders was learnt. Through reading of materials, I have now gain knowledge in areas I had little or no knowledge on. I hope my next research work will not be challenging in terms of formulating problems statement, research main and sub-question.

During the data collection on the field, I spent 5 weeks instead of the 4 weeks I had initial planned. This happen because I did not seek much information about the area during the time of the year the data was to be collected. I pre-tested the checklist in school and thought it was well enough for the data collection. On getting to the field, I had to pre-test it again. After pre-testing the checklist on the field, I realized that there were some questions, which were not relevant and other which could not be answered. I therefore realized that it was important when preparing checklist for a research you have to pre-test it with people with similar characteristics like your respondents. I also had a more practical knowledge on collecting qualitative data and using both the right and left side of the brain.

Another reflection is that, in modern research, no amount of limitations can prevent one from getting the information he/she needs, as there are many tools, which can be used to get information from the field. In addition, the advantages and disadvantage of using visual imagery such as photography were something that has impressed me most. Pictures can be useful tools to convey a message but also the way pictures are interpreted is largely influenced by what makes sense out of it. Another lesson learnt

from the field is making time for your respondents and identifying with them. This will give you the data you require.

This research work has offer me the opportunity to learn and apply some qualitative data analysis techniques. Although, it was interesting using these techniques, it was however challenging. Interpreting the data and discussing it offer me an opportunity to know more about the VSLA operations, how it works and the various ways through which it contributes to household food and nutrition security. What interest me most was how the small amount they contribute sum up to huge amount, which they use in starting their farm business or trade.

Through this research I have also gotten to realised that JSITRI is actually contributing to food and nutrition security but need to improve on it operational strategies. From the research finding I asked myself if JSITRI was under reporting on it success looking at what was emerging from the findings and discussion. This report will be beneficial to JSITRI as source of first-hand information before the final project evaluation coming up in August 2017

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Annexes

Annex 1: Checklist for semi-structured interviews

Check list for individual semi-structured interviews

Hello, my name is Wilfred Apiung Akan. I am a student from the Van Hall University of Applied Science. I am conducting a research on "THE CONTRIBUTION OF VILLAGE SAVINGS AND LOANS ASSOCIATIONS TO HOUSEHOLD FOOD AND NUTRITION SECURIT". Despite the recording of the interview responses, the information you give will be kept strictly confidential and will not be disclosed to anyone else. You are under no obligation to answer any question that you feel uncomfortable to answer and I would urge that you provide as honest answers as possible.

ID.....Date of Interview.....

INFLUENCE OF VSLA IN ENHANCING FOOD AVAILABILITY

1. Has VSLA enhanced your ability to produce more food?
2. How has VSLA enhanced your ability to produce more food?
3. How much has your production improved?
4. Has VSLA enabled you to stockpile foodstuff in your home through purchase?
5. how much has your stocks improved?
6. Have you experienced food shortage after joining VSLA?
7. How has participating in the VSLA influence decisions relating to food production at household level?
8. Has your participation in the VSLA enhanced the food variety taken in your household?
9. How has participating in VSLA enhanced the food variety taken in your household?
10. What knowledge have you gain participating in the VSLA in the areas of food production?

INFLUENCE OF VSLA IN ENHANCING ACCESS TO HEALTH SERVICE

1. Has VSLA enhanced your ability to access to health service?
2. How has VSLA enhanced your access to health service?
3. Has your participation in the VSLA improve your access to health information?
4. How has your participation in the VSLA improve your access to health information?
5. How many of your household members' has been registered on the health insurance after you have join the VSLA?
6. Have you in any time after joining the VSLA fail to afford your health care bills?
7. How has participating in the VSLA influence decisions relating to your access to health service at household level?
8. Has your participation in the VSLA enhanced the type of health service you and your household access?
9. What knowledge have you gain participating in the VSLA in the areas of access to health service?

INFLUENCE OF VSLA IN ENHANCING CARE PRACTICES

1. Has VSLA enhanced your ability to undertake proper care practices?
2. How has VSLA enhanced your care practices ability?
3. What are some of the care practices you have learn as a result of being part of the VSLA?
4. How has this practices improve as a result of you being part of the VSLA?
5. How often do you visit the hospital after joining the VSLA?
6. How do you get best care practices information?
7. how often do you your household members visit the clinic after joining the VSLA?
8. Have you or your family members experienced poor health condition?
9. Has your participation in the VSLA enhanced your care practices ability?
10. How has participating in VSLA enhanced the general care practices?
11. What knowledge have you gain participating in the VSLA in the areas of care practices?

INFLUENCE OF VSLA IN ENHANCING Environmental hygiene and sanitation

1. Has VSLA enhanced your environmental hygiene and sanitation?
2. How has VSLA enhanced your environmental hygiene and sanitation?

3. How much has your environmental hygiene and sanitation improved?
4. What are some of the effects of dirty and unhygienic environment?
5. Has VSLA enabled you to purchase sanitation materials for use?
6. What type of materials and how have they contributed?
7. Have you experienced unhygienic disease VSLA?
8. How has sanitation and hygiene been like, before and after joining the VSLA?
9. Has your participation in the VSLA enhanced environmental sanitation and hygiene?
10. How has participating in VSLA enhanced environmental sanitation and hygiene at your homes?
11. What knowledge have you gain participating in the VSLA in the areas environmental sanitation and hygiene?

Annex 2: Checklist for Key Informants Interviews

Key Informants Check-list

Hello, my name is Wilfred Apiung Akan. I am a student from the Van Hall University of Applied Science. I am conducting a research on "THE CONTRIBUTION OF VILLAGE SAVINGS AND LOANS ASSOCIATIONS TO HOUSEHOLD FOOD AND NUTRITION SECURIT". Despite the recording of the interview responses, the information you give will be kept strictly confidential and will not be disclosed to anyone else. You are under no obligation to answer any question that you feel uncomfortable to answer and I would urge that you provide as honest answers as possible.

ID.....Date of Interview.....

1. How does food availability, care practices, access to health and environmental sanitation and hygiene status of households participating in VSLA compare to those that don't participate in Teanoba Community?
2. Compare the decision making role with regards food availability, care practices, access to health and environmental sanitation and hygiene for households who participate in VSLA and those who don't?
3. How has VSLA enhance household nutrition?
4. How has VSLAs enhance food availability, care practices, access to health and environmental sanitation and hygiene in Teanoba community?
5. Elaborate how the participation of community members in VSLA activities has contributed to household level food availability, care practices, access to health and environmental sanitation and hygiene ?
6. What role has your organisation play in contributing to housed nutrition through the VSLAs?

Annex 3: Focus group discussion guide

Focus Group Discussion

Hello, my name is Wilfred Apiung Akan. I am a student from the Van Hall University of Applied Science. I am conducting a research on "THE CONTRIBUTION OF VILLAGE SAVINGS AND LOANS ASSOCIATIONS TO HOUSEHOLD FOOD AND NUTRITION SECURITY". Despite the recording of the interview responses, the information you give will be kept strictly confidential and will not be disclosed to anyone else. You are under no obligation to answer any question that you feel uncomfortable to answer and I would urge that you provide as honest answers as possible.

INFLUENCE OF VSLA IN ENHANCING FOOD AVAILABILITY

1. Has VSLA enhanced more food production?
2. How has VSLA enhanced food production?
3. Has VSLA enabled members to stockpile food stuff in their home through purchase?
4. How much have stocks improved?
5. How frequently do VSLA members experience food shortage after joining VSLA?
6. How has participating in the VSLA influence decisions relating to food production at the household level?
7. Has participation in the VSLA enhanced the food variety taken in homes?
8. How has participating in VSLA enhanced the food variety taken in homes?
9. What knowledge do people gain participating in the VSLA in the areas of food production?

INFLUENCE OF VSLA IN ENHANCING ACCESS TO HEALTH SERVICE

1. Has VSLA enhanced the ability to access to health service?
2. How has VSLA enhanced access to health service?
3. How has participation in the VSLA improved access to health information?
4. Averagely, how many people have a member of VSLA household been able to register?
5. Have members ever fail to afford health care bills?
6. How has participating in VSLA influence decisions relating to access to health service at the household level?
7. Has participation in VSLA enhanced the type of health service household access?
8. What knowledge do you think participating in VSLA in the area of access to health service?

INFLUENCE OF VSLA IN ENHANCING CARE PRACTICES

1. How has VSLA enhanced care practices ability of VSLA members?
2. What are some of the care practices members of VSLA learn as a result of being part of the VSLA?
3. How often do members visit the hospital after joining the VSLA?
4. How do members get best care practices information?
5. How has participating in VSLA enhanced the general care practices?
6. What knowledge have members gained participating in the VSLA in the areas of care practices?

INFLUENCE OF VSLA IN ENHANCING Environmental hygiene and sanitation

1. Has VSLA enhanced environmental hygiene and sanitation?
2. How has VSLA enhanced environmental hygiene and sanitation?
3. How much has environmental hygiene and sanitation improved?
4. What are some of the effects of dirty and unhygienic environment?
5. Has VSLA enabled members to purchase sanitation materials for use?
6. What type of materials and how have they contributed?
7. Have you experienced unhygienic disease VSLA?
8. How has sanitation and hygiene been like, before and after joining the VSLA?
9. Has participation in the VSLA enhanced environmental sanitation and hygiene?
10. How has participating in VSLA enhanced environmental sanitation and hygiene at homes?
11. What knowledge have been again participating in the VSLA in the areas environmental sanitation and hygiene

Annex 4: consent form

Consent form

Dear Respondent,

My name is Wilfred Apiung Akan, a student from the Van Hall University of Applied Science. I am conducting research on "THE CONTRIBUTION OF VILLAGE SAVINGS AND LOANS ASSOCIATIONS TO HOUSEHOLD FOOD AND NUTRITION SECURITY" for my programme. I will like to have a private interview with you on the above subject since you are a member of a VSLA under the following conditions:

1. I will be recording your responses on my book and with a digital recorder.
2. I will also take pictures of you or the two of us and I may be using the picture as part of the work.
3. Your picture may go international and might be on the internet in case the work is published and your picture is used

Despite the recording of the interview responses, the information you give will be kept strictly confidential and will not be disclosed to anyone else. .. You are under no obligation to answer any question that you feel uncomfortable to answer and I would urge that you provide as honest answers as possible.

I have agreed and will participate
Signature/tump print (Interviewee)

Date:

I have not agreed and will not participate
Signature/tump print (Interviewee)

Date

I have not agreed to 2&3 but will participate
Signature/tump print (Interviewee)

Date

Signature of interviewer(Researcher Research Assistant)

Date