

UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

**ASSESSING THE IMPACT OF VILLAGE SAVINGS AND LOAN
ASSOCIATIONS (VSLA) ON RURAL HOUSEHOLDS'
WELFARE IN THE LAMBUSSIE DISTRICT**

ABDUL-HAKIM BADUONMIE

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BY

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DECLARATION

CANDIDATE'S DECLARATION

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: 

Date: 8th April 2024

Name: Abdul-Hakim Baduonmie

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of thesis laid down by the University for Development Studies.

Supervisor's Signature: 

Date: 8th April 2024

Supervisor: Professor Paul Kwame Nkegbe



ABSTRACT

VSLAs are allowing millions of unbanked people in developing countries to save and borrow without resorting to formal banking systems. Empirical studies suggest that rural households' access to saving and credit enhances their income, food consumption, health status as well as improvement in education. Though many VSLAs exist in the Lambussie District, there is limited evidence on the determinants of membership in such groups as well as the specific impact of VSLAs on households' income, food consumption, education and health. Therefore, this study's main objective was to examine the impact of VSLAs on the welfare of rural households in the Lambussie District. Primary data were collected from a sample of 227 VSLA beneficiaries and 139 non-beneficiaries using stratified random sampling. Propensity score matching, comparative analysis and logit model were used to analyse the data.

The findings from the study revealed that the income level, age, status as a head of household, the number of children, marital status and educational level of respondents are the main determinants of membership in VSLA. This study identified short loan repayment period, insufficient loan amounts, default loan, lateness/absenteeism, high interest rates and collusion/disagreements as the challenges confronting VSLA members. The study also showed a large positive and statistically significant relationship between participation in VSLA and improvement in one's household food consumption, income, health care and children's education. As much as 38% and 17% of total and per capita weekly household expenditure, respectively, can be attributed to participation in VSLA interventions. This is consistent with most prior studies and seems to suggest that, if properly designed and implemented, VSLAs equally can contribute to rural poverty alleviation.



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DEDICATION

This work is dedicated to my parents, Mr and Mrs Mui and my lovely sister, Ajaratu, who toiled and sacrificed to see me through my education.



TABLE OF CONTENTS

Contents	Pages
DECLARATION.....	i
ABSTRACT.....	ii
ACKNOWLEDGEMENTS	iii
DEDICATION.....	iv
TABLE OF CONTENTS	v
LIST OF TABLES.....	ix
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background to the Study	1
1.2 Problem Statement	5
1.3 Research Questions	7
1.4 Research Objectives	7
1.5 Significance of the Study	8
1.6 Scope of the Study.....	9
1.7 Organization of the Study	9
CHAPTER TWO	11
LITERATURE REVIEW	11
2.0 Introduction	11
2.1 Definition of Concepts	11
2.1.1 Livelihood.....	11
2.1.2 Sustainable Livelihood	11
2.2 Theoretical Framework	12
2.2.1 The Sustainable Livelihood Framework.....	13
2.2.2 The Theory of Empowerment.....	19
2.3 Household Welfare.....	22





2.3.1 Money-Metric Measures Versus the Asset-Based Approach.....	22
2.4 Microfinance	24
2.5 Approaches to Microfinance	32
2.5.1 Welfare Approach.....	32
2.5.2 Institutional Approach	32
2.6 Models of Microfinance Interventions	33
2.6.1 Individual Lending	33
2.6.2 Group Lending.....	34
2.7 An overview of Microfinance in Ghana.....	35
2.8 Other Areas of Microfinance Impact	37
2.9 Overview of VSLA	41
2.9.1 Operations of VSLA	47
2.9.2 Factors Likely to Affect VSLAs.....	49
2.9.3 Strengths of VSLA	52
2.9.4 Challenges Facing VSLAs.....	53
2.10 Relationship between VSLA and Microfinance.....	54
2.11 Summary of Literature	55
CHAPTER THREE	56
METHODOLOGY	56
3.0 Introduction	56
3.1 Profile of the Study Area.....	56
3.1.1 The Lambussie District.....	56
3.2 Research Design	59
3.3 Study Population	61
3.4 Sample Size and Sampling Procedure.....	61
3.5 Sources of Data	64
3.6 Methods of Data Collection	65



3.6.1 Survey	65
3.6.2 Focus Group Discussions	66
3.6.3 Key Informant Interviews.....	67
3.7 Ethical Considerations.....	68
3.8 Validity	68
3.9 Data Analysis and Presentation.....	69
3.9.1 Model Specification: Propensity Score Matching	70
3.9.2 Matching Estimators/Algorithm	73
3.9.3 Average Treatment Effect on the Treated (ATT) Estimation.....	73
3.10 Hypothesis Testing	75
3.11 Variable Definition and Descriptive Statistics	76
CHAPTER FOUR.....	79
RESULTS AND DISCUSSION	79
4.0 Introduction	79
4.1 Descriptive Analysis of Background of Respondents.....	79
4.2 Determinants of VSLA Membership Status.....	83
4.3 Impact of VSLA on Welfare	87
4.3.1 Impact of VSLA on Income	87
4.4 Comparative Analysis via Hypothesis Testing	89
4.4.1 VSLAs Programme Contribution to Households' Food Consumption and Incomes.....	89
4.4.2 VSLAs Programme Influence on Households' Access to Healthcare	93
4.4.3 VSLAs Programme Contribution to Children's Education in Rural Households	97
4.5 Challenges Facing the VSLAs Programme in the Lambussie District	101
4.6 Chapter Summary.....	103

CHAPTER FIVE	105
SUMMARY, CONCLUSION AND RECOMMENDATION.....	105
5.0 Introduction	105
5.1 Summary	105
5.2 Conclusions	108
5.3 Recommendations	109
REFERENCES.....	111
APPENDICES	134
APPENDIX A: QUESTIONNAIRE.....	134
APPENDIX B: KEY INFORMANT INTERVIEW	151
APPENDIX C: FOCUS GROUP DISCUSSION GUIDE	152



LIST OF TABLES

Table 2.1: Economic and Social Impact of Micro Finance	28
Table 3.1: Sample Distribution	64
Table 3.2: Summary of Respondents that were sampled for the Study	65
Table 4.1: The Summary of the Descriptive Statistics of the Respondents	80
Table 4.2: Descriptive Statistics of Covariates	82
Table 4.3: Summary of Determinants of VSLA Membership Status	83
Table 4.4: Propensity Score Estimation Using Logit Model	86
Table 4.5: Estimation of Average Effect of Participation in VSLA on Average Monthly Household Income Using Nearest Neighbour and Kernel Matching	87
Table 4.6 : Chi– square Test for the Joint Significance of Variables and Matching Quality	88
Table 4.7: Household Diet	89
Table 4.8: VSLAs Programme Contribution to Households’ Food Consumption and Income	91
Table 4.9: Chi-Square Test for Perception towards their Household Diet (Consumption)	92
Table 4.10: The summary of the Regression Model and other Findings on Household Access to Health Care.....	94
Table 4.11: Chi-Square Test of Respondents’ Perception towards their Household Health.....	95
Table 4.12: Education in Rural Households in the District	98
Table 4.13: Chi-Square Test - Respondents’ Perception towards their Children Education	99



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Development agencies, including governmental organisations and non-governmental organisations (NGOs), have been working to reduce rural poverty for some time now. The living standards of the rural poor can be improved by making financial services more easily available to the poor via a financial industry focused on helping the rural poor. According to Hugh (2002a) there are several reasons why microfinance services like those offered by traditional financial institutions are unable to reach the rural poor. Schreiner & Colombet (2001) define microfinance as "the attempt to enhance access for poor families ignored by banks to the deposits and small loans that they are entitled to". Other financial services, such as savings and credit, as well as insurance and payment services, might be included in this category (Eoin, 2005). Poverty reduction may be achieved via microfinance. However, it has not had enough impact on society's lower classes. Many of the poorest people lack access to microfinance (Littlefield, Morduch, & Hashemi, 2003 and Cheston & Kuhn, 2002).

Numerous banks and Micro Finance Institutions (MFIs) in Africa offer vital services to the poor. Still, they are most effective in metropolitan areas where the borrowing needs are large and the expenses of reaching the clients are cheap (Allen & Staehle, 2006). Most individuals in rural regions and urban slums, especially the impoverished, are not served by any government agencies. Consequently, there is still a huge disparity between the requirements of the poor for financial services and the capacity of banks and MFIs to provide these needs (Allen & Staehle, 2006).





For many people in Ghana and throughout the globe, especially those in government and non-governmental organisations (NGOs), reducing poverty has long been a top priority (Abdulai, Adams, & Abdulai, 2014 and Abdul-Moomin et al., 2013). Different policies, programmes, and initiatives have been launched in this regard, focusing on the underprivileged in rural regions. Rural electrification, Microcredit and Small Loans Centers (MASLOCs), Free Compulsory Universal Basic Education (FCUBE), School Feeding Programs, Uniforms for All Students, Livelihood Empowerment Against Poverty (LEAP), the National Health Insurance Scheme (NHIS), Planting for Food and Jobs (PFJs), and Agriculture Extension Services (AES) are a few of the more recent initiatives (Abdulai, Adams, & Abdulai, 2014 and Abdul-Moomin et al., 2013). Poverty rate in Ghana declined from 31.9% in 2005 to 23.4% in 2016 and further decreased to 11.10% in 2019 as a result of the implementation of some of these policies, programmes, and projects, thereby contributing to achieving the first Sustainable Development Goal (SDG1) of ending poverty in all its forms by 2030 within reach (GSS, 2021).

Similarly, more simplistic forms of micro finance like Village Savings and Loan Associations (VSLAs) have emerged. Evidently, CARE International developed and extensively tested the VSLA model in Maradi-Niger in 1991 (Aston, 2014; Cimadamore, Koehler & Pogge, 2016). The primary objective of VSLA is to provide simple savings and loan facilities in a country that does not have access to formal financial services and also targeting the pro poor (Aston, 2014). According to Aston (2014), the VSLA methodology has been replicated in 21 countries worldwide. To date, the approach has spread to 2.3 million people in 26 African countries. Kumar (2009) and Ellis (2007) states that self-help groups are formed across countries as an effective strategy for poverty alleviation, human development and social empowerment. In

Ghana, NGOs like CARE International, PLAN, MEDA and SNV and their respective local partners used VSLA model in some of their projects to extend financial services to rural households in order to ultimately improve their livelihood and/or living conditions (Sadick et al., 2016).

VSLAs are widely accepted as a good model for providing financial services in rural and remote locations. In Africa, Asia, and Latin America, more than 40,000 VSLAs (over 1 million members) have been built and modified by CARE utilising this approach. Non-profit organisations including Oxfam, Catholic Relief Services, and Plan International have adopted village and savings-based models in Africa and Asia that have some parallels with the Self-Help Group (SHG) model in Asia (Hamadziripi, 2008). Saving rather than borrowing is a greater priority for low-income families (as well as those who aren't) since saving generates assets and may be used to handle both risks and anticipated life events (Hossain, 1988 and Hendricks & Chidiac, 2011).

Susu, a traditional Rotating Savings and Credit Association (ROSCA) performed in Ghana, is the inspiration for the VSLA. Groups were urged to include the following new features: a cash box and oral record-keeping system to protect money, by-laws and a committee to promote governance and administration, and technical assistance to members in operating the associations (Hamadziripi, 2008). Profits from the activities are "cashed out" or "shared out" after a few months and each member gets his/her portion, keeping the community's resources in the hands of everyone (Hamadziripi, 2008). When people in a self-chosen group save money, it becomes available as loan capital to the rest of the members of the group. Savings and basic insurance are the primary goals of a VSLA, but if the amount saved by the membership is adequate, any of them may borrow from this source and must pay back the loan with interest when the amount saved is sufficient (Allen & Staehle, 2006).





Currently, Plan and Care International VSLA programme covers seven regions in Ghana which include; Volta, Central, Eastern, Northern, Upper West, Brong Ahafo and Ashanti. In the Upper West Region, it covers the following districts; Nandom, Lawra, Sisala East, Wa East, Nadowli, Issa-Busie, Daffiama, Lambusie-Kani and Wa (Aston, 2014). In the Upper West Region VSLA started around 2006 and has so far been implemented across all 11 districts in Upper West Region. In the Lambussie District, the VSLA model was implemented by CARE International between 2010 and 2015 in a project dubbed Banking on Change I and II (BoC I & II) to extend and develop households' access to financial services, improve their employability and entrepreneurship skills and supporting the establishment of income generating activities. In the district, the project established 189 VSLAs, which comprise 4,334 direct beneficiaries. (Project Report, Dec 2015 MIS).

Despite this and similar efforts, the Upper West Region recorded relatively lower rates of school attendance (63.6%), the lowest annual average household expenditure of Gh5,991 and has the highest proportion of households in the lowest quintile (55.7%) (GSS, 2014). This according to GSS (2014) could be an indication that poverty is more prevalent in the Upper West Region. Food consumption, household income, and healthcare utilization have also been negatively affected. On average, 1 out of 3 people in the Upper West Region are below the poverty line (Fuseini, Enu-Kwesi, & Sulemana, 2019). The 2016 Ghana Poverty and Inequality Report by UNICEF ranks Upper West as the region with the highest poverty incidence (70.7%), with inequality ranging from 41.5% in Wa East to 47.5% in Lambussie. On the ranking of districts in Ghana, Lambussie District is occupying the 14th position on the league table of poverty incidence (Owusu & Oteng-Ababio, 2015). Despite the intervention of VSLA in the Upper West Region, there is rarely any empirical research work that has been carried

out in Lambussie District to determine the extent to which VSLA has impacted on the indicators of rural households' welfare. This therefore requires a scientific investigation to determine whether these VSLAs can significantly contribute to the enhancement of the poor people's socio-economic status (SES) in Lambussie District.

1.2 Problem Statement

Most of the people who live in rural areas and urban slums in Ghana, particularly the poor, receive very little services from microfinance institutions (Abdulai, Adams, & Abdulai, 2014 and Abdul-Moomin et al., 2013). This problem persists because in most cases the vulnerable are unable to recover their cost and also cannot meet the collateral requirements (Allen & Staehle, 2006). Those mostly affected are women particularly those outside the formal sector (Luttrell & Moser, 2004). Other challenges include lower levels of literacy, lower levels of access and control over resources, lower levels of access to networks and vulnerability to sexual exploitation and abuse at the community and household levels. The major goal of microfinance institutions (MFIs) is to provide low-interest loans to the underserved in order to promote economic development for the poor. Microfinance may help alleviate poverty by enhancing the standard of living (Swain, 2006). Boosting home income and control over that income, improving household production and trading abilities, and increasing household decision-making involvement are all possible outcomes of microfinance (Parpart, Rai, & Staudt, 2002).

The world community has set a goal of halving global poverty by 2030 in view of the current condition of affairs. After this process, a set of objectives and indicators for the fight against poverty, sickness, a lack of access to basic education, and discrimination against women were developed. These targets and indicators became known as the Sustainable Development Goals (UN, 2015). Goal 5 aims to "promote gender equality



and empower all women and girls." It was widely agreed that empowering women at the grassroots level necessitates capital investment in their varied livelihood plans.

In spite of these challenges the Barclays Bank Ghana in conjunction with CARE International and Plan Ghana began promoting a new model for ensuring access to financial services through VSLA (CARE and Plan Ghana Guide, 2014). The VSLA as an informal microfinance model promotes locally self-managed savings and loan associations in rural areas. The VSLA programme is based on the belief that the right approach to salvage the plight of the extremely poor, particularly women, is to build their financial assets and skills through savings rather than creating artificial debt for them. However, CARE and Plan Ghana Guide (2014) clearly stipulates that, before one can join a VSLA group, the person must be able to attend meetings regularly, buy at least one share in every weekly meeting, make weekly contributions to the group's social fund and pay fines anytime the person goes contrary to the rules and regulations of the group. Aside from these guiding principles, it is important to discover the factors that determine one's participation in a VSLA.

By having access to microcredit, members can boast of a smooth but irregular income pattern. This will enable them to meet their basic household consumption needs rather than taking on significant debt they may not be able to repay (Hendricks & Chidiac, 2011). Improving women's access to financial services, particularly credit, is an important step towards livelihood sustainability (Littlefield et al., 2003). In spite of these interventions, poverty still persists. This raises critical questions, as the incidence of poverty and poverty gap in the Upper West Region is about 70.7% which is three times the national figure (GSS, 2014).



Even though the VSLA plays a vital role in enhancing the welfare of rural households as evident by studies such as (Orame, et al., 2020; Ashenafi, 2017) not much has been done in terms of the assessment and certification of its impacts in the Lambussie District. There rarely exists any literature on the impacts of VSLA in Lambusie District. This study therefore sought to bridge this gap in empirical literature by assessing how the VSLA initiative in the district has impacted households' welfare.

1.3 Research Questions

The main research question is; what is the impact of Village Savings and Loans Associations (VSLAs) on rural households' welfare in the Lambussie District?

The specific research questions are:

1. What are the determinants of an individual's participation in a VSLA in the Lambussie District?
2. To what extent has the VSLAs programme influenced households' socio-economic wellbeing in the Lambussie District?
3. What are the challenges facing the VSLAs programme in the Lambussie District?

1.4 Research Objectives

The main research objective is to assess the impact of Village Savings and Loans Associations (VSLAs) on rural households' welfare in the Lambussie District.

The specific research objectives are:

1. To investigate the determinants of individual's participation in a VSLA in the Lambussie District.



2. To examine the impact of VSLAs programme on households' socio-economic wellbeing in the Lambussie District.
3. To assess the challenges facing the VSLAs programme in the Lambussie District.

1.5 Significance of the Study

Microfinance is proven to be an effective and powerful tool for poverty reduction (Daley-Harris, 2009). According to the United Nations Capital Development Fund Report (2004) and Buss (2005), there are approximately 10,000 MFIs in the world but they only reach four percent of potential clientele of about thirty million people. Besides, the Bank of Ghana (2012), as emphasized by Boahene, Dasah, & Agyei (2012), shows that 61% of the nationwide microfinance institutions are located in Greater Accra.

This is the gap that CARE International in conjunction with Barclays Bank and Plan Ghana instituted a new Microfinance model referred to as VSLA, to address. The model has received more attention especially in most African countries with little research carried out on it in Ghana.

With this, the study responded to the research gaps on VSLA and the livelihood sustainability of the poor in Ghana with specific reference to the Lambussie District. As a result, the study produced information on the VSLA and livelihood sustainability of the poor. This could further serve as a basis for subsequent studies, policy formulations as well as inform subsequent governments who would like to undertake poverty reduction initiatives. The findings and recommendations are useful in providing detailed information on pertinent issues in microfinance and livelihood. In sum, this study has contributed greatly to bridging the gaps in empirical literature.



The findings from this study could assist CARE, Plan Ghana and other implementers of VSLA to improve their services to VSLA members and also donor agents to continue funding the programme.

The research will inform Government, NGOs, Private organizations, Farmer Based Organisations (FBOs), Banks and many others on the best microfinance model to adopt in achieving the Sustainable Development Goals (SDGs) and will also aid in finding an alternative solution to reducing poverty in the Upper West region of Ghana.

1.6 Scope of the Study

A convergent parallel mixed method design was used in this research. In order to get a deeper understanding of the topic being studied, this research approach was used. While labor-intensive and necessitating a significant amount of data collecting, this approach successfully provided an in-depth grasp of the subject. Moreover, the study looked at the factors that determine the VSLAs' membership and its impact on the welfare of members. Though VSLA groups are found in all districts, the study had been conducted only on VSLA groups located in the Lambussie District of the Upper West Region of Ghana due to time constrain. The researching findings are therefore limited to the Lambussie District. To learn more about the impact of VSLA on members' welfare, it is wise for this study to be expanded to other districts. A wider coverage in all districts in the region could result in improved comparability.

1.7 Organization of the Study

There are a total of five sections to this research. Chapter one provides an overview of the study's background, problem statement, research questions, objectives, and significance of the study. In the second chapter, you will find a comprehensive synthesis and analysis of relevant research in the form of an extensive literature review.



The study's methodology is discussed in detail in Chapter three. Chapter four presents the results and discussion. There is also a conclusion and suggestions section in this last chapter.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter focused on the review of the theoretical and empirical literature. Issues discussed in this chapter include; the definition of concepts, theoretical framework, the concept of sustainable livelihood, overview of the Village Savings and Loans, livelihood and microfinance, as well as socio-economic empowerment of poor rural households in Ghana.

2.1 Definition of Concepts

2.1.1 Livelihood

The World Bank defines livelihood as the full range of means that individuals, families and communities utilize to make a living, such as waged-based income, agriculture, fishing, foraging, other natural resource-based livelihoods, petty trading, and bartering (World Bank, 2014). Livelihood according to Chambers & Conway (1992) comprises the capability, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhances its capabilities and assets both now and in the future, while not undermining the natural resource base (Chambers & Conway, 1992, cited in Afriyie et al., 2020).

2.1.2 Sustainable Livelihood

According to Scoones (1998), a sustainable way of life is one that can recover from stresses and shocks, preserve or improve its capabilities and assets, and not undermine the natural resource base. It has been noted that sustainable livelihood definitions are



often ambiguous, inconsistent, and limited (Carswell, 1997; Abdullahi Shagali et al., 2020). To determine whether or not a particular livelihood strategy is sustainable, it is important to consider how well it can handle and recover from stress and shocks. It is inevitable that those who are unable to manage with or adjust to change (temporary adaptations in the face of change) are vulnerable and unlikely to attain long-term sustainable livelihoods.

Keeping in mind that the idea of sustainable livelihoods is always open to discussion is crucial. Because the composite definition (above dissected into five sections, but possibly divided up in numerous ways) contains inconsistencies and trade-offs, it is important to be aware of these issues at all times. Different individuals will undoubtedly have different priorities, and when conflicts are highlighted, they will have to make decisions. It is feasible to negotiate between several potential outcomes as a part of any policy formulation, planning or implementation process that includes sustainable livelihood considerations at its core by breaking down the definition into a number of indicators (Conway, 1985).

2.2 Theoretical Framework

For social scientists, theories, models, and ideas are essential for figuring out how and why particular phenomena occur. As stated by Ssendi and Anderson (2009), theories are the notions used to define and/or explain certain events. This section explains the theoretical framework used to identify important variables for the research. The researcher utilised Sustainable Livelihood Framework and the Empowerment Theory as the basis for this study. By application, when VSLA clients are able to mobilise resources (savings, credit and insurance fund) and they are equipped with the right



capacity through training (VSLA training methodology), they will be able to achieve desirable outcomes (improved income and food consumption, education and health,etc)

2.2.1 The Sustainable Livelihood Framework

The Sustainable Livelihood Framework (SLF) is a conceptual tool to analyze and understand the factors and dynamics influencing livelihoods and well-being. It considers various assets or capital that individuals and households utilize to pursue sustainable livelihoods. These assets include human, social, natural, physical, and financial capital.

SLF is the central concept of the Department for International Development of the United Kingdom in the early 1990's (Mihaye, 2013). The framework is an effort by policymakers to go beyond traditional definitions and ways to poverty reduction since typical approaches focus on particular characteristics such as income, without taking into account key indicators like vulnerability and social exclusion (Krantz, 2001). All five components of the Sustainable Livelihood Framework (SLF) created by the Department for International Development (DFID) provide a comprehensive strategy for alleviating poverty. A key goal of the framework is to highlight the importance of the five basic components as well as the complex web of connections that connects them.

Recent studies such as (Patel et al., 2023; Smith et al., 2023) have turned focus to elements that affect a person's capacity to earn a livelihood and do so in a way that is both socially and economically acceptable. The SLF is a good tool for examining how laws affect the lifestyles of the poor and may be employed at many levels of study; and its adoption as a research instrument will promote learning as to its potential value in comprehending urban development challenges. The SLF sees humans in a state of



vulnerability as its most basic concept. Many assets or poverty-reducing variables may be found in this setting, and their meaning and worth are determined by the existing social, institutional, and organisational environment.

A variety of financial service approaches is shown in Figure 2.1. Because of this, people are free to choose any approach that appeals to them, according to their actual or imagined expectations. Customers' financial assets (credit) have an impact on other assets they have that may then be diversified via different livelihood strategies or activities so that they are less vulnerable to risk, encourage asset growth, reduce poverty, and sustain the local natural resource base (Ellis & Allison, 2004)

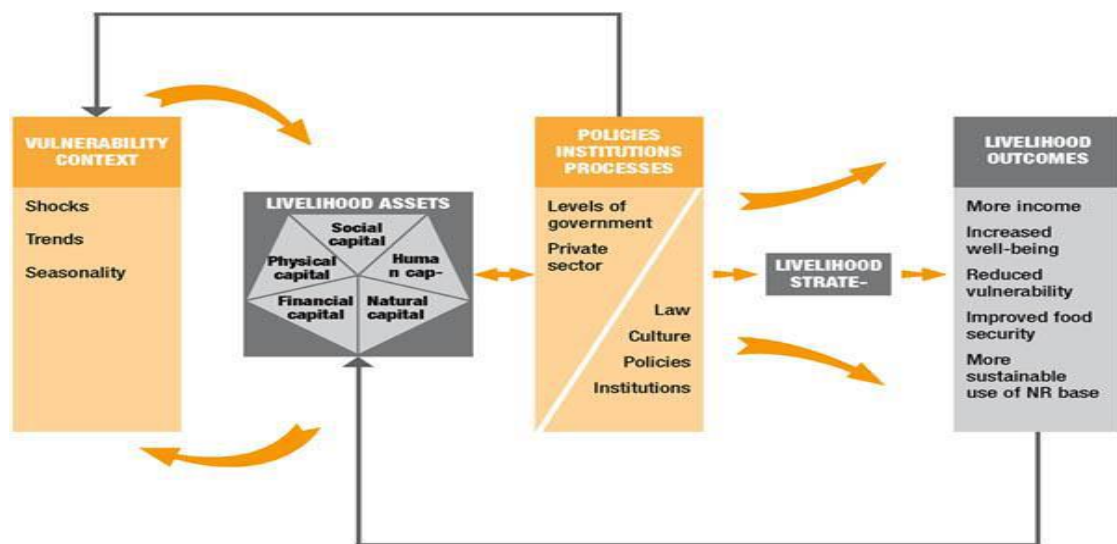


Figure 2.1: DFID's Sustainable Livelihood Framework

Source: Adopted from DFID (1999)

In this study, the Sustainable Livelihood Framework per its application implies that people based on their activities directly or indirectly affect their lives. The framework further explains how the vulnerable (rural households) can manage the situation by



employing strategies (through VSLA) to harness the resources (credit) available for survival.

Vulnerabilities: This describes externalities (often uncontrolled) that may influence an individual's assets and living options. Externalities are categorised as shocks (which are environment and conflict related), trends (e.g. technology) and seasonality (employment and price volatility) (United Nations Economic Commission for Europe, 2014). For this study, it tried to identify the vulnerabilities rural households face and examine how participation in VSLAs influences their ability to cope with and mitigate these vulnerabilities. Consider external shocks (e.g., economic downturns, natural disasters) and how VSLAs contribute to household resilience.

Livelihood Assets: The SLF recommends the availability of human, natural, financial, physical, and social resources in an effort to achieve better livelihood outcomes. People's fundamental material and intangible (social and interpersonal) assets determine their capacity to pursue various livelihood alternatives. Using an economic analogy, these resources can be seen as the 'capital' from which various productive streams and livelihoods are derived and built. "Capital," according to Lipton and Ahmed (1997), is traditionally understood as a store of productive resources amassed through the investment of current income streams, thus increasing future benefits from a specific input of labour or raw material. It is possible for this capital to depreciate, be consumed, or be sold off. The following is a list provided by Johnson (1997) of the various capital assets:

- i. **Natural Capital:** These are the natural resources that provide the resource flows and services necessary for human subsistence, such as soil, water, mineral resources, plants, fisheries, animal life, and environmental services



(such as the hydrological cycle and pollution sinks). There are a variety of products and services they give that are either completely unaffected by human activity (such as forest, wildlife, and soil stability) or actively affected by it (e.g. farm crops, tree plantation). As noted by Mensah & Antoh (2005), different natural assets merge and change through time (e.g. seasonal variations in value). Because degraded land with diminished nutrients is less valuable to livelihoods than good quality fertile land, both have decreased in value when people do not have access to water and the physical capital or infrastructure necessary to utilise them for agricultural output. Vulnerability and natural capital have a strong connection in the context of sustainable livelihoods (Jefferies et al., 2005 and Antoh et al., 2015). In many cases, the shocks that ruin the lives of the poor are caused by natural processes that destroy natural capital (for example, wildfires that decimate forests and floods and earthquakes that decimate agricultural land) (Chambers, 1987).

- ii. **Financial Capital:** It is necessary to have sufficient financial capital (cash, credit/debit, and savings) in order to pursue any livelihood plan. Johnson (1997) grouped this capital into stocks (savings, cash, and bank deposits) and liquid assets (such as cattle and grain stocks). Credit-granting institutions may also be a source of financial resources.
- iii. **Human Capital:** In order to pursue a variety of livelihood options and accomplish their goals, individuals must have a wide range of skills, knowledge, and capacity to work, as well as excellent health. The quantity and quality of labour available at the home level is an element of human capital; this fluctuates according to the size of the family, skill levels,



leadership potential, health state, among other things (DFID, 1999). This capital occurs in the DFID framework as an asset for livelihoods, which may be used as a foundation or tool to achieve livelihood goals. It may also cumulatively serve as a goal in itself. As a result, improving one's health or education may be a top priority for those trying to lift themselves out of poverty. It is essential to have skills, knowledge, the capacity to work, and a healthy body and mind in order to pursue various career options. Other capital assets can't be utilised without it, which makes it the most critical asset (Johnson, 1997).

iv. **Social Capital:** Sustainable livelihoods framework, according to Carney (1998), uses the term "social capital" to refer to the social resources that individuals rely on while pursuing a variety of livelihood strategies that require coordinated effort (networks, social claims, social interactions, affiliations, associations). Social capital is built via interactions with others, according to Antoh, (2005):

- a. People's trust and capacity to work together and get access to more institutions, such as political or civic bodies, is increased through networks and connections, whether vertical (patron/client) or horizontal (between individuals with common interests);
- b. Belonging to more institutionalised organisations, which frequently requires abiding by mutually agreed-upon or widely acknowledged rules, standards, and punishments; and
- c. Relationships based on mutual trust, reciprocity, and trade that make it easier for people to work together, lower transaction costs, and even serve as informal safety nets for the impoverished.



- v. **Physical Capital:** These are human-made assets which include infrastructure such as houses, roads, water supplies, power, and telephone and computer networks, as well as the tools and machinery required to sustain daily life. Hence, physical capital includes both commodities and services produced by mankind and made accessible to consumers. Apart from immediately addressing people's needs, physical capital is essential for facilitating access to other resources (e.g. through transport and infrastructure). People make a livelihood by combining their physical labour, skills, knowledge, and creativity with these resources, both material and intangible. In other words, individuals seek a variety of monetary, food, health, and vulnerability-reduction outcomes through engaging in a variety of activities (Chambers & Conway, 1992). When people accumulate assets, they are expected to have an impact at each subsequent level of this framework.

Livelihood Strategies

A person's "livelihood strategy" refers to the methods and means by which they engage in certain economic activities to achieve their desired results or satisfy their goals, requirements, and ambitions in terms of their financial well-being (DFID, 1999). People used various methods to help them meet their most basic requirements and aspirational goals. Many studies have shown the wide range of livelihood strategies that exist across regions, industries, families, and throughout time. No one is switching from one kind of work or "own-account" activity (farming, fishing) to another in this situation. Instead, it's a fluid process in which people mix and match activities to suit their diverse demands at various points of time. A frequent display of this phenomenon at the family level is 'straddling' whereby family members live and work in various locations on a





permanent or temporary basis (e.g. seasonal migration) (DFID, 1999). This is a common practice among households in Lambussie District. It is apparent that social patterns such as these complicate research and underscore the significance of seeing homes and communities within their larger contexts. People, things, and money are all movable; therefore it's impossible to get a true picture of people's livelihoods by drawing artificial borders (DFID, 1999).

DFID's SLF concludes by emphasising the importance of policies being executed by institutions with the necessary expertise. In this sense, "structures" refers to organisations that make and enforce laws, manage natural resources, and offer other essential services, such as education and health care. Governmental departments and non-profit organisations in the Lambussie district are examples of this kind of structures. Individuals and the structure interact via processes. In order to execute policies that may affect the poor, structures must be adequately established.

Livelihood Outcomes

The term "livelihood outcomes" refers to the consequences of one's livelihood strategy. Higher incomes, better food security, and less vulnerability are all possible outcomes. The effects of a person's livelihood are not necessarily logical since they often conflict with one another (Serrat, 2017). A good illustration of this would be the sacrifice of environmental cleanliness for the sake of increased profits.

2.2.2 The Theory of Empowerment

The discussion and analysis in this research were guided by the theory of empowerment. Power play is common in everyday home interactions, but it is difficult to separate for investigation since power is often hidden (Kabeer, 2001). Consequently, a person may be deprived of their power without even realising it. According to Kabeer

(2005: 13-14), "the procedures by which persons who have been denied the capacity to make choices gain such ability" are what is meant by empowerment. Empowerment, according to the preceding definition, is a continuous process of transformation that incorporates self-determination via the exercise of options that might enhance a person's well-being.

According to researchers, a development intervention like the VSLA must "...add to people's feeling of independence rather than merely satisfying survival necessities" (Kabeer, 2005: 15). In this way, people may be able to make "choices" that work against structures or persons that hinder the pursuit of their interests and potentials. According to Kabeer (2005), for a person to make a meaningful decision, "there must be alternatives and these alternatives must be recognised to exist," In the long run, individuals should be able to make their own decisions and be held accountable for their decisions.

According to Kabeer (1999) and Kabeer (2005: 14-15), "Agency," "resources," and "achievement" are three connected dimensions of empowerment. The term "resources" may refer to a wide range of both tangible and intangible assets (such as money, knowledge, labour, etc.) that are essential to a person's well-being or the well-being of a community (Kabeer, 2005: 15). Agencies are defined by Kabeer (2005: 14) as "a person's capacity to make decisions, especially in the face of resistance, and to put them into action." People who want to use their agency must be aware of their current situation, have a desire for change and have the tools to make that change happen. In other words, the combination of resources and agency (also known as "capabilities") enables success. The ability to live the life one desires is what is meant by the term "accomplishment" (Kabeer, 2005: 15). Resources, agency, and achievements are all



intertwined. As a result, "changes in any one dimension may lead to changes in others" (Kabeer, 2005: 15).

As a practical matter, achieving success is a matter of exercising one's agency, which is made possible by access to resources (such as microfinance programmes). While these "resources" might improve people's economic standing, they can also heighten their awareness of their predicament. Individuals may then be inspired to take action (agency) to decide the utilisation of their labour and credit. If they are successful in reclaiming control over the use of their labour and credit as a result of their actions, then we may conclude that they have succeeded. For the purpose of this study, resources include savings (shares of VSLA members), loans and their social fund. Agency as used in this study encompasses the trainings (training on VSLA methodology as well as the add-on trainings on financial management and IGAs) that Partnership For Rural Development Agenda (PRUDA) routinely organized for VSLA members to improve the capability to utilize the resources. As depicted in figure 2.2, when people can mobilise resources (savings and loans) and are equipped with the right capacity through training (VSLA training methodology), they will be able to achieve the desirable outcomes (improved income and food consumption, health, education,

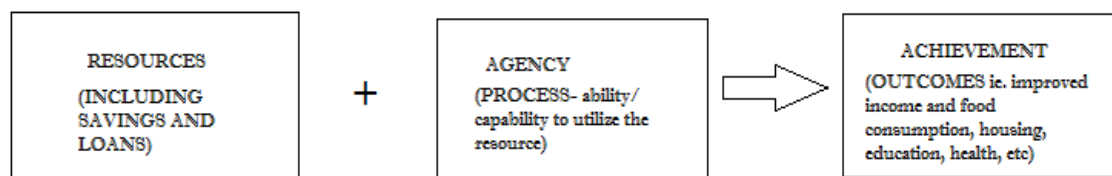


Figure 2.2: Conceptual Framework

Source: Adapted from Kabeer (2005)



For this study, the empowerment theory will provide the analytical tools to examine how the VSLAs and their complementary support to groups have served as enabling “resources”. Also, it helped the researcher to explore the extent to which these resources (savings and loans) have been used through the agency (capabilities) to enhance livelihood variations (desirable outcomes) in their households. When VSLAs impact its members’ household income, food consumption, healthcare and education, they become empowered in their households, communities and the district.

2.3 Household Welfare

2.3.1 Money-Metric Measures Versus the Asset-Based Approach

These methods are divided into two primary categories: money-metric measurements and other techniques used to evaluate household socio-economic status (welfare) (Anyango, 2006). Traditionally, economists have relied on the metric measure (income or expenditure) of welfare since it is easier to quantify in a monetary definition and is commonly understood by the general population. Non-monetary proxies of family well-being have emerged as a result of practical difficulties in measuring income or spending, particularly in developing countries. The household asset index is one of the indicators used in the alternative methods.

In developing nations like Ghana, it is difficult to measure income because of a number of factors (Anyango et al., 2006). These difficulties include underreporting for fright paying taxes or anticipation of public assistance, memory lapses in households with several sources of income, as well as seasonal variations in income and a large share of income coming from self-employment both inside and outside of agriculture.

This research was able to address these above mentioned difficulties by shortening the recall period for household expenses to the past one week. Respondents, on the other



hand, were well-informed about the purpose of the study. These helped reduce errors originating from memory loss and under-reporting for fear of utilising the data for taxes reasons were great.

The asset-based index, for example, has been established as an alternative instrument for defining family wellbeing since income assessment is technically and practically challenging (Anyango, 2006; Anyango et al., 2006; Filmer & Pritchett, 2001). According to Filmer and Pritchett (2001), a household's genuine long-term wealth or economic wellbeing cannot be measured directly, but instead is reflected in the asset index and current consumption expenditures.

Asset-based measures of household wellbeing have been promoted in a number of researches in the last several years (Anderson & Dekker, 2005; Anyango et al., 2006; Filmer & Pritchett, 2001). The asset-based approach to measuring poverty is preferable because the data needed to build these indices is easier to collect, the measure is more accurate (due to the low recall), easier to calculate, and it can capture aspects of poverty that aren't captured by a single measurement of consumption or income.

According to most studies that used an asset-based wealth index, household assets include consumer durable goods (such as televisions, radios, bicycle, watches, motorcycles and telephones), household land ownership and number of rooms for sleeping/members per room (Anderson & Dekker, 2005; Filmer & Pritchett, 2001).

Using a common list of assets helps make comparisons between nations or groups on a national level since it contains data on what (independent of where people live) separates the affluent from the poor on a country level (Anderson & Dekker, 2005). A country's distinctive traits may be considered while picking asset variables in certain surveys (Kolenikov & Angeles, 2008). With the rural nature of the study area and the



fact that certain settlements are not linked to the national grid, this study excluded various assets such as vehicles, refrigerators and energy consumption from the index.

Although Nsungwa-Sabiiti et al. (2008) used some of the same asset variables in their project midterm review/evaluation in Northern Uganda in 2008, they did not use principal component analysis nor even construct an asset index using any other scientific method, and this study corrects these methodological shortcomings. Pangas, rakes, land, bicycles, motorcycles, sponge mattresses, wheelbarrows, ox-ploughs, radios, mobile phones, weighing scales, boats/canoes, and other assets were all included in their survey. In contrast, this research includes semi-permanent/permanent dwelling, tables, bed, motor tricycle, poultry, donkey cart, and sewing machine as important assets in the Lambussie District.

2.4 Microfinance

Simply put, microfinance is the practice of providing monetary assistance to those with minimal or no access to traditional sources of credit (Otero, 1999). According to Ledgerwood (1999), additional financial services such as insurance and payment options might also be included in this category of financial services. "The attempt to enhance access to small deposits and small loans for impoverished families disregarded by banks", is what Schreiner (2001) refers to as "microfinance." In other words, microfinance is the provision of financial services to low-income individuals and families in urban and rural areas who would otherwise be unable to access them via the official financial system. In view of the UN (2015:23): "Microfinance is the provision of financial services and the management of small sums of money via a variety of products and a system of intermediate roles aimed at low-income customers. It comprises a wide range of financial services and products, such as loans, savings, insurance, and money transfer".





Atiqur Rahman & Westley (2001) widened this concept's scope to include a wide range of financial services (loans, savings, insurance, leasing, transfers and social intermediation) delivered by both official and informal institutions. 'Social intermediation,' as defined by Sievers & Vandenberg (2007), is non-financial support provided to prospective borrowers to aid them in acquiring the knowledge, values, and skills necessary to establish and manage their microenterprises. An important feature of this training is the building of micro-enterprise organisations and the development of appropriate technology as well as credit standards and processes. Other aspects of this training include financial discipline, business management, and technical skills. Microfinance institutions (MFIs), which include a wide range of providers that varies in legal structure, objective, and strategy, serve clients who do not have access to mainstream banks or other formal financial service providers (Egyir, 2010).

New perspectives on livelihood strategies lay premium on reducing poverty among women, children, and the poorest of the poor. Anwuni (2018) defines microfinance as "small financial transactions with low-income families and micro-enterprises, both urban and rural, using non-standard methodologies such as character-based lending, group guarantees, and short-term repeat loans" (Awaki, 2015). Microfinance has had a profound impact on people's lives and communities throughout the globe (Hassan & Ibrahim, 2015, Latif, Shaikh et al., 2011 and Jung & Eriksson, 2006). In the view of Okibo and Makanga (2014); "microfinance is the means to provide a range of financial services to the poor, based on market-driven and commercial techniques". For Otero (1999), it is the provision of financial services to low-income and extremely poor self-employed persons.



According to Awuah and Addaney (2016), and Affum (2020), the word "microfinance" refers to a spectrum of financial goods and services that are aimed at low-income consumers, such as modest loans, savings, insurance, and transfer services, to impoverished, low-income households, as well as microenterprises. Several studies have shown that microfinance helps individuals escape poverty by providing them access to productive capital, which they may use to start their businesses (Josily, 2006). As stated by Schreiner & Colombet (2001), these financial services typically comprise savings and credit . Still, other financial services, such as insurance and payment services, may also be included in this group of services.

A person's feeling of self-worth is boosted when they have access to monetary resources, and this empowers them to engage in the economy and society (Otero, 1999). According to the author, microfinance plays a role not just at the personal level in combating poverty but also at the institutional level. If it succeeds, it will help the poor, who the banking system has long disregarded, have access to financial services. As a result of this market failure, MFIs have sprung up to help the underprivileged access financial services. It is possible for an MFI to become part of the country's official financial system, thereby enabling it to access capital markets and significantly expand the number of disadvantaged people it can help (Otero, 1999).

Microfinance has emerged as a leading and successful technique for poverty reduction, having the potential to have a wide-ranging influence on the lives of the poor. SDGs and national policies that aim to reduce poverty, empower marginalised groups, and raise living standards may all be helped by microfinance. At the 2005 International Year of Microcredit launch, former UN Secretary General Kofi Annan said; "sustainable access to microfinance helps alleviate poverty by generating income, creating jobs,

allowing children to go to school, enabling families to obtain health care, and empowering people to make the choices that best serve their needs". The definitions given by Josily (2006) and Otero (1999) were adopted in this study.

The impact of microfinance on livelihoods is mostly measured by how assets used to support livelihoods change or are utilised to help people deal with their vulnerabilities. As a result of the availability of microfinance, it is possible for the poor to discover ways to safeguard their livelihoods and expand and diversify their businesses (Johnson & Rogaly, 1997). Chowdhury, Mosley, and Simanowitz (2004) suggested that if microfinance is to fulfil its social aims of giving financial services to the poor, it is necessary to determine how its broader implications help in poverty reduction. In order to lift people out of poverty, social networks play a crucial role. Social networks protect customers from having to sell their physical and human assets to safeguard their family's financial well-being (Carney, 1998).

Women, in particular, need empowerment in order to overcome the limitations imposed on them by social conventions, beliefs, rituals, and values that set women apart from males. To empower women, an MFI like the VSLA cannot empower them directly. Training and awareness raising may assist them to question current conventions, attitudes and beliefs that position them at a disadvantage in regard to males and help them gain more control over resources (Mosedale, 2003).

Microfinance helps increase the financial capital of a person's livelihood assets, which may then be turned into other forms of capital and put to use for achieving the goals of the person's livelihood (DFID, 1999). Additionally, microfinance leads to the development of tangible assets. Marconi and Mosley (2004) found that client ownership of livelihood assets such as cattle, equipment, and land had increased significantly.



They observed that poorer customers are more risk cautious and less inclined to invest in fixed capital, making them more exposed to craving to liquidate productive assets in the case of a shock. People who are impoverished may escape poverty with the help of human capital, social capital, education, and training made possible via microfinance (Josily, 2006). Table 2.1 shows how microfinance has a positive influence on the economic and social well-being of its recipients.

Table 2.1: Economic and Social Impact of Micro Finance

Financial Services	Economic Results	Social Impact
Acceptance of Savings	i. Earned income from savings	i. Reduced vulnerability due to natural and external shocks
	ii. Capacity for future self-investments	ii. Household consumption more predictable
	iii. Enables consumption smoothing	iii. Higher earned income from interest rates
	iv. Ability to face external shocks	iv. Feelings of the severity of poverty and desperation reduced
	v. Decreased need to borrow money from informal sources at high interest rates	v. Reduced social exclusion due to improved living conditions and quality of life
	vi. Encourages purchase of productive assets	vi. Social, political, and economic empowerment
	vii. Improved/balanced allocation of resources	vii. Potential increase in wellbeing of women
	viii. Increased economic opportunities and growth	
Credit Availability	i. Encourages profitable investment opportunities	i. Higher household income
	ii. Adoption of better technology	ii. More diversified income sources
		iii. Social, political, economic, and



	iii.	Expansion of existing micro-enterprises	personal empowerment
	iv.	Promotes safe risk-taking	
	v.	Enables consumption Smoothing	
Insurance Services	i.	More financial assets saved	i. Less volatile consumption patterns
	ii.	Reduced distress from unpredictable shocks	ii. Greater income due to more investments
			iii. Greater personal and economic security
Payments/Money Transfers	i.	Facilitates more open trade and investments	i. Greater income, cash mobility
	ii.	Reduces dependence on informal money sources	ii. Higher overall consumption
	iii.	Diversification of household economic activities	

Source: Asian Development Bank, 2011 and Buntaine (2011)

The socio-economic impact of microfinance on the livelihood of beneficiaries particularly women is revealed by the report of the Asian Development Bank (Buntaine, 2011). Their report categorizes the purpose of microfinance as acceptance of savings, credit availability, insurance services, and payments/ money transfers. To sum up, their report indicated that microfinance indeed contributes positively to the social and economic lives of its beneficiaries.

However, a research in Ghana by Yeboah (2017), shows that although microfinance programmes have the ability to enhance the lives of their recipients, they also tend to





have worrying negative repercussions if essential counteracting measures are not followed. When comparing Ghana and South Africa's impact circumstances, the author observed that the effect patterns and levels were not all that different. However, in South Africa, both positive and negative outcomes were more pronounced than in Ghana. For example, South Africa's total positive effect was 56%, but Ghana's was just 50%. The percentages for South Africa and Ghana were 7.6 percent and 3.3 percent, respectively. It was found that the two impact studies conducted by Boateng and Bampoe (2015) showed that microfinance programmes had an overall favourable effect on the companies and lifestyles of those who benefited from them as well as the facilities and services they had access to.

Additionally, impoverished individuals still confront difficulties while attempting to get credit. Paradoxically, some of these same institutions tend to turn their backs on the poor. The primary cause of microfinance not reaching the poorest of the poor, according to Simanowitz and Walter (2002), is discrimination by loan officers. Poor individuals are more likely to default on a loan because they lack the collateral needed to secure a repayment plan. It's a disease that ravages society. As a result, it is doubtful that microfinance will be successful in attracting the poorest of the poor. Having the poorest excluded from microfinance does not mean that the poor cannot benefit from MFI services, but rather that MFIs have failed to build programmes to meet the requirements of impoverished families (Marcus, Porter, & Harper, 1999). As long as they are employed by a firm that obtains a loan or other assistance, the poorest of the poor may be able to profit.

The extremely young, the aged, the ill, or those who are physically or intellectually disabled are not eligible for microfinance (Versluysen, 1999). Their projects are also



responsible for avoiding remote communities lacking infrastructure or access to markets. A major criticism of microfinance is that it demands low-income individuals to be entrepreneurial (Versluysen, 1999). This is ironic because not everyone has that entrepreneurial spirit to quickly take initiatives. One should bear in mind that people are dynamic and may not be addressed with just one particular style or model in order to alleviate poverty. Besides, it is likely that poor people may be unable to repay their loans. Hence, economic conditions such as high inflation rate has the potential of increasing the interest rate of borrowing which can also affect payment in due time.

Additionally, Hishigsuren, Beard, and Opoku (2004) examined the effect of microfinance by monitoring a sample of customers of the Sinapi Aba Trust, a microfinance institution (MFI) in Ghana. A total of 487 customers were included in the analysis. Seventy-one percent (71%) were old customers, 25 % were new customers, and 4% were old customers who had previously been denied credit. Eighty-seven percent of the participants were females. The report shows that old Customers and new customer had significantly different sales revenues. The net earnings, savings, and expenditures on children's education for existing and new customers were reported to be identical.

Both existing and new customers saw an increase in their incomes as a result of remittances. According to a research of Ghanaian customers of Freedom from Hunger (Shah et al., 2019), participants saw an increase in income of \$36 compared to an increase of \$18 for non-clients.

2.5 Approaches to Microfinance

The welfare method and the institutional approach are the two main schools of thought in microfinance when it comes to providing services to its clients (De Aghion, Armendáriz, & Morduch, 2007). These approaches are discussed below.

2.5.1 Welfare Approach

With this strategy, groups that get funds from the government or benefactors or both, work to alleviate poverty via lending and other services they give. The focus is on the beneficiaries and the changes in their way of life (Morduch, 1999 and Cull, Demirgüç-Kunt, & Morduch, 2008). In some texts, it is referred to as the "poverty lending" or "social mission" strategy. Like the majority of microfinance models, this one does not require the borrower to start saving with the organisation right away. Since only loans are offered, the poverty approach is referred to as micro credit since other services like insurance and savings are not included. Government initiatives that provide modest loans to recipients without requiring them to save are typical instances of this method (De Aghion et al., 2007).

2.5.2 Institutional Approach

The term "sustainability" or "financial strategy" are both used to describe the institutional approach to microfinance. For the sake of the organization's financial health, it focuses more on commercial lending to both savers and borrowers. Pioneers of this technique believe that it allows them to reach more clients and serve more people than would be possible with government or donor funding. A number of private organisations have opted to adopt a financial approach because of the substantial operating expenses that come with this method.





Proponents of this approach claim that providing their customers with high-quality financial services would result in customers becoming economically better off. They maintained that MFIs are no longer in need of donor and government help since new consumers are drawn to the MFIs and old customers continue to repay and accept further loans (Morduch, 1999). In their varied mission statements, practitioners of this approach often say that they are adhering to the dual bottom line i.e. sustainability and poverty lending. It has been suggested by detractors that sustainability and poverty reduction are not compatible.

The study sought to assess the impact of VSLA_s on the welfare of its members. In line with this, the welfare approach to microfinance, which tends to reduce poverty among its beneficiaries, can be related to the study on VSLA_s. It is evident that VSLA_s uses the welfare approach to microfinance.

2.6 Models of Microfinance Interventions

Microfinance lending may be divided into two distinct approaches. Individual and group lending are the two main methods of financing. In order to reach more clients, many MFIs specialise in either one of these strategies or both of them.

2.6.1 Individual Lending

Basically, individual lending is defined as single-client financing when repayment is completely the responsibility of one person. A person's capacity to consistently repay a loan determines whether or not they will be approved for a loan (Ledgerwood, 1999). One of the most common ways that MFIs lend money to individuals is through the use of collateral and/or the guarantee of another person, such as a co-worker, family member, or even an individual's bank account. In some cases, the individual client may

even have to allow the MFI to inspect his/her business (to ensure that the client really owns the business).

2.6.2 Group Lending

There are several advantages to using a "group lending" method, such as allowing the MFI to access a broader range of potential customers. For instance, the Grameen Bank, Latin American Solidarity Group, and the self-reliant village bank are all examples of group lending approaches (Ghatak & Guinnane, 1999). Both individuals and the group as a whole may take out loans and distribute them among themselves. Members of a group are accountable for the repayment of a debt (De Aghion et al., 2007). This technique has made it simpler for the poorest of the poor to receive loans while simultaneously reducing the transaction costs incurred by microfinance institutions by substituting collateral with joint liability. In most cases, training in fundamental financial and job skills is required before loans may be issued.

When it comes to lending strategy, microfinance institutions in the Lambussie District and Ghana in general, use a mix of both. Persons with guarantors or collateral are more likely to acquire loans from individual lenders, but others with low incomes are more likely to get loans from group lenders, who are eager to share liability with people with comparable qualities.

VSLAs in Lambussie District use either the individual lending model or a blend of individual and group lending models, depending on the credit requirement of members of the VSLA group at a given point in time. Within each VSLA, the individual lending model is used to issue credit to group members. However, in situations where the group savings are insufficient to meet the credit requirement of all members, the VSLA uses the group lending model to contract credit from micro financial institutions. This



contracted credit is subsequently issued to group members based on the individual lending model.

2.7 An overview of Microfinance in Ghana

The concept of microfinance is not new in Ghana. To start businesses or farms, people have historically used self-help methods such as saving and borrowing small sums of money from individuals and groups. For instance, it is known that Canadian Catholic missionaries established Africa's first credit union in Northern Ghana in 1955. A microfinance scheme in Ghana known as "Susu" is reported to have originated from Nigeria around the early twentieth century (Awuah & Addaney, 2016 and Adusei, 2013). There have been a number of financial sector measures implemented by governments since the country's independence that have led to the development of the microfinance business as we know it today" (Affum, 2020). In the 1950s, subsidies were made available for agricultural and fisheries projects; in 1965, the Agricultural Development Bank was established specifically to address the sector's financial needs; in the 1980s, Rural and Community Banks (RCBs) were established, as well as new regulations requiring commercial banks to set aside 20 percent of their total portfolio for agricultural and small-scale industry lending (Zakaria, 2009).

As a result of these guidelines, three primary types of microfinance institutions emerged. These are savings and loans companies, rural and community banks as well as some development and commercial banks. Banks and credit unions are only two examples of the typical financial institutions, but there are also less formal "Susu" collecting clubs, dealers, money lenders, and other people that are involved in the financial sector. Non-Bank Financial Institutions (NBFIs) Law 1993 (PNDCL 328)



governs savings and loans institutions, whereas the Banking Act 2004 (Act 673) governs rural and community banks (PNDCL 328).

Programmes such as the Financial Sector Improvement Project, the Financial Sector Strategic Plan (FINSSP), the Rural Financial Services Project (RFSP), the UNDP Microfinance Project, the Social Investment Fund (SIF), the Community Based Rural Development Program (CBRDP), the Rural Enterprise Project (REP), and the Agricultural Services Investment Project (ASSIP) have all contributed to tackling this sub-sector in Ghana (Fant, 2011 and Zakaria, 2009).

Debates on microfinance trends now centre on the trade-offs between microfinance's societal and commercial goals, such as providing financial services to a large number of low-income individuals in order to improve their welfare or providing such services in a financially viable manner (De Aghion et al., 2007). Microfinance institutions have discovered ways to expand their reach and impact poverty, but doing so comes at a high cost (Simanowitz & Walter, 2002). Simonowitz and Walter (2002) found that a microfinance institution's revenue from fees and interest should be sufficient to cover the costs of financing, operations, loan write-offs, and inflation. Larger and more effective MFIs tend to be self-sustaining.

Rahman (2004) and Mayoux (2001) claim that microfinance just increases the financial load of a woman that is already impoverished. He argues that the credit from micro-debt sector is no more an empowering tool than credit from an evil moneylender or a relative unless the scope of the lender somehow modifies the utility of the money borrowed, which it doesn't". In examining the impact of microfinance on income generating capacity of women in the Tamale Metropolis in the north of Ghana, Alhassan and Akudugu (2012) , also revealed that “ women are of the view that



receiving micro-credit enhances their ability to earn revenue from IGAs and this eventually improved their personal lives. In their findings, about ninety-percent of the clients indicated that microcredit has impacted positively in their lives. In several cases, some of the participants said that they had never participated in an IGA before getting microcredit. For those that took on IGAs, they did so largely for their own consumption, with the excess, if any, being sold if necessary. The respondents indicated that when married to a farmer, many stayed at home as housewives, earning little money but helping out on the husband's farm. These dynamics have been shifted by the fact that microcredit has made it possible for people to engage in IGAs only for the purpose of making money. The conclusion from their findings states that microcredit has a positive impact on the ability of women to create money to sustain their households.

2.8 Other Areas of Microfinance Impact

i. Financial Assets

Numerous research projects show that microfinance helps the impoverished stabilise and enhance their income by allowing them to diversify and safeguard their sources of revenue. A study by Chikwira et al. (2022), shows that micro-credit programmes can alleviate the vulnerability of its customers by smoothing out their expenditures, creating assets, and providing emergency assistance in the event of natural catastrophes. In addition to a control group, a Heckman two-step technique is used to adjust for any self-selection bias in Zaman's assessment.

Additionally, Choudhury et al., (2017) found a positive effect on income. Possible bias in their work, were controlled by allocating communities to either a programme or control group using baseline data. A simple comparison between treatment and control groups may be used to determine the effectiveness of the programme since it eliminates any possible biases in the data gathering process. Participants in Bolivia's Credit with





Education Program (CRECER) report that their earnings have grown or considerably increased since they began participating in the programme. Also, Clients of Ghana's Lower Pra Rural Bank Credit and Education Program had an average annual income rise of \$36 compared to \$18 for non-clients. Additionally, customers' income has become much more diverse, with 80 per cent of them having a supplementary source of income compared to 50 per cent of non-customers (MkNelly & Dunford, 1999). Using a control group and a mix of advanced quantitative and qualitative methodologies to control for possible biases, Dunn and Arbuckle (2001) found that microfinance customers in Lima, Peru had incomes that were almost 50% greater than non-participants.

In surveys, household income might be difficult to estimate. It is thus common to substitute family spending for income when assessing the overall effect of a programme. According to Pitt and Khandker (1998), for clients of Grameen Bank, Bangladesh Rural Advancement Committee (BRAC) members' yearly family consumption spending rises by 18 taka for every 100 taka more borrowed by women, compared to 11 taka when the borrowers are males. A limited information-maximum likelihood framework is used to determine the influence of programme credit on gender by controlling participation and village-level fixed effects are used to control for non-random programme placement. According to Khandker (2005), Pitt & Khandker (1998) overestimated the benefits of the programme because they used a panel data model with fixed effects at the household level, which takes into account both household and village-level endogeneity. He discovers that every extra 100 taka in loan to women increases total yearly family spending by almost 20 taka, but finds no returns at all on male borrowing.

However, a few studies have shown that microfinance participation does not have a positive impact on income. A study by Masanjala (1997) found that the FINCA Malawi had minimal impact on people's quality of life or patterns of spending in Malawi. Ssendi & Anderson (2009) also discovered minimal long-term impact on household assets. Both studies, on the other hand, rely on a technique that is far less robust and makes little effort to control for selection bias.

ii. Poverty

Providing microfinance services to individuals in need may help eliminate poverty. Peruvian microfinance consumers in Lima are just 28 per cent poorer compared to 41 per cent of non-clients in Lima, (Dunn & Arbuckle, 2001). Also, Khandker (2005), discovers that the proportion of people living in moderate poverty dropped by 17 percentage points (18 points) in villages where Grameen Bank or BRAC was active, and declined by 13 points in villages that were not part of the programme. Poverty rates among programme participants, who had been members since 1991/92, fell by more than 20% – about 3% each year. It is estimated that more than half of this decrease may be attributed to microfinance, and the effect is stronger for severe poverty than moderate poverty (Khandker, 2005). Microfinance programmes, according to Khandker (2005), lower the average village poverty level by one percentage point per year in the regions where they are implemented. In this way, microfinance benefits the local economy as well as needy individuals. According to Khandker (2005), microfinance is responsible for 40% of the overall decline in moderate poverty in rural Bangladesh.

iii. Quality of Housing

A household's socioeconomic standing is commonly gauged by the quality of its dwelling since other welfare indicators like income or spending are difficult to come





by in the majority of developing nations. There seems to be a positive correlation between the quality of housing and the degree of investment in microfinance programmes. It has been shown by Hossain (1988) cited in Uddin & Islam (2021), that Grameen Bank members spend six times more on housing investments compared to non-members in both Grameen villages and comparison villages. According to Ksoll et al., (2016), “an Indian microfinance program's participant lives in significantly better housing than non-participant. His study utilises a control group of new participants to minimise selection bias. He discovered that most members (64 per cent) have tile roofs and concrete foundations, but just 50 per cent of the new members have these features (the balance live in mud and thatch houses).

iv. Education

Children of microfinance customers are more likely to attend school and remain in school for a longer period of time (Ksoll et al., 2016; Annan et al., 2013). For example, Dunn & Arbuckle (2001) found that the Zambuko Trust programme in Zimbabwe had an educational effect on males ages 6 to 16 through the use of a control group and advanced quantitative and qualitative approaches. The programme, on the other hand, has little impact on the education of females in the client households. However, Khandker et al. (2013), found that involvement in a microfinance programme increased the likelihood of enrolling for female students. A quasi-experimental approach used by Coleman (1999) cited in Karlan & Zinman (2011) to control for endogeneity found minimal impact on education expenditures, which may be used as a proxy for either access to or quality of education.

v. Nutrition and Health

Compared to non-client households, microfinance clients' households tend to have superior nutritional and health statuses (Asrat, 2016; Pronyk et al., 2007; Annan et al.,

2013; Hossain 1988). Women's credit has a big and statistically significant effect on two of three indices of children's health (Pitt et al., 2003). According to him, increasing credit to women by 10% raises the arm circumference of their daughters by 6.3%, double the rise predicted from a proportionally equivalent increase in credit to men. Sons' arm circumference is positively influenced by women access to credit; however, the impact is less pronounced. In both boys and girls, huge, positive, and statistically significant impacts on height-for-age are believed to be caused by female access to credit. There are, however, no statistically significant differences in the BMI of males or girls.

According to Barnes et al. (2001), participation in Zambuko Trust in Zimbabwe positively affects the frequency and quality of food consumption in severely poor households. Specifically, people are eating more high-protein meals (meat, fish, chicken and milk) as a result of their membership in Zambuko Trust. Feeding frequency improves significantly for children of Lower Pra Rural Bank Credit programme users in Ghana compared with non-clients (Ohemeng, 2017). On the other hand, clients of the CRECER Credit programme in Bolivia and their children's nutrition have not seen any improvement. An in-depth look at only the clients category, suggests that a higher weight- for- age ratio indicates better educational outcomes (MkNelly, 1999). This shows that until significant changes in caregiver habits are made, more money and even empowerment will not have a significant impact on the nutritional status of children.

2.9 Overview of VSLA

It is a self-capitalized and self-managed savings and loans association model which ensures that local pools of investment financing are mobilised by members, who then act as intermediaries to supply savings, insurance and credit in markets that are





normally outside formal institutions. CARE International created the model in Niger in 1999 and it focuses on saving, building assets, and providing credit that is proportional to the borrower's needs and repayment capacity. VSLAs are low-cost and easy-to-manage groups and may be considered the initial step toward more formal financial services for its members. Members of VSLAs might experience a major rise in self-esteem and a strengthening of community social capital, particularly among women, who make up 70% of the membership.

CARE or any other sponsoring organisation makes no direct capital investment in VSLAs; they depend only on members' savings and income from loans to fund their operations. Training on group dynamics, governance and financial management is within CARE's purview. VSLA training has four phases. A CARE field officer visits the group weekly and conducts group dynamics training throughout the first three months of the programme. In addition, a Community Contact Person (CCP) or village trainer is chosen and trained by the field officer in the target community.

The VSLA pays the CCP, not CARE. In the second phase, the group becomes more reliant on the CCP and as such, the field officer visits the groups once or twice a month. After a year of supervision, the CCP will take a certification exam during this third phase, and if he or she succeeds, the field officer will go on to the next community and repeat the process. In the fourth phase of the original VSLA model, once a group is mature, it is able to function without external aid (Training Guide, 2004). However, CARE soon came to the conclusion that even the matured VSLAs may benefit from enhanced monitoring and technical help. For this reason, CARE established a structure known as an Apex Organization, which would support and monitor existing groups

while promoting the development of new groups, allowing CARE to extend its influence into new territory.

VSLAs have the potential to positively impact people's lives by providing financial services to those rural households who cannot otherwise afford them and by creating a platform for its members to advance to the status of banks. VSLAs provide members with a safe place to keep their savings while also encouraging those who benefit from their services to save; the ability to take out small loans at interest rates determined by the group members; and the opportunity to learn about HIV/AIDS, malaria, and other social issues in a safe and supportive environment. However, VSLAs' sustainability depends on five key elements. These include:

- i. savings led – no external liabilities;
- ii. simplicity – high level of transparency helps builds trust;
- iii. sustainable – once established groups have almost no operating costs and groups self-replicate;
- iv. welfare fund – helping to meet emergency needs of group members; and
- v. groups can act as platform for accessing other financial institutions and services. A single association consists of 15 to 30 people who save a small amount every week.

Members may contribute up to three shares a week, which costs US\$0.90 each share. However each group is allowed to choose its own share value and the maximum number of shares a member may contribute each week. Each share's price is kept low to ensure that even the most impoverished members may take part. The group's cash box is secured with three padlocks and the keys to the padlocks are held by three different members in the group. Improved openness and the ability to reject loans from non-



members like one's spouse are two of the many benefits of this arrangement (Allen & Staehle, 2007).

Besides the savings fund, the cash box contains the social and educational funds. Group members may be given little amount from the social fund in the event of an emergency. If a member borrows money from the social fund, he or she pays no interest on the loan and payback is not severely enforced. It is not shared out the social fund at the end of the cycle since it is kept separate and carried over to the next cycle. The group may purchase supplies like passbooks and a lockable box with the money you set aside for education. The monthly training charge is deducted from the education budget.

After a period of time, the group's savings (shares) becomes enough and this enables the group to start loaning to its members. Even if all members are entitled to take out a loan, each member is limited to a maximum of three times the value of his or her shares. A group determines its interest rate of around 5% per month for short-term loans; this is lower than moneylenders' monthly fees of up to 30%, but more than the monthly interest charged by NGO-MFIs, which are often about 4% (Lwoga et al., 1999). Groups have the freedom to decide on their own payback schedule. In contrast, a VSLA will never impose late payment penalties on borrowers because doing so could exacerbate any underlying problems the household is already experiencing. It is assumed that the shame associated with paying loans late is sufficient punishment (Allen & Staehle, 2007).

On a predetermined date, generally approximately a year later, the savings and interest are shared among the members in proportion to each member's shares. In order to promote the use of funds to fulfill immediate needs and discourage the use of savings for needless purchases, this event, known as a "auction audit," is frequently planned to



occur around the beginning of the school year or before a significant holiday, such as Thanksgiving. Once the monies are disbursed, the group is quickly reformed and begins a fresh cycle of saving and lending.

For members who are illiterate, the VSLA model has been praised for its openness and responsiveness to their needs. During weekly meetings, the whole group is present to ensure that all actions (deposits/withdrawals/loans/loan repayments) are transparent. Additionally, the process of preserving records was designed to be as straightforward and open as feasible. Passbooks for each member are stamped every week, and each stamp represents a share. The weekly starting and closing balances of the social, loan fund and the loan disbursement is written in the group ledger (Allen & Staehle, 2007).

VSLAs have been popular in rural economies because of the lengthy time periods between input and output of agricultural production, the unpredictability and weather reliance, and the lack of centralised control over agricultural production. This means that the capacity to manage expenditure, obtain finance, and utilise risk-coping methods is critical for families in these situations (Ksoll, Liller, Lnborg, & Rasmussen, 2016, p. 1). This is contrary to what Cassidy & Fafchamps (2015) have discovered in rural Malawi, where VSLA groups serve as a financial intermediary. Hochreiter (2013) asserted that, the rural poor, in particular, were the intended beneficiaries of VSLAs. There have been 27,222 VSLA groups established in rural Uganda during the last decade, which represents more than half a million individuals. More than \$19 million has been saved and 72 percent of them have taken out loans among themselves, which includes paying the interest rates determined by the groups themselves (Hochreiter, 2013).





It has been shown that in Uganda and Malawi that being a member of VSLA is associated with wealth, ownership of business, loan reporting, and social integration (going to community meetings, joining other groups, and having friends ready to loan money) (Karlan, Knight, & Udry, 2012). On the whole, VSLA membership is more common among women who are educated and come from more affluent families. As a result, the kind of persons participating in VSLAs is no longer an issue. In the research, it is evident that VSLAs are intended for a certain set of persons who are financially excluded from the mainstream and have an unreliable source of income. In reality, CARE's Uganda VSLA handbook says unequivocally that the intended clients consist of homes that are both critically and actively vulnerable (Xu et al., 2015).

Furthermore, Fletschner (2009) contends that rural women throughout the globe contribute to national agricultural yields and household food security; yet they are more credit limited than males of the same socioeconomic status. Lakwo (2008), gave a brief description of women condition as follows:

"Women account for more than 50 percent of the world's population; they do 67 percent of the world's working hours, are 60 percent of the world's labour force, but only earn 10 percent of the world's revenue and control less than 1 percent of the world's resources,"

Since women are the most disadvantaged in society, microfinance programmes focus on them. According to Arnoff (2011) and Sarah (2020), women lack assets, autonomy, self-confidence, and position within the home. In this sense, credit may be used to alter their life.

2.9.1 Operations of VSLA

In spite of VSLA's apparent success, there have been few studies of the model's performance. As Lambongang, Aboidun, et al., (2020) found, VSLA participation in Zimbabwe increases household productive and non-productive asset levels as well as some improvement in the quality of housing among the majority of participants. According to these data, being a member of VSLA resulted in an increase in number and stability of these income-generating activities (IGAs). In addition, households devote more labour and resources to IGAs. In addition, 81% of those polled believe that their social standing has improved. However, it is difficult to credit these impacts only to the VSLAs' activities. The research has no control group and depends on recall data. This may not give reliable results since there is a likelihood of individuals forgetting what their status was four years ago. The research focused on the program's impacts without considering the program's durability. This opens a gap in the literature that warrants further research.

However, examining the VSLA programme in Malawi, L. Anyango (2005) comes to the same findings as Allen & Hobane (2004). In his research, he discovers that the program's participants' lives have been improved and their poverty levels reduced, especially for the majority of the groups' members who are women. Taking part in the programme has led to a significant boost in economic activity. Members, on the other hand, have stayed away from more capital-intensive economic activity. There is no control group in this research and although there is a baseline, it's taken at the communal level. This means that the VSLA members may differ from the rest of the community and hence the likelihood of selection biases.

As far as studies are concerned, the SII (Strategic Impact Inquiry on Women's Empowerment) is the largest and was finished in 2006. A quantitative survey was





administered to 181 women, comprising 134 VSLA members and 47 non-members, as part of the research. Additionally, a series of focus groups were held to further investigate the questions presented in the survey. The authors attempted to remedy the lack of baseline data by asking participants to compare their present status to their situation prior to entering the VSLA group. Statistical significance is not examined for the quantitative data in this study. As a result, the research team's opinion is heavily weighted when determining the importance of a finding.

For short-term economic empowerment, VSLA women are more likely to gain from larger savings, more IGAs, improved food security and health as well as increased educational expenditures than non-VSLA members. Women who joined the VSLA groups have seen an increase in their savings. When it comes to income-generating activities, women who are VSLA members are more likely to engage in such activities than their counterparts who are non-members. Food security is also better in the homes of VSLA women, as compared to non-VSLA families. In addition, VSLA households are more likely than non-VSLA households to report significant increases in both the amount and quality of their meals in the previous three years. In comparison to non-VSLA families, 34% of VSLA households report better family health in the previous three years. There has been a significant increase in the educational status of family members in VSLA homes during the previous three years. VSLA families have spent more money on schooling in the last year than non-VSLA households.

Economic empowerment for VSLA women is more than for non-VSLA women, according to the SII. 40% to 77% of the women in each asset category used either loans or payouts from the VSLA to acquire their assets. Several other women have bought their assets by using money they've made from IGAs or other sources of income. In addition, the number VSLA women who invested in housing over the past three years

are almost twice more than the housing investments made by non-VSLA women. Even though VSLA membership isn't required for women to invest in long-term assets, the research found that being in VSLA boosts the likelihood of women making such investments.

A study by Ksoll et al. (2016) of the impact of VSLAs in Malawi reveals that IGAs of members have improved in the sense that households hold significantly larger savings. There are indications of household income having gone up as the estimated total consumption increased by 4.8 percent. Participants also report that they use their savings for investment, primarily in agriculture and small scale businesses. The study concentrated on only livelihoods of participants, however fails to look at the sustainability of the programme.

A similar research by Awoyemi & Kosiwor (2020) and Abdul-Moomin (2014) found that 74.2 per cent of respondent used a greater portion of their saving in their IGA whilst 62 per cent of the respondents invested loans in IGAs in several rural areas in Ghana's Bole District. This was done in order to develop their enterprises and boost their profit margins for an eventual improvement in their socio-economic lives. Additionally, 90% had all of their school-age children enrolled prior to joining the VSLAs. However, after joining the VSLA, the percentage of respondents who had all their children of school-age in school, rose from 90 to 98 per cent. This indicates that the children of responders are getting better access to education. Additionally, no consideration is made in this analysis for sustainability of the the programe's impacts.

2.9.2 Factors Likely to Affect VSLAs

Though much of the literature above linked VSLAs to poverty reduction among the rural poor, notably women, it is possible to argue that access to financial services alone



cannot alleviate the poverty encountered by women unless other surrounding variables are addressed. Also, it is possible that some of these elements might be attributed to women's skills, while others are influenced by their surroundings.

According to Johnson, Malkamaki, and Wanjau (2006), VSLAs are based on non-contractual components such as trust and moral standards, as well as religious values, to carry out their functions. Punishments such as guilt, humiliation, and even informational penalties may be used to enforce social standards like these, which can harm a person's reputation. These consequences also have the ability to instigate action on their own, without the need for outside pressure. In order to enforce the rules, these play a significant role. However, some members may not react to these sets of regulations, putting the group's finances at danger. This means that even if rural impoverished women benefit from VSLAs, the financial and administrative structure threatens to undermine the group's viability. Members are also placed under a lot of stress by the short-term loans they get, with payback periods ranging from one to three months. The necessity to generate enough money to save and repay the debt in a short period of time may increase the strain (Micro Save Africa, 2001). Aside from that, short-term borrowing restricts long-term planning (CARE, 2006). However the ability to save is used as a precondition in determining the ones approval for loan.

There is a cultural component to the challenges faced by VSLA members. Women's poverty, particularly that of rural women, is closely linked to the values and customs of the community in which they live. Women are expected to act and conduct themselves in accordance with the prevailing cultural norms and values. There has been a long-standing tradition in male-dominated civilizations for women to be subservient and excellent homemakers. As a result, women are less likely than males to participate in





financial activities. As stated by Kabeer (2005), socio-cultural values and beliefs have a vital role in the legitimacy of inequality. This is why it is so difficult to reduce poverty in this country without enabling women to resist cultural change. Traditionally, women's lives in patriarchal countries revolve on their male counterparts, who utilise their position as household heads to exert dominance over their female counterparts' financial resources. It's not uncommon for males to exploit the fact that women may set their own financial goals as an excuse to neglect family duties in favour of placing more of their financial burdens on them. Many women have given up their loans to their husbands to assist them run the household since the obligations are just too much for a single woman to handle. As a result, rather than serving as a tool to combat poverty, loans have become a source of stress for many women. For example, Oxaal & Baden (1997: 9) found that income-generating activities or programmes for women frequently increase their burden without increasing their control over resources or decision-making authority.

According to Hunt (2002) and Altay (2007), many women have been exploited as "post boxes" by their spouses, who take out loans and then give their husbands the money they've borrowed, with little or no interest. According to Goetz & Gupta (1996), 63% of women who held loans from three Bangladeshi microfinance institutions exerted minimal or no control over how their loans were used. A study of women's group found that 25 of the participants transferred the whole amount of their loans to their spouses, but they only received the money they needed each week to pay back their debts. Nabayinda (2014) and Samer et al. (2015) found that 40 to 70 per cent of women who gave their husbands the money they borrowed faced violence at home as a result of the mounting tensions.



As a result of these discrepancies, poverty alleviation, particularly for women, is hindered. It has been shown that, even when women utilise their loans to start businesses, their choice of activity and capacity to grow revenues are substantially hampered by gender inequities. Even if women have superior business ideas than males, loans in rural credit and micro savings programmes, are more likely to be offered men though women are majority of the savers in such schemes (Mayoux & Hartl, 2009: 11). As stated by Noreen (2009), the economic and social position of women may be boosted or held back by their spouses.

Even though they have contributed to the family's income, some women are refused access to financial services and have no participation in the decision-making process. The poorest women in Nicaragua, although having easy access to financial services, may nonetheless find it difficult to alleviate their family's financial woes. When it comes to money and resources, males still have too much power in the home. When women beneficiaries' husbands and wives are well-informed and recognise the advantages of their wives' VSLA participation, this might lead to a more harmonious home environment. For the sake of the family, they may work jointly rather than relying on the woman to do all the housework, which restricts her ability to make money.

2.9.3 Strengths of VSLA

According to Zelalem (2016) the following are the strengths of VSLA:

Rural and poverty outreach: It is possible to operate in rural or poorly inhabited places when more formal financial services are neither cost-effective nor readily accessible.

Low operating costs: VSLAs avoid the majority of the infrastructure, transportation, communications, and human expenditures that MFIs pay. *Capital remains within group:* Borrowers benefit from compound interest, which is reinvested in the group and

added to their own bank accounts. *Transparent, democratic and flexible:* As a group, members set their own rules and make choices based on agreement with minimum documentation. Depending on the agreement of the group, members might save a different amount each time. Fast loan distribution and tailored payback plans are made possible by the fact that members are familiar with one another.

Client debt level: Based on the group's choice, each member is given a loan that is matched to their ability to repay. *Conduit for other interventions:* Groups may also be used to deliver services such as health education by certain organisations. *Opportunity for increased economic activity:* Financial inclusion may be considered as beginning with the use of VSLAs. Financial services in the context of a group may be used to get access to more formal and broader options in the formal sector.

2.9.4 Challenges Facing VSLAs

Awoyemi & Kosiwor (2020) and Abdul-Moomin et al. (2014) concluded that absenteeism and lateness to meetings by members is the major challenge confronting VSLA operations. The major challenges confronting the implementers of the VSLAs include inadequate funds to pay staff, maintenance of motor bikes and training of VSLA members. Shorter duration for repayment of loans, high interest rate, gossiping among members and disagreement during meetings are some of the challenges facing the Association (Young, 2010). Aside, Hardi (2019) study reveals that some of the challenges of the VSLAs programme include late loan repayment by few members and inadequate training by implementers.

According to Zelalem (2016) the following are the constraints VSLAs face:

- i. **Limited capital:** Due to the low savings capacity of VSLA members, the group's lending capital may not be able to keep up with demand.





- ii. **Limited product offering:** This means that the group's offerings are restricted to basic savings, loans, and insurance products that may not meet the requirements of all of its members.
- iii. **Interrupted savings:** Members' long-term aspirations to collect huge sums of money are hampered by the annual distribution of funds and restrictions on the number of shares they may own (although at the first meeting when the group reconstitutes, savings can be reinvested at five times the normal weekly amount).
- iv. **Elite capture:** It's possible for more powerful members of the organisation to take advantage of the loan fund by defaulting on their debts. In an effort to prevent this, a limit has been placed on the number of shares (savings) that may be acquired by a single member, as well as a limit on the amount of money a member may borrow.
- v. **Exclusion:** Since groups are self-selecting, there is a risk that members of the community will exclude poorer individuals from groups.
- vi. **Theft:** The groups are responsible for the upkeep of the cashboxes, which makes them vulnerable to theft. With the exception of the initial few weeks when groups begin saving and the last months when loans are returned, the cashbox is practically empty as the grounds are in circulation among its members. During the final few months before action audit, groups may be linked to banks to enable them to secure the group funds in a bank savings account.

2.10 Relationship between VSLA and Microfinance

MFIs and VSLAs complement each other. They are helpful to individuals who live in distant areas where their income is small and inconsistent, need to save a little amount



of money, and they have a restricted demand for credit since the market for their goods is low. MFIs must spend a lot of money to reach these people. VSLAs may help certain community members accumulate enough assets to make them desirable customers for MFIs, credit unions, and banks. Managing family cash flow and providing meaningful lump amounts for life-cycle events, which may or may not involve revenue creation, is their primary requirement. Most of them reside in rural locations with only occasional access to local market, far from the centre of the country's economic activity.

One of the methods is not a substitute for the other. MFIs act as a middleman for vast pools of cash, and their primary objective is to provide loans to support business expansion. In most cases, the savers and borrowers are strangers and come from different parts of the country. Smaller deposits and withdrawals are less costly to administer since the MFI would naturally (and reasonably) want to keep its unit cost of service delivery as low as possible in order to pay its expenditures. Instead, VSLAs allow anybody, no matter how far away or impoverished they may be, to easily and affordably pool little amounts of local capital on a regular basis.

2.11 Summary of Literature

Concluding on the above review, it can be deduced that all the variables discussed are relevant to the current study. No scholarly work was identified and reviewed on the contribution of the VSLAs in the Lambussie District. This study therefore seeks to add to existing literature while examining the contribution of the VSLA on members in the Lambussie District. Therefore, the literature gave the direction on which the current study was built.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter explains the research methods used in the study. Research design, sample size and sampling techniques, sources of data and data collection instruments are all discussed in detail by the researcher. Data collection instruments are pre-tested for validity and reliability, and the results of data analysis and presentation are also discussed, as are ethical considerations and study limitations. The research used PSM and comparison analysis using Pearson's Chi-square and an independent t-test.

3.1 Profile of the Study Area

The selection of a study location is a key step in the research process. An inappropriate study area, according to Akoto-Baako (2018), might "weaken or damage" the eventual findings of a research. In order to acquire meaningful data, the researcher must be cautious to choose an appropriate study area, rather than a location that is readily accessible. The Lambussie District was used as location for this study. Though VSLAs have existed in the district for long, there is no much empirical data about its impact on beneficiaries' households' welfare. The study area was therefore chosen to address this gap.

3.1.1 The Lambussie District

Lambussie District, which is situated in the country's northwest part, is one of the 11 administrative districts located in the Upper West Region of Ghana. Legislative Instrument LI 1849 created the district in 2007 by carving it out of the Jirapa-Lambussie District. With Lambussie as its capital, the Lambussie District, according to the 2010 population census, has a total population of 51,654 people, representing 7.4% of the





total population in Upper West. Males account for 48.3% of the population, while females account for 51.7%. Rural areas constitute about a whopping 86.7% of the population. Almost half of the district's residents are under the age of 30, illustrating a wide base demographic pyramid that narrows to a few elderly persons 60 years and older representing 9.1%. (Ghana Statistical Service, 2015). More people are financially dependent on their children (85.0 % child dependency) than on their elderly relatives (13.1 % old age dependency).

There is a Total Fertility Rate of 3.9 in the district. This is the second-highest fertility rate in the Upper West region, considering the 111.7 births per 1000 women aged 15-49 years criteria. The migrant population in the district is 7,032. 51.1 % of migrants in the district were born elsewhere in the Upper West Region; 48.9 % were born elsewhere in a different region. 37.4% of the total migrants were born in Ashanti Region, followed by those from Brong Ahafo (17.7%) and 12.7% of the migrants were born in Greater Accra. Poverty is a major reason for the District's high levels of migration. The district has a total of 7,524 households, with a total population of 50,896. The district's average household size is 6.8 people. According to the GSS (2014) study, children account for 43.6 per cent of the household population.

54.1% of the population over the age of 12 are married, compared to 36.8 % who have never married. Nearly 80 % of women are married by the age of 25-29, compared to just 51 % of men. Considering those over the age of 65, widowed women account for as much as 44.6 % of the population, while widowed men account for just 5.5 %. Almost 77% of married people are employed, according to the GSS. Only 2.3% married people are jobless, while 20.8% of married people are economically inactive. Considering the people who have never been married, 1.3% is jobless and 50.5% is

economically inactive. As a result of these findings, it is possible that locals may seek loans to sustain their current livelihood alternatives.

43.5 % of the population aged 11 and over is literate, while 56.5% is illiterate. In comparison to females, men are more likely (53.3 %) than women to be literate (35.0%). Moreover, 41.5% said they could communicate fluently in both English and Ghanaian. In the district, 49.1% of the school going population have never attended school, 37.5% are presently enrolled, and 13.4% have previously attended (GSS, 2014). These findings have implications in understanding the perceived impacts of microfinance programmes on education.

51.4 % population aged 15 and over are self-employed without employees, while 37.6 % are contributing to the family workforce. A whopping 94.7% of the district's workforce is employed in the district's informal economy, with just 3.3% working for the government. In sum, about 70.8% of people over the age of 15 are employed, while just 29.2 % are unemployed (GSS, 2014). For the unemployed population, about 33.5 % of them are students and 32.9 % are contributing to family labour. Agricultural, forestry, and fishing employees account for 73.1% of the employed population, while 11.6% work in craft and allied trades and 7.8% work in service and sales. Only 3.6 % of those surveyed work as managers, professionals, or technicians, according to the data. The District Map is shown in Figure 3.1.



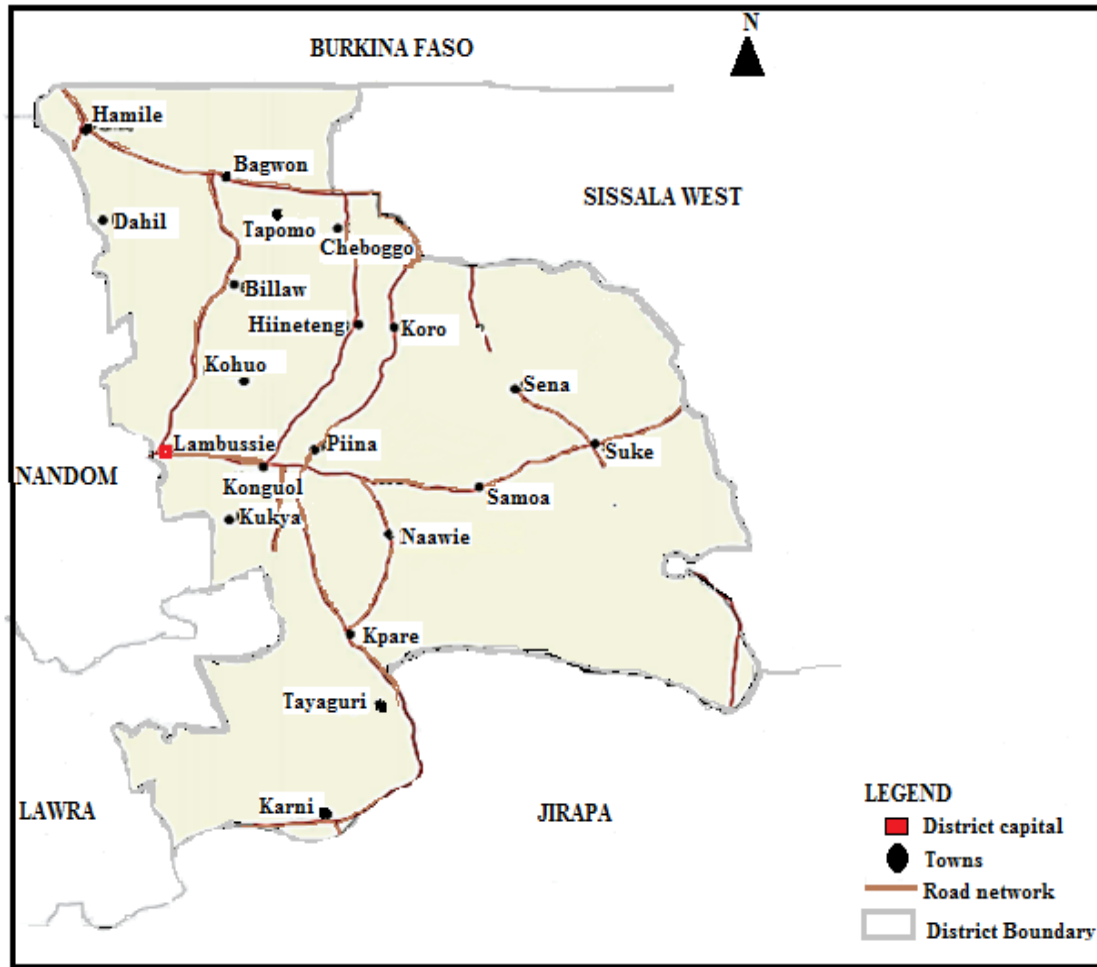


Figure 3.1: Map of Lambussie District

Source: Lambussie District Assembly, 2020

3.2 Research Design

Research design is all about collecting and analysing data in a way that is both relevant to the purpose of the research and cost-effective (Kothari, 2004). Every research is based on some underlying philosophical assumptions regarding what constitutes ‘valid’ research and which research methods are appropriate for the development of knowledge in a given research work. The study is underpinned by the pragmatist philosophy which allowed the researcher not to be limited to a particular worldview. Pragmatism focuses on producing valuable research findings without being limited by ontological,

epistemological or axiological assumptions (Creswell & Clark, 2018). Paulinus and David (2013) states that pragmatism is particularly useful in cases where it is difficult to categorically associate the social phenomenon under investigation with a specific worldview and associated philosophical assumptions. Thus pragmatism is a better philosophical approach for providing a more working solution without limiting the researcher to prior assumptions about the nature of the impact of VSLA. Hence, it minimised the researcher's influences on the data sources and reduced subjectivity from skewing the conclusions.

This philosophical underpinning informed the researcher in using the sustainable Livelihood framework and the empowerment theory to guide its data analysis. The essence of the sustainable livelihood Framework is to identify how various factors interact in influencing livelihood and which of these factors are statistically significant in improving the welfare of VSLA members.

Furthermore, from a rural development perspective, the household remains at the center of analysis to understand the behaviour of household members and their strategies of combining different resources to achieve certain livelihood outcomes. The Sustainable Livelihood Approach (SLA) and the empowerment theory that place the household at the center of livelihood analysis were adopted to conceptualise and interpret the findings of the study. These two approaches link how microfinance could contribute to household livelihoods.

The pragmatist philosophy informed the use of the Convergent Parallel mixed methods in this study. Using convergent parallel mixed techniques, the researcher combines both quantitative and qualitative data in order to offer a full understanding of the research question (Creswell, 2014).



Though intensive, the design offered an excellent comprehension of the subject matter (Sharan, 2002; Creswell, 2014). The nature of the research topic, the specific objectives, and the assumptions behind this study informed the selection of design. The design was time-consuming and necessitated extensive collection data, but it gave a thorough knowledge of the VSLA programme as a tool for empowering programme beneficiaries.

This study's data largely came from both VSLA participants and non-participants (the "control group"). To ensure that the control group is in the same or comparable socioeconomic and political context as the participants, they were carefully chosen. The researcher used group mean comparisons of households' welfare indicators while controlling for VSLA involvement, household characteristics, and other factors that may affect wellbeing.

3.3 Study Population

The target population is the entire group of individuals to which researchers are interested in generalizing the conclusions (Agyapong & Bedjabeng, 2019). The target population for the study was four thousand, three hundred and thirty four (4,334) comprising old VSLA clients and new clients whose membership in the VSLA is less than 3 months from communities in the Lambussie District. The list of old VSLA clients (treatment group) and new VSLA members (referred to as non-participants -control group) was obtained from PRUDA (the local implementing partner).

3.4 Sample Size and Sampling Procedure

As Al Hassan et al. (2018) explains, sampling is the process of selecting a subset of a population for an experiment with the goal of obtaining findings that are applicable to the full population. Jensen and Shumway (2010) called for "representativeness" in



sampling, implying that each sampled unit will have characteristics that are similar to those of a known number of other sampled units in the population. The study used a sample of 371 respondents which consisted of 227 VSLA clients, 139 non beneficiaries in the Lambussie District and five (5) key informants from CARE international and its partner organisation. For a group to be qualified for registration under the VSLA programme it must be between 15 and 30 members. This criterion was adopted for the study; hence, only registered groups in all the 4 area councils within the Lambussie District were used for the study. Zoning was done in order to minimise biases that could arise as a result of the difference in the socio-economic conditions of communities where the respondents are located. To ensure objectivity, the sample of beneficiary and non-beneficiary households (control group) was determined with the aid of Yamane (1973) formula. According to Yamane (1973) a random sample is selected from a population by using the formula:

$$n = \frac{N}{1 + N(e)^2}$$

where, n is sample, N is population in each zone (sampling frame in each zone), e is probability of error and $e = 5\%$ (95% confidence).

The use of this formula in each zone resulted in total sample of 366. Therefore, the study used 366 households consisting of 227 beneficiary households and 139 non-beneficiary households within the Lambussie District. See table 3.1 for the details.

To aid the assessment of the impact of the VSLAs programme, the study predominantly targeted the poorest households (beneficiaries of VSLAs and non-beneficiaries of VSL), thus those of the same quota with beneficiaries in the study area.



Both probability and non-probability sampling were used. The researcher used the purposive sampling technique to sample one (1) key informant from CARE international staff and four (4) key informants from the Local Partner Organization staff who have in-depth knowledge on the VSLA implemented by CARE in the Lambussie District. The purposive sampling technique involves selecting certain respondents based on specific purpose rather than randomly selecting them (Tashakkori & Teddlie, 2003).

Probability sampling is the general term for samples selected in accordance with probability theory, typically involving some selection mechanism (Jensen & Thompson, 2016). The study used the stratified random sampling method to select 366 respondents from both the old VSLA members and new VSLA members. The population of eligible respondents in each council was first categorized into groups or strata of VSLA beneficiaries (treatment) and non-beneficiaries (control group). Simple random sampling was subsequently used to select the required number of respondents from each stratum. This was adopted to minimise the level of selection bias associated with non-random programme placement

This method was adopted because it gives a fair representation of the population, assures that survey findings can be argued as statistically representative of the population, and allows the researcher to draw conclusions about the population. The selection criterion used above, led to the numbers in table 3.1.



Table 3.1: Sample Distribution

Zonal Council	Total Membership			Total Membership		
	VSLA	Non - VSLA	Total	VSLA	Non - VSLA	Total
	Member	Member		Member	Member	
Hamile Area	55	32	87	48	30	78
Kani Area	70	40	110	60	36	96
Lambussie Area	62	36	97	53	33	86
Samoa Area	79	45	123	66	40	106
Total	525	213	738	227	139	366

3.5 Sources of Data

A combination of primary and secondary sources was used to get the information. Data for this study came mostly from interviews, surveys, and focus groups. Secondary data were obtained from both published and unpublished sources, including official project reports and their websites, in order to increase the quality of discussions, give explanations, and augment the original data. Furthermore, evaluations on the impact studies of the VSLA programmes were also reviewed.



Table 1.2: Summary of Respondents that were sampled for the Study

Sample Unit	No. of respondents	Method of data collection
VSLA members	227	Questionnaire Administration
Non –VSLA members	139	Questionnaire Administration
Staff of CARE Local Partner	4	Key informant interview
CARE staff	1	Key Informant Interview
VSLA members	40	Focus Group discussion
Non-VSLA members	40	Focus group discussion

Source: Survey (2020)

3.6 Methods of Data Collection

A research instrument is a means by which necessary information is collected by a researcher (Kothari, 2004). Data were collected through key informants interview, survey and Focus Group Discussions. These methods of data collections supported the convergent parallel mixed method design for this study as they enabled a large respondent to be reached by the researcher.

3.6.1 Survey

According to Check and Schutt (2012), survey is the collection of information from a sample of individuals through their responses to questions. In this research the researcher used questionnaires (see Appendix A) as a survey data collection instrument to gather the views of the respondents on the study.

The questionnaire contained ten (10) sections that basically cantered on socio-economic characteristics of respondents and their households; participation in VSLA, assets level,





income, savings, credit/loans; impacts of participation on health care, education and food consumption as well as the challenges of VSLAs. The researcher and his assistants administered the designed questionnaires to 227 VSLA beneficiaries and 139 non beneficiaries through a face-to-face household level survey. The researcher adopted this approach because most of the respondents were non-literate and so it was impossible for them to have filled the questionnaires by themselves. The few literate respondents filled the questionnaires by themselves with or without the assistance of the researcher.

The questionnaires captured both close and open-ended questions. The close-ended questions dealt with questions that were straight forward and needed just a tick from the alternatives that were provided or writing a figure (in the case of questions that were discrete in nature). The open-ended questions allowed the respondents to express their opinions on the issues. Though the data generated from the questionnaires was heavily quantitative in nature, it also yielded few qualitative data.

3.6.2 Focus Group Discussions

After the individual interviews, focus group discussions were used to further explore the general nature of the comments from different individuals (Shneiderman and Plaisant, 2005). When participants are given the freedom to agree or disagree with one another during a focus group discussion, it is possible to get an understanding of the diversity of viewpoints and ideas that exist within a given group as well as their own personal beliefs and practices.

In line with this, the researcher conducted focus group discussions in each of the zones utilising a guide specifically prepared for this purpose (see Appendix C). The researcher and his assistants functioned as facilitators, leading and directing the pace of the talks. Two (2) focus group discussions (one for beneficiaries and one for non-beneficiaries)

were conducted in each of the area councils with membership in each discussion group ranging between six (6) and ten (10) people.

The focus group discussions centred on twelve (12) open-ended questions which covered issues such as group formation and membership, general group dynamics, challenges and limitations of VSLA as well as the social and economic impacts of VSLA. Though time consuming (Morgan, 2002), the focus group discussions provided enough evidence and explanations to support some of the quantitative data (descriptive statistics) that were generated from the questionnaires. It also enabled the researcher to discover the collective opinions of respondents regarding the impacts of the VSLA and how the cash or credits received were used by the beneficiaries.

3.6.3 Key Informant Interviews

In addition to the questionnaire, the researcher employed an interview guide for key informants (see Appendix B) to elicit information. Key informant interviews are essentially qualitative interviews and are carried out with interview guides that list topics and issues to be covered (Kumar, 1993). To learn more about someone's thoughts and behaviours, or to go further into new topics, this tool comes in handy (Boyce & Neale, 2006). Key informant interviews were employed because the researcher believes such respondents have in-depth knowledge on the operations of the VSLA programme.

Five (5) focal respondents consisting of the Project Coordinator from CARE International and 4 PRUDA (local implementing partner organization) staff were selected and interviewed since they had extensive knowledge of the subject matter at hand. The interview was face-to-face and consisted of 14 open-ended questions which were used to probe for qualitative data on issues on group formation and dynamics,



VSLA methodology, services rendered to VSLA groups, challenges and limitations of VSLA as well as the socio-economics impact of VSLA.

3.7 Ethical Considerations

In the process of doing research, researchers must take into account social, cultural, and psychological issues, challenges, and conflicts, some of which include confidentiality, inconspicuousness, and privacy (Wiles, Rosenberg, & Kearns, 2005). At the beginning of the study, the researcher fully identified himself and his background, and stated the purpose of the research. All participants were made aware of the study's objectives and that their participation was completely voluntary in nature. All participants in the study gave their permission to participate in the research. Confidentiality was maintained to all who participated in the study. In addition, the research works cited in this work, were all properly acknowledged.

3.8 Validity

According to Wolfinbarger & Gilly (2003), validity is a measure of how well a test measures what it is designed to assess. The validity and reliability of the survey instrument are critical to the success of any research. As a result, it is essential that the survey instrument be pre-tested by the researcher.

To ensure the validity of the research instruments, the instruments were pre-tested on 10 beneficiaries and 10 non-beneficiaries. This was done with the help of research assistants. The purpose of it was to remove ambiguities and unnecessary items in the questionnaire. It was also to check the wording and the sequence of questions, the length and the clarity of instruction. The objectives set in this study were largely achieved.



3.9 Data Analysis and Presentation

Data from the field were edited and coded correctly to make meaning out of them. Editing was done by checking through to correct mistakes that may occur in the process while coding was done by tallying the data based on numbers assigned to a variable. The study made use of both quantitative and qualitative methods in its investigation. Quantitative data were processed and analysed with the aid of the Statistical Package for the Social Scientist (SPSS) version 20, correlation and independent tests and presented using tables and figures.

Dependent variables in this study are the individual's membership status in VSLA and household's welfare of respondents while independent variables are: determinants of membership, income, gender, age, healthcare utilization, children's education and food consumption. From the statistical evidence available, the researcher used focus group discussions and key informant technique to gather qualitative data in order to validate and give an in depth explanation for the statistics obtained.

Comparative analysis (using Pearson's chi-square test) and propensity score matching (PSM) were used in the research, with the treatment group consisting of 227 old VSLA members and the comparison group consisting of 139 new VSLA members (classified as non-participants). It utilised comparative analysis to compare the difference and similarities in individual and household poverty indicators (household diet, education and health) between VSLA members and non-participants. Propensity score matching is used to determine how much of an influence the VSLA has on households' welfare.

Old VSLA members are assumed to have similar features and poverty profiles, with the only variation being the issuance of loans to new VSLA members, which the loan takers utilise to generate revenue. This assumption is employed in the study. Comparison



study helps to understand how involvement in village savings and loans and the resulting income-generating activities affects individual and family poverty alleviation (Beyene & Dinbabo, 2019).

3.9.1 Model Specification: Propensity Score Matching

PSM is used in this research because of the programme's nature and the available data, and since PSM is an effective method for assessing impact in a clear way (Wordofa & Sassi, 2018 and Dillon, 2011). Even though conducting randomised control trials (RCTs) is the "gold standard" for assessing effect, this approach is not practical in this situation because of programme placement/targeting and self-selection (Dercon et al., 2009). The PSM is one of a number of quasi-experimental procedures that may be used to address the issue of attribution of influence and identifying the counterfactual outcomes of participants (Caliendo & Kopeinig, 2008).

Beneficiaries and non-beneficiaries of a programme may be compared to see how much of a difference there is in their outcomes through the use of PSM. Nevertheless, it is very difficult to match individuals based just on covariates, or external factors, such as loan amount (Khandker et al., 2010). In order to address this issue, the matching procedure is carried out in the probability of partaking in VSLA on the basis of observable qualities (Khandker et al., 2010). That is to say, PSM uses the propensity score of VSLA members who did and did not participate in the VSLA to create a statistical comparison groups. Propensity score matching, its model, and average treatment impact on treated (ATT) techniques are discussed in detail in the next paragraphs.

Before beginning the propensity score estimation process (PSE), it is necessary to estimate a subject's propensity score. According to Guo, Barth, and Gibbons (2006),





matching may be done conditionally on $P(X)$ rather than X , where $P(X) = \text{Prob}(D=1|X)$ is the probability of participating in the programme conditional on X , with X being a collection of observable attributes. If outcomes without the intervention are independent of participation given X , then they are also independent of participation given $P(X)$, which simplifies a multidimensional matching issue to just one dimension.

There are a number of factors that need to be taken into consideration before we can estimate a person's propensity score. Households' likelihood of participating versus not participating is often estimated using the logit and probit models. In Gujarati (2011), the two models provide the same conclusion as Gujarati, Bernier, & Bernier (2004). According to Caliendo & Kopeinig (2005), the logit model is more extensively employed since it is simpler to calculate than the probit model. As a result, the logit model was utilised in this work to estimate propensity scores. If a household is a VSLA participant, the dependent variable, participation, has a value of 1; and if otherwise, it has a value of 0. (Ebojei, Ayinde, & Akogwu, 2012 and Gujarati, 2011). Thus, mathematically the logit model is formulated as follows:

$$P_i = \mathbb{E}(Y = 1|X_i) = \beta_0 + \beta_2 X_i \quad (1)$$

where X is the target outcome and $Y = 1$ means a member participates in VSL.

A relook at equation (1) develops:

$$P_i = \mathbb{E}(Y = 1|X_i) = \frac{1}{1 + e^{-(\beta_0 + \beta_2 X_i)}} \quad (2)$$

For ease of complexity in the equation with exponentiation, (3) can be rewritten as:

$$P_i = \frac{1}{1 + e^{-z_i}} = \frac{e^z}{1 + e^z} \quad (3)$$

where,

P_i is the probability of a person (member) participating in VSL

z_i represents the cumulative logistic distribution function as shown:

$$Z_i = \beta_0 + \sum_{i=1}^n \beta_i X_i + \xi_i \quad (4)$$

where, with $i = 1, 2, 3, \dots, n$

β_0 is the intercept

β_i is the regression coefficients to be estimated

X_i represents the pre-intervention member and their household characteristics in the model.

ξ_i is the noise or the disturbance term with $i = 1, 2, 3, \dots, n$

If P_i , the probability of participating member in VSLA, as proposed by equation (4), then $(1 - P_i)$, the probability of a non-participating member in VSLA, is given as;

$$1 - P_i = \frac{1}{1 + e^{z_i}} \quad (5)$$

where the odds ratio is written as:

$$\frac{P_i}{1 - P_i} = \frac{1 + e^{z_i}}{1 + e^{-z_i}} \quad (6)$$

The left-hand side of equation (7), $\left(\frac{P_i}{1 - P_i}\right)$ is simply the odds ratio in favour of participating in VSLA. In other words, it is the ratio of the likelihood of the household participating in the VSLA compared to the likelihood of the household not



participating. Last but not least, by taking the natural log of equation (6) the log of the odds ratio may be represented as follows:

$$L_i = \ln\left(\frac{P_i}{1 - P_i}\right) = Z_i = \beta_0 + \sum_{i=1}^n \beta_i X_{ij} + \xi_i; \quad \forall j \quad (7)$$

where L_i , which is the log of the odds ratio in favour of participation in VSLA, is not just linear in X_{ij} but also linear in the parameter. β_0 is the propensity score of observable household and individual attributes. PSM estimation obtained through the logit model should contain pre-determined factors that influence the participation in VSLA and the outcome of interest (Bryson et al., 2002 and Guo, Barth, & Gibbons, 2006).

3.9.2 Matching Estimators/Algorithm

Choosing between various matching strategies is the next step after estimating the propensity score. There are a variety of PSM matching estimators to choose from. For this study, only the most widely used matching estimators are included below.

3.9.3 Average Treatment Effect on the Treated (ATT) Estimation

The final stage of the process of determining the PSM value is the estimation of ATT. Caliendo & Kopeinig (2005), provide an explanation for its empirical specification. An example of how to estimate the impact of members' involvement in the VSLA savings and loan programme on a particular outcome (Y) is provided below:

$$T_i = Y_i(D_i = 1) - Y_i(D_i = 0) \quad (8)$$

where T_i is treatment effect (effect due to participation in VSLA),

Y_i is the outcome on member's household i ,



D_i is whether member i has got the treatment or not (i.e., whether member participated in the VSLA saving and loan or not).

As a result of this, it is widely accepted that a person's $Y_i(D_i = 1)$ and their $Y_i(D_i = 0)$ cannot be observed at the same time. Furthermore, it is difficult to quantify the individual treatment T_i impact; hence one must instead estimate the average treatment effect of the population. It has been noted in Caliendo and Kopeinig (2005) and Becker and Ichino (2002), that the most widely used average treatment effect estimate is an average Treatment Effect on the Treated (ATT) which is defined as:

$$\begin{aligned} T_{ATT} &= \mathbb{E}(T|D = 1) \\ &= \mathbb{E}[Y(1)|D = 1] - \mathbb{E}[Y(0)|D = 1] \end{aligned} \quad (9)$$

This helps in understanding; how much the member's involvement in the VSLA savings and loan programme benefits him or her as opposed to others who do not participate (Caliendo & Kopeinig, 2005). Because $E[Y(0)|D=1]$ is not seen as the counterfactual mean for those being treated, a suitable replacement must be chosen in order to estimate ATT. Untreated persons' mean result, $E[Y(0)|D=0]$, might be used as a replacement for the counterfactual mean for those being treated, $E[Y(0)|D=1]$. Non-experimental studies in particular should not employ this method since it is possible that the same factors that influence treatment choices will also have an impact on study outcomes. For instance, the elements that determine whether or not a member participates in the VSLA might also be influenced by our outcome variable (e.g. average monthly household income). As a result, even in the absence of treatment, the results of people in the treatment and control groups would vary, resulting in a self-selection bias.

By rearranging and subtracting $\mathbb{E}[Y(0)|D = 0]$ from both sides of equation (10), ATT can be specified as:



$$\begin{aligned} & \mathbb{E}[Y(1)|D = 1] - \mathbb{E}[Y(0)|D = 0] \\ & = T_{ATT} + \mathbb{E}[Y(0)|D = 1] - \mathbb{E}[Y(0)|D = 0] \end{aligned} \quad (10)$$

There is no self-selection bias when $E[Y(0)|D=1]-E[Y(0)|D=0]=0$ in the aforementioned equation (11), which means that both components on the left side are observables and ATT may be found. Only in a randomised experiment can this be guaranteed (i.e., when there is no self-selection bias). PSM, for example, uses statistical techniques to create an artificial control group in non-experimental studies like this one. To be more explicit, we look for non-treatment observations with the most identical (observable) properties for every feasible treatment (Gertler & Karadi, 2011).

3.10 Hypothesis Testing

Additionally, Pearson's Chi-square test may be employed in order to establish whether or not two category variables are statistically significant. The Pearson's Chi-square test is used to examine whether there is a statistically significant link between VSLA membership status (new participants or old members as non-participants) and the health status of VSLA member households. Another method used to assess educational status of children, Pearson's Chi-square test, is used to determine whether or not the educational status of children has improved, decreased, or I don't know (new or old members). Nominally scaled group factors (VSLA status – new or old) and test variables (household members' health, children's educational, and family nutrition), as well as random samples, are used in the Pearson's Chi-Square Assess to test the hypotheses. The null hypothesis cannot be rejected if the significant value surpasses the significance level (0.05 in this example), which suggests that all variables are independent of each other, or in other words, there is no significant difference. There can be no null hypothesis in a situation where a significant value is less than or equal



to 0.05. This means that the two groups are reliant on each other in some way, and hence the difference between them is significant.

A t-test is also used to assess whether or not the metric test variable and the group variable are statistically significant differences. The same factors are used to determine significance.

It is also important to note that qualitative material gathered from focus group discussions is organised in an understandable way, transcribed and categorised qualitatively, and then presented narratively (Nili, Tate & Johnstone, 2017).

3.11 Variable Definition and Descriptive Statistics

Household Welfare: When determining a family's socioeconomic standing, factors like money and education are often evaluated (Stanislav & Gustavo, 2008). According to Massari (2005), well-being or welfare is not directly observable, but it is associated with things like money, education, and so on. As a result, it is required and even conceivable to discover a proxy variable that is directly observable in the opposite direction. Household income, food consumption, education, and health status are employed in this research to assess household wellbeing.

Income: The entire monthly earnings of a household (members and non-members of VSLAs) were estimated. Income from property, businesses (farm and off-farm), labour (salaries and wages), transfers, and other advantages are all included in this measure of family wealth.

Household food consumption: this is another indicator of welfare and it refers to whether or not, a household have to access to food (in their right quantities and quality) all year round. The study measured this by using the availability of food in the



household, number and quality of meals consumed per day as well as household weekly consumption expenditure.

Household Health: this refers to a household's ability to finance and thus access health care, eventually improving household health status. This is measured by household health expenditure in the areas of NHIS, medication and other medical expenses. A respondents' perception of improved household health as a results of joining VSLA is assigned a value of 1 and 0 if there is no improvement in household health status.

Household education: This welfare indicator was measured in this study by using the number of children in a family who are unable to enrol in school or have dropped out of school due to financial restrictions and the amount of money spent on education by the family. The number of youngsters who have given up on their education (dropped out of school) is known as the "school drop-out" population. Children's school fees and other educational expenses were used to calculate education spending for the last year.

Participation in VSLA: This refers to one's membership with Village Savings and Loan Associations (VSLA) and it was given a value of one (member). A Participant as used in this study refers to those who have participated in VSLA for more than at least 3 months (a time period for which they would have benefitted from the group savings and loans)

Non-Participants as used in this study refer to VSLA members whose membership in a VSLA is less than 3 months (a time period for the group members are under-going training but have not received any credit or pay-out from the group). It was assigned the value of 0 for a non-participant.



Household members who are employed: At the time of the survey, household members who were involved in any kind of business or employment were deemed to be employed, and data was gathered on the number of employed household members in each household.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

Under this section of the study, the results presented are based on the responses gathered from 366 respondents as well as 5 other respondents which include 4 Staff of Care International local partner and a Care International staff. The results obtained from the analysis are presented in tables and figures where necessary with discussions. The chapter is further divided into: descriptive analysis of respondents' background, determinants of VSLA membership status, VSLAs programme contribution to households' food consumption and income, VSLAs programme influence on households' access to healthcare, VSLAs programme contribution to children's education in rural households as well as challenges facing the VSLAs programme in the Lambussie District. Extensive studies were conducted using propensity score matching to estimate the impact of micro finance on poverty eradication by including a wide range of variables in the model estimation process (Yu, Han, Chen & Ren, 2020 and Beyene & Dindabo, 2019).

4.1 Descriptive Analysis of Background of Respondents

Table 4.1 presents the summary characteristics of the respondents sampled for the study. In describing the background of the respondents, the study took into consideration, gender, the status regarding household headship, marital status of the respondents, VSLA membership status, relationship with household head, educational background of household heads and family members.

From the study, it was discovered that from a total of 227 respondents of the VSLA members, only 20 (8.81%) were males and 207 (91.19%) were females. However, out



of the 139 respondents of the non-VSLA members, 52 (37.41%) were males and 87 (62.59%) were females.

Table 4.1: The Summary of the Descriptive Statistics of the Respondents

Variable	Level	VSLA members	Non –VSLA members
Gender	Male	8.81	37.41
	Female	91.19	62.59
Household Head Status (%)	Yes	42.39	21.86
	No	57.61	78.14
Marital status (%)	Married	74.89	54.68
	Widowed	8.37	14.39
	Divorced	4.85	10.79
	Separated	1.76	2.16
	Single	9.69	17.98
Age		44.64	41.02
If married, husband polygamous (Female Only)	Yes	42.50	44.50
	No	57.50	55.50
VSLA Membership	Yes	100.00	0.00
	No	0.00	100.00
Relation to HH (%)	Household head (HH)	42.39	21.86
	Spouse	47.14	59.00
	Child	9.20	18.00
	Other relation	1.27	1.14
	No education	15.86	26.62
Educational attainment (%)	Primary	47.51	21.13
	JHS	25.62	32.11
	Middle/SHS	10.90	18.06
	Tertiary	0.01	0.00



In effect, females were the majority in both the treatment and control group. This is particularly so because according to a project staff of PRUDA:

“most men are not willing to join the VSLA with the excuse that they are too busy and cannot get time to be attending weekly VSLA meetings”.

Household status here was used to determine whether the respondents sampled from either group is the household head or not. Based on the 366 responses gathered from the corresponding zones of respondents in the Lambussie District, it was discovered that, 96 (42.39%) of the VSLA members sampled were household heads as against 29 (20.86%) representing heads from the non-VSLA members. Though in both groups, most of the respondents were not household heads there were more households' heads among the VSLA respondents as compared to heads of households from non-VSLA member respondents

In terms of the marital status of the respondents, it was discovered that majority of the respondents said they were married. 170 (74.89%) of VSLA participants and 76 (54.68%) of non-participant indicated they were married. The study also considered the respondents relationship status with household heads. In this regard, 47.14% of VSLA participants are spouses to the heads while 59% of non-VSLA participants are spouses to the head of household.

Finally, the educational backgrounds of the respondents were taken into consideration. From the responses obtained, it was observed that, 15.86% of the respondents had no education from the VSLA membership group as against 26.62% of the respondents from the non- VSLA membership group. Majority of the respondents from both groups had basic education (Primary or JHS). The study revealed that 73.13% of the VSLA



members had basic education as against 53.24% for non-VSLA members. Hence, it can be said that most of the respondents had at least elementary education.

Respondents age, marital status, education, household size, past job experience, number of household members earning money, and the number of households with members who are financially dependent are the covariates that are significantly different between the treatment and comparison respondents, as shown in Table 4.2.

Table 4.2: Descriptive Statistics of Covariates

Variable description	Overall	VSLA Status		t-test/ Chi-Sq. test
		Treatment (Old VSLA / participants)	Comparison (New VSLA / non- participants)	
Number of observations	366.00	227.00	139.00	
Age of member	42.83	44.64	41.02	-4.98***
Married member (1 if member is married) %	64.785	74.89	54.68.	9.84***
Education (1 if member attended school) %	78.76	84.14	73.38.	3.17*
Household size	3.48	3.94	3.03	-4.64***
Member work status prior VSLA (1 if member worked) %	88.60	81.90	95.30	11.25***
HH head (1 if female headed the HH)	44.90	40.94	49.61	1.92
Number of people earning income in HH	1.61	1.77	1.45	-4.75***
Number of dependents in HH	2.61	3.01	2.20	-5.23***

Note: Test of statistical significance of mean differences between treatment and control

*/ comparison households: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.*



4.2 Determinants of VSLA Membership Status

There is no difference between the control and treatment groups in terms of observable and unobserved variables in this research. The influence of VSLA involvement on the wellbeing of families was estimated by comparing the means of the treatment and control groups. The logistic regression analysis was used to further explore certain outcome variables on membership status.

The regression analysis allows the researcher to draw more solid findings by quantifying the influence of programme participation on a particular set of outcome variables, while adjusting for individual and household factors that may potentially affect the outcome variables. As a result, the researchers utilised a logistic regression model to identify the factors that influence whether or not someone is a member of the VSLA.

Table 4.3: Summary of Determinants of VSLA Membership Status

Membership	Coefficient	SE	Odd Ratio (OR)	SE (OR)
Gender	0.110	0.233	1.116	0.260
Age	-0.271**	0.119	0.763	0.091
Household Status	0.514***	0.201	1.672	0.214
Children	1.598***	0.194	4.943	1.353
Income	0.298***	0.116	1.347	0.157
Prior Savings	-0.674**	0.292	0.510	0.149
Religion	-0.039	0.118	0.962	0.113
Marital Status	-0.411**	0.186	0.663	0.136
Prior Access to credit	1.941***	0.194	6.966	1.353
Education	-0.623***	0.192	0.536	0.103
Constant	-1.848	1.542	0.158	0.243

Significance at *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$





After performing the regression analysis, it was discovered that, based on the responses gathered from the respondents, the age of the respondents, household head status of the respondents, the number of children of the respondents, income level, marital status and educational category were judged to be the main determinants of VSLA membership. Gender and religion are not statistically significant in the determination of VSLA membership since their p-values (0.63800 and 0.74200) are greater than the significance level (0.05).

In justifying why income level is a determinant of VSLA membership, a 42 year old project staff of PRUDA said:

“... personally, most of the people here find it difficult to handle their daily needs together with weekly and monthly savings and special levies in their VSLA groups. I think this is a factor when it comes to VSLA membership.”

This confirms the existence of the challenges faced by poor people in trying to access MFIs. Ironically, these same institutions sometimes shy away from very poor people. According to Simanowitz & Walter (2002), microfinance does not reach the poorest of the poor due to loan officers' biases. The primary cause of this is that poor people often lack collateral and the possibility of default is high. Poverty is a cancer in society. Very poor people often tend to withdraw away from public hence it is unlikely that microfinance will actually attract these very poor people.

Having the poorest excluded from microfinance does not mean that the poor cannot benefit from MFI services, but rather that MFIs have failed to build programmes to meet the requirements of impoverished families (Rachel Marcus, Porter, & Harper, 1999). Some of the most destitute people may be able to gain anything by working for a company that obtains a loan or other incentives.

There has been a long-standing tradition in male-dominated civilizations for women to be subservient and excellent homemakers. Women cannot decide on their own, to join any programme or access credit without exclusive authorisation from their husbands. This practise was highlighted by a staff of PRUDA who indicated that:

“...some of the people in the community find it difficult to join VSLA as a result of husbands not permitting them and high interest rate on loans”

Portion of the above view expressed, supports the assertion of Noreen (2009), who said that “when beneficiaries' husbands and wives are well-informed and recognise the advantages of their females' participation in VSLA, this might lead to a more harmonious home environment.

Table 4.4 shows that the older the members are, the more likely they are to participate in village saving and lending, as indicated in comparison to the younger members. Economic pressures may be to blame for this, since members are expected to take care of their children and other family members throughout their productive ages and child-bearing years (typically 30-45). As a result, the majority of them try to find new ways to save money and get loans to set up businesses that will generate revenue so that they can deal with the current economic climate. Prior to joining village saving and loan, members with working experience are less likely to participate, maybe because they may have other options for saving. Small loans from traditional microfinance organisations, secured by collateral from their jobs, may also be available to these members. Families with fewer members who are financially burdened tend to have greater participation rates because their members have a stronger tendency to save. As the number of dependents in the family grows, members may be compelled to



participate in village savings and loans and establish income-generating businesses utilising loans as a result of rising demands from their dependents.

Table 4.4: Propensity Score Estimation Using Logit Model

Variable	Coefficients	S. E
Constant	-5.27***	1.41
Age of member	0.91***	0.27
Married member (1 if member is married) %	0.01	0.21
Education (1 if member attended school) %	0.212	0.21
Household size	-0.27	0.20
Member work status prior VSLA (1 if member worked) %	-1.48***	0.46
HH head (1 if female headed the HH)	0.43	0.50
Number of people earning income in HH	1.25***	0.46
Number of dependents in HH	0.42**	0.21
No. of Observations	366	
Wald Chi-Square	42.64	
Pseudo R-squared	0.16	

*Note: Dependent variable: Member participation in village savings and loans associations for more than three months, with saving and loans (= 1) or not (= 0); Statistical significance based on Z statistics. Significance at *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.*



4.3 Impact of VSLA on Welfare

4.3.1 Impact of VSLA on Income

The average impact of members' involvement in village savings and loans on the outcome variable, average monthly household income (ATT), was calculated in this study. Table 4.5 shows that membership in village savings and loans has a positive and statistically significant impact on the average monthly family income of participants. In comparison to non-participants, the ATT findings reveal that people who have been a part of VSLA for three months or longer had an average monthly household income ranging from Ghc169.63 (nearest neighbour matching) to Ghc141.55 (Kernel matching) greater than the average Ghc for non-members (those members who are in less than three months and have not yet accessed VSLA loan).

Table 4.5: Estimation of Average Effect of Participation in VSLA on Average Monthly Household Income Using Nearest Neighbour and Kernel Matching

Outcome Variable	ATT estimates using	ATT estimates using
	nearest-neighbor estimator	Kernel matching estimator
Average monthly household income	169.63 ** (66.517)	141.55 ** (86.029)
No. of observations	366	359
Treated	227	227
Comparison	139	132

*Standard errors in parenthesis. Note: 227 treated and 132 comparison individuals on common support. ** indicate statistical significance at the 5% levels.*



Table 4.5 shows that results from "Nearest neighbour" and "Kernel matching" are converging. This suggests that the findings are robust. As a result, assuming no selection bias is present owing to unobservable factors, the average monthly income of households whose members participate in VSLA is positively and significantly impacted on average monthly household income. Similar to Wordofa & Sassi (2018) and Arpino & Aassve (2014), the current research used mean comparison (before and after matching), standardised bias, and overall measures of covariant imbalances to check matching quality and common livelihood condition. Prior to matching, the mean comparisons of most variables were significantly different between the two groups. It seems that the matching procedures were effective in balancing confounding variables, since no statistically significant differences were discovered between groups when post-matching T-tests were conducted. Most of the factors, such as age of member, household size, number of people making money at home, and number of dependents, show a significant reduction in percentage bias after post-matching. Total covariate balance as given in Table 4.6 shows that a 41.6 per cent bias in the unmatched sample is reduced to 20.3 per cent in the matched one, indicating that the matching approach is effective in reducing existing biases.

Table 4.6 : Chi– square Test for the Joint Significance of Variables and Matching Quality

Sample	Ps R^2	LR χ^2	$p > \chi^2$	Mean Bias	Med. Bias
Unmatched	0.557	210.77	0.000	41.6	26.0
Matched	0.233	71.11	0.000	20.3	14.2



4.4 Comparative Analysis via Hypothesis Testing

4.4.1 VSLAs Programme Contribution to Households' Food Consumption and Incomes

Participant and non-participant members of the VSLA were asked about their perceptions of their households' diet, including its diversity, quantity and quality. The research predicted that participants who had access to loans from local village savings and loan organisations would be able to participate in income-generating activities that would allow them to acquire higher quality and quantity of food for their families than those who did not. Table 4.7 shows that although VSLA membership has minimal influence on meal number, it has a significant beneficial impact on meal quality, as seen by a rise in fish and meat intake.

Table 4.7: Household Diet

	Treatment Group	Control Group
Average number of meals per day	2.67	2.35
Average number of days consumed meat in last week	0.51	0.18
Average number of days consumed fish in last week	4.32	1.26
Frequency of problems satisfying food needs in past year (%)		
Never	59.14	29.04
Sometimes	38.14	58.14
Often	2.71	12.82
Always	0.00	0.00

This finding from the research backs with the majority of the relevant literature, which shows that, on the average, microfinance customers' homes have better nutrition and health than non-client households, particularly when the client is female (Pitt et al. 2003; Pronyk et al., 2007; Barnes et al., 2001; Littlefield et al., 2003).



In justifying how her household diet has improved, a VSLA respondent from one of the focus group discussions said:

“... I used to carry firewood to Piina market to sell in order to buy food stuff for my households. But after joining the VSLA, I was able to mobilize money for farming. I now feed my household from my farm and my children no longer disgrace me by going to other people houses to beg for food. I have also stopped selling the firewood because I am now economically empowered”. (Female FGD participant at Kanguol, December 2020)

Another VSLA respondent said: *“At first TZ was the only common meal of all households in this community. But through our savings in the group, we sometime support our husbands to buy rice, yam and keta school boys to prepare varied good meals for our households. We now vary our meals just like those in the cities”.* (Female FGD participant at Kanguol, December 2020)

The regression model indicates the number of children, prior savings and respondent's prior access to loan are factors that have influenced the households' food consumption and income as summarised in Tables 4.8 and 4.9.



Table 4.8: VSLAs Programme Contribution to Households' Food Consumption and Income

Independent Variable(s)	Co-efficient	SE
Membership	0.551**	0.014
Age	0.314	0.151
Gender	0.301	0.254
Religion	0.401	0.014
Children	0.356**	0.021
Prior Savings	0.313**	0.025
Prior Access to Loan	0.445**	0.112
Constant	0.426	0.121
R-Square	71.5%	
R-Square Adj.	67.9%	

***Significance flagged at 5% level of significance. .*



Table 4.9: Chi-Square Test for Perception towards their Household Diet (Consumption)

Household Consumption		VSLA Status		Total
		Non-		
		Participants	Participants	
Improve	Count	223	0	223
	Expected Count	138.3	84.7	223.0
Not Improve	Count	4	139	143
	Expected Count	88.7	54.3	143.0
Total	Count	227	139	366
	Expected Count	227.0	139.0	366.0
Pearson Chi-Square			349.49***	

VSLA members and their families are likely to consume more variety foods and have less difficulty in meeting their family's dietary demands than non-participants. The result in Table 4.9 shows a Pearson chi-squared value of 349.49 at 1 degree of freedom and is statistically significant at the 1% level. As a result, the null hypothesis is discarded in favour of the alternative. This shows that households nutrition improvement and village saving and loan participation go hand in hand, and that the differences between families with participating members and non-participants is substantial. A research by Mukhooli (2015) found that the majority of women who participated in Village Savings and Loan Associations said that their involvement in the VSLA had a direct impact on their capacity to access good food quality in their homes. During the focus group discussion, participants were also invited to compare and contrast their family's diet before



and after the intervention. People's differing viewpoints throughout the conversation suggest that families have improved their diets after taking part in VSLA. The following is an example of how a participant of the focus group described the process of improving the nutrition of the household:

“Prior to joining VSLA, I and my family could only afford to have two meals every day. I did all I could to provide my children with the best meals I could afford in terms of both quantity and quality. My family was dissatisfied with the dinner despite my best efforts. As a result, I've taken up an IGA that pays the bills. As a result, we can eat three meals a day without becoming hungry. The food we're eating consists mostly of vegetables and meat, which I believe is a balanced and quality meal for my family.” (Female FGD participant at Samoa, December 2020)

4.4.2 VSLAs Programme Influence on Households' Access to Healthcare

According to Chilimba, (2020), participation in a microfinance programme improves a household's capacity to finance and hence receive healthcare, which ultimately improves the household's health.

From the responses gathered as shown in Tables 4.10 and 4.11, those respondents who are members of the scheme are, to a large extent, able to get access to health care in the district more than their counterparts who are non-beneficiaries of VSLA services. This is attributable to VSLA members' improved access to savings and loans which they use to cater for their health expenses. More so, age, savings, children, gender of the respondents and income were discovered to be some large covariates on health care access in the district as shown in table 4.10.



Table 4.10: The summary of the Regression Model and other Findings on Household Access to Health Care

Independent Variables	Coefficient	S.E
Membership	0.123**	0.215
Age	0.512**	0.122
Gender	0.114**	0.021
Religion	0.010	0.210
Children	0.298**	0.012
Income	0.512**	0.117
Savings	0.019**	0.012
Access to Loan	0.124	0.123
Constant	1.250	2.300
R-Square	75.60%	
R-Square Adj.	72.40%	

***Significance flagged at 5% level of significance.*

Clients of microfinance are more likely to have better diet and health statuses compared to those who do not utilise the service microfinance services (ASRAT, 2016; Pronyk et al., 2007; Littlefield et al., 2003; Hossain, 1988). The findings from this study strongly affirm the above assertion.

Table 4.11: Chi-Square Test of Respondents' Perception towards their Household Health.

Household Health		VSLA		Total
		Non-		
		Participants	Participants	
Improve	Count	227	17	244
	Expected Count	151.3	92.7	244.0
Not	Count	0	122	122
	Expected Count	75.7	46.3	122.0
Total	Count	227	139	366
	Expected Count	227.0	139.0	366.0
Pearson Chi-Square		298.86***		

Non-participants and participants alike were asked to rate the health of themselves and their family members over the course of a year to see whether VSLA participation had an impact. As shown in Table 4.11, there was a Pearson's chi-square value of 298.86 with one degree of freedom and a statistical significance at the 1% level. The significance value is smaller than the level of significance (0.05) hence, a rejection of null hypothesis in favour of the alternative hypothesis. Thus, there is a link between better household health and VSLA involvement. The findings in Table 4.11 suggest that VSLA participants have a more positive effect on the health improvement in their household than non-participants.

For this study, participants in FGD were asked to reflect on the health of themselves and their family members before and during their involvement in VSLA, in order to



determine the impact of VSLA on household health. According to some of the FGD participants, the VSLA's impacts on household health are as follows:

“The VSLA has been a tremendous help to us in numerous ways. I am presently having an income generating activity, thanks to the loan I received from the group. Before I joined this group, I was unable to raise enough money to support myself and my family, and when members of my family were ill, we were unable to afford the costs of treatment and medication from health centres. However, after joining VSLA, these circumstances have improved since I can now borrow money from my group to pay for medical care when I need it” (Female FGD participant at Naawie, December 2020).

Several participants also listed improved access to health care as a one of the major benefits to membership in the vsla programme. In the words of a 37 year old woman of Akaweri VSLA, she said:

“When I did a surgery, it was my group that granted me a loan of 1000 Ghana cedis to pay for my hospital bills. I requested for the loan from the group whilst I was on admission at Nandom Hospital and I was able to repay the loan after I was discharged from the hospital.” (Female FGD participant at Kanguol, December, 2020)

It is clear that VSLA programmes have an impact on members' diet and health statuses, according to the qualitative data. Participants in focus groups explained that their loans and savings are primarily used to improve the health of their household members. Narrating how helpful VSLA has been to her, a focused group discussion participant said:



“When my daughter fell off from a tree, I took her to the hospital without a penny on me. I was at the hospital and requested the group to help me. The following day, my group brought me the money which I used to settle her hospital bills. Had it not been this group even my daughter could die. I will say it is this group that has given life to my daughter. (Female FGD participant at Kanguol, December, 2020)

4.4.3 VSLAs Programme Contribution to Children’s Education in Rural Households

Here, the study sought to examine if the VSLAs programme to some extent has contributed to children’s education in rural households in the District. To analyse the impact of membership on children’s education in rural households in the District, the regression model was employed. From the results gathered in Table 4.12, membership has played a significant role in assisting respondents on their children’s education. The other covariates that influence education of children in rural households include the age, total number of children under the care of a respondent, as well as access to loans and savings. These findings confirm some study findings. A study by Ksoll et al. (2016) and Annan et al. (2013) found a positive impact of microfinance programme participation on education. Also according to the study by Khandker, et al. (2013) and Banerjee et al. (2015), children of microfinance clients are more likely to go to school and stay in school longer. A quasi-experimental approach used by Coleman (1999) as cited in Karlan & Zinman (2011), find a minimal impact on education expenditure which may be seen as a proxy for either access education or quality of schooling.



Table 4.12: Education in Rural Households in the District

Children's Education	Coefficient	S. E
Membership	0.451**	(0.214)
Age	0.114**	(0.251)
Gender	0.021	(0.253)
Religion	0.001	(0.014)
Children	0.356**	(0.010)
Income	0.412**	(0.124)
Savings	0.113	(0.050)
Access to Loan	0.245**	(0.142)
Constant	0.126	(0.117)
R-Square	81.50%	
R-Square Adj.	78.90%	

***Significance flagged at 5% level of significance. Standard errors in parenthesis.*

Similar to the previous sections, the impact of VSLA on the education of a respondent's household members was measured by gauging the perceptions of respondents about the educational status (improved, stayed the same," or "worsened") of their household members. A chi-square test is used to determine whether or not the respondents' household educational attainment is statistically different or otherwise, between the treatment and control group. Table 4.13 displays the Pearson chi-square test value of 120.64 with 1 degree of freedom which is statistically significant at 1% level. This means that participants' and non-participants' perceptions of their children's schooling are statistically different. Participation in VSLA is linked to an increase in children's educational outcomes. As a result, it may be argued that children belonging to



households of VSLA participants have a more positive impact on their education than their counterpart from families of non VSLA participants. The above finding is in line with an earlier study by Brannen (2010), who found that VSLA households spent significantly more on education than non-participants. This suggests that the VSLA programme increases school attendance and retention because parents can pay all fees.

Table 4.13: Chi-Square Test - Respondents' Perception towards their Children Education

Children Education		VSLA Status		Total
		Participants	Non-Participar	
Improve	Count	103	0	103
	Expected	60.1	42.9	103.0
	Count			
Not Improve	Count	51	110	161
	Expected	93.9	67.1	161.0
	Count			
Total	Count	154	110	264
	Expected	154.0	110.0	264.0
	Count			
Pearson Chi-Square		120.64***		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 42.92.

b. Computed only for a 2x2 table

Below are testimonies of how helpful VSLA has been to some of the FGD respondents:



“... I was able to pay my children school fees and other educational expenses through borrowing and selling part of my shares in the VSLA. This is an indication that, without the contribution of the association, my kids would be dropout by now....” (Female FGD participant at Chum, December, 2020)

Similarly another respondent said;

“when my husband’s brother got admission in Tumu Training College in 2015, we were asked to pay ‘twenty million’. My husband couldn’t raise the money so he told me to pick a loan from our group for him to pay the fees, which I did. After harvest, we sold our farm produce and repaid the loan. His brother is now a teacher and he respects me even more than my husband. He usually tells me that I have made him who he is today”, (Female FGD participant at Kanguol, December, 2020)

A participant said:

“....My son who is now a student in Yendi SHS wouldn’t have been able to go to school had it not been this group. When he was to go to school, I was not having anything so I pleaded with my group to assist me. My group understood me and gave me the money which I used to buy him his school provisions and fare him to school. During share out I had to use part of my shares to pay off the loan because I couldn’t repay the whole loan during the cycle. So, if even the group has not helped anybody at all, as for me, I will say the VSLA group has helped me a lot”, (Female FGD participant at Billaw, December, 2020)



In another focus group, a mother spoke about her experience with VSLA and its impact on her children's academic performance.

“...In the past, despite the fact that my children were enrolled in school, their grades were consistently below average. This low performance was mostly due to the students only attending school for half of the school day and working the rest of the day to help support the family. They were frequently too weary to study after school, so they didn't. However, the situation has improved recently. Due to my small business, I don't allow my children after school. They can relax, have fun, and get their homework done. I've recently seen an increase in their academic performance, and I hope this trend will continue in the future..” (Female FGD participant at Suke, December, 2020)

Participation in VSLA, according to the majority of participants' perspectives expressed in the focus group discussions, helps increase student enrolment and retention in schools.

4.5 Challenges Facing the VSLAs Programme in the Lambussie District

Here, the focus of the study was to examine the views of respondents on the key challenges facing the association. From the responses given, lateness and absenteeism to meeting, shorter loan repayments duration, default in loans repayment, disagreement or collusion as well as insufficient loan amount are the main challenges facing the VSLA in the District

According to a Staff:

“... we have members who are committed to their obligations. However, some of our members find it difficult to pay back their loans as a result of



low income level. In addition, some complain of the interest rate involved to be too high. Some of the members do not regularly attend our meeting. This sometimes makes the running of the associations very difficult.” (Care International Staff, 2020).

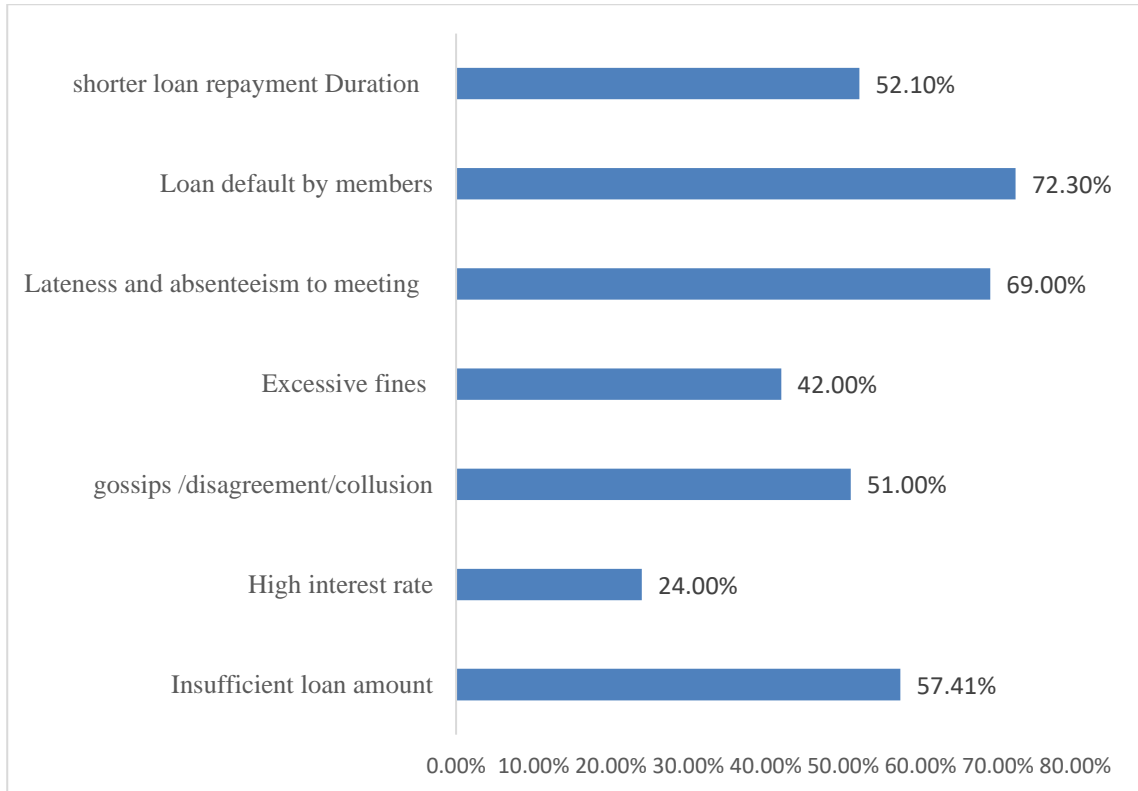


Figure 4.1: Challenges of VSLAs in the Lambussie District

From Table 4.14, the Chi-square value of 341.36 with 6 degrees of freedom is statistically significant at the 1% level. This implies that there is significant differences between the challenges (shorter loan repayment period, loan defaulters growing, lateness or absences from meetings, a high interest rate, and gossips or disagreements) faced by VSLA participants and non-participants. It was revealed that most of these challenges are peculiar to VSLA participants. This is partly so because non- participants are relatively new in VSLA; a period which is too short for them to have confronted

these challenges. These findings are in consonance with Young, (2010) and Zelalem, (2016) whose findings revealed similar challenges.

Table 4.14: Chi-Square Test - Respondents' Challenges Been Faced in VSLAs

Challenges Faced		VSLA Status		Total
		Participants	Non-Participants	
Shorter Loan	Count	52	0	52
Repayment Duration	Expected Count	32.3	19.7	52.0
Loan Defaulters	Count	72	0	72
by Members	Expected Count	44.7	27.3	72.0
Lateness and	Count	69	0	69
Absenteeism to	Expected Count	42.8	26.2	69.0
Meetings	Count	34	7	41
Excessive Fines	Expected Count	25.4	15.6	41.0
Gossips/Disagreements/Collusion	Count	0	51	51
	Expected Count	31.6	19.4	51.0
High Interest Rates	Count	0	24	24
	Expected Count	14.9	9.1	24.0
Insufficient Loan	Count	0	57	57
Amount	Expected Count	35.4	21.6	57.0
Total	Count	227	139	366
	Expected Count	227.0	139.0	366.0
Pearson Chi-Square	341.36***			

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.11.

4.6 Chapter Summary

Under this chapter, the study looked at the descriptive analysis, determinants of VSLA membership status, VSLAs programme contribution to households' food consumption and income, VSLAs programme influence on households' access to healthcare, VSLAs programme contribution to children's education in rural households as well as challenges facing the VSLAs programme in the Lambussie District. The research also glanced through some covariates that affect the various variables under investigation. Some of these covariates include gender, religion and age. The rest are number of



children, income level, savings, access to loans and other qualifications to having certain freedoms in the VSLA.



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

Under this section of the chapter, the study presented the summary of the entire work, key findings, conclusions and some recommendations. The study used convergent parallel mixed method design. Convergent parallel mixed method is a form of mixed methods design in which the researcher converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem. In addition, the study used 366 respondents as well as selected 5 other respondents thus 4 staff of Care International local partners and 1 Care International staff.

In the data analysis stage, the study used linear and binary logistic regression models aided by propensity score matching with self-treatment effects in addressing the study objectives.

5.1 Summary

VSLA as an informal microfinance model promotes locally self-managed savings and loan associations in rural areas. The VSLA programme is based on the belief that, the right approach to salvage the plight of the extremely poor, particularly women are to build their financial assets and skills through savings rather than creating artificial debt for them. By having access to microcredit, members can boast of a smooth but irregular income pattern. This will enable them to meet their basic household consumption needs rather than taking on significant debt they may not be able to repay (Hendricks & Chidiac, 2011). Improving women's access to financial services, particularly credit, is an important step towards livelihood sustainability (E. Littlefield et al., 2003).





In spite of these interventions poverty still persists. This raises critical questions as the incidence of poverty and poverty gap in the Upper West Region is about 70.7% which is three times the national figure (GSS, 2014). Even though the VSLA plays a vital role in enhancing the welfare of rural households, not much has been done about the assessment and documentation of its impacts in the Lambussie District. It is against this background that, this research sought to assess the VSLA's impact on welfare of households in the district.

The research investigated the determinants of one's membership in VSLA in the Lambussie District since not all the individuals who are willing to join have got the opportunity to pass the level for VSLAs. As can be seen in Table 4.5 of the ATT findings, people are desirous to join VSLAs since there is an attribution of higher average monthly household income of 169.63 Ghc (nearest neighbour matching) to 141.55 Ghc (kernel matching). By controlling for selection biases and combining the "Nearest Neighbour" and "Kernel matching" which showed the findings robust, it can be concluded that participation in village savings and loan programmes increases average monthly family income. The study's primary goal was to examine the effect of VSLA's programme on the consumption and income of families. It is shown in Table 4.9 that Pearson's chi-squared value is 349.49 when the significance level is 1%. This suggests that family nutrition and VSLA participation are linked, even when controlling for factors such as the number of children, savings, and access to credit in advance of the time of borrowing.

Moreover, the impact of VSLAs programme on households' access to healthcare in the district is a key element in life. The participant's age, savings, number of children, and gender of the respondents were discovered to be some large covariates on health care

access in the district. The Pearson's chi-square value of 298.86 in Table 4.11, at significance level of 1% indicates there is a positive correlation between improvement in household health and members' participation in VSLAs possibly based on the fact that, an expected 151 improvement scale as against 76 poorly improved on the programme is observed in Table 4.11.

Besides, the results from the study showed that there is a positive impact of VSLA programme on the education of children in rural households of VSLA members in the District. This finding was partly obtained from the regression model which was employed to survey the covariates: membership, age of member, number of children, the income level and accessibility to the loans in the program. This finding confirms some study results by Neponen (2003) and Littlefield et al. (2003) who found a positive impact of microfinance program on education in the lives of household members of VSLA participants. The observed difference between participants and non-participants with regard to perception towards their children education has a huge statistical significance due to the Pearson chi-square level of 120.64 at p – value of 4.58E-28 as seen in Table 4.13. It can be said that there is association between member's participation in VSLA and the improvement in their respective children's education no matter the age and number of the children.

Finally, the study also, investigated the challenges facing the VSLAs programme in the Lambussie District. The Pearson chi-square value of 341.36 with 6 degrees of freedom and a p-value of 1.106E-70 in Table 4.14 shows the observed difference between participants and non-participants, and therefore, it can be said that there is association between member's participation in VSLA and the aforementioned factors militating against the success of VSLAs in the district.



From the research work, the following key findings were obtained using the required tools aforementioned.

Firstly, the age of the respondents, household head status of the respondents, the number of children of the respondents, income level, marital status and educational category were judged to be the main determinants of VSLA Membership. Secondly, membership in VSLA had a positive and significant impact on households' food consumption and income. Thirdly, membership thus those of the respondents who were members of the scheme having access to loans from their savings were to, some extent, able to access health care in the district more easily than their counterparts who were not qualified members based on the rudiments defined through VSLA. More so, VSLA membership has positively significant impact on member's children education in the district. Finally, lateness and absenteeism to meeting, shorter loan repayments duration, default in loans repayment, disagreement or collusion as well as insufficient loan amount are the main challenges facing the VSLA in the District.

5.2 Conclusions

The study empirically examines the VSLA programme in Lambussie District to see whether it has a positive influence on households' welfare. The results suggest that participation in the programme has an overall positive impact on various indicators of household and individual welfare, including nutritional content in foods consumed, household income level, improvement in health care and improvement in education, which is manifested in other works by Busingye Kampemuka (2015) and Diaz-Martin et al.(2020).

The study findings show a link between participation in VSLA and improvement in households' welfare, thereby leading to the conclusion that households of VSLAs





beneficiaries have higher average monthly income and better improvement in food consumption, health and education than non- beneficiaries. Such favourable outcomes are especially heartening in light of the VSLA program's long-term sustainability. No donor funding is required for the VSLAs. VSLA seems to be an effective and long-term programme. Based on the sustainable Livelihood Framework which implies that the vulnerable (poor rural households) can manage adverse situations (poverty) by employing strategies (through VSLA) to harness the resources (credit) available for survival, and the theory of empowerment which posits that individuals and communities can be enabled and supported to take control over their lives, make their own decisions, and have agency in shaping their circumstances, it can be seen that the strategy of VSLA provide the opportunity for the rural households to improve their socio-economic well-being through access to credit. It can be seen from the study that those households that are part of the VSLA experienced positive impact on their children education, healthcare and others. If nothing else, VSLA might serve as a model for enhancing the welfare households in underdeveloped nations.

5.3 Recommendations

Based on the findings of this study, the following recommendations are suggested:

- ❖ Firstly, MMDAs must take up the development and integration of VSLA into their livelihood interventions initiatives since the research finding showed that VSLA is impacting positively on rural household welfare. The study clearly identified that there is the need to embark on community sensitisation through awareness creation on VSLA and creating ways to attract more community members in to VSLA.
- ❖ Secondly, Ghana Enterprises Agency (GEA) should ensure building the competence of front line workers and improving the working environments of

VSLA for successful implementation. As a result, VSLA participants should have access to frequent, timely, and need-based capacity-building workshops, and a positive working environment that draws more frontline players.

- ❖ VSLAs rely on their limited funds to issue short term loans to its members. MASLOC must link these groups to microfinance institutions so that the groups can have the opportunity secure savings in banks and other formal financial institutions. This will also enable them to get group long term loans to grow their IGAs.
- ❖ Lastly, the study recommends further studies be conducted using longitudinal approach rather than the approach used by this research to get more reliable results. This study could not use the longitudinal approach due to time constraint.



REFERENCES

- Abdul-Moomin Et Al. (2014). Village Savings and Loans Associations and Livelihood of People in Rural Communities in the Bole District of Ghana: A Case of Village Savings And Loans Associations Supported By Jaksally Youth Group. *International Journal of Development Research*, 4(1), 118–126.
- Abdullahi Shagali, A., Sani Ibrahim, S., & Mukhtar, S. (2020). Contemporary issues on the sustainable rural development in Sub-Saharan Africa: A survey of salient literature.
- Adusei, M. (2013). Determinants of credit union savings in Ghana. *Journal of International Development*, 25(1), 22–30.
- Affum, F. (2020). A Study of Microfinance and Its Impact on the Livelihoods of Market Women; Evidence from Yilo Krobo Municipality, Ghana. *European Scientific Journal ESJ*, 16(16). <https://doi.org/10.19044/esj.2020.v16n16p216>
- Agyapong, D., & Bedjabeng, K. A. (2019). External debt stock, foreign direct investment and financial development: Evidence from African economies. *Journal of Asian Business and Economic Studies*.
- Akoto-Baako, H. (2018). Perceived Influence of Large Class Size and Psychological classroom environment on students academic performance. University of Cape Coast.
- Al, A.-M. et. (2014). Vulnerability in the face of climate change and variability: Perceptions and Off-Farm Copping Strategies among Farm Households in Northern Rural Savannah. Ghana. *International Journal of Humanities and Social Science Invention*, 6(5), 33–42.



- Al Hassan, A., Lewis, R. B., Küpers, H., Lin, W.-H., Bahrami, D., Krause, T., ... Geelhaar, L. (2018). Determination of indium content of GaAs/(In, Ga) As/(GaAs) core-shell (-shell) nanowires by x-ray diffraction and nano x-ray fluorescence. *Physical Review Materials*, 2(1), 14604.
- Alemu, B. A. (2006). Microfinancing and poverty reduction in Ethiopia. *A Paper Prepared under the Internship Program of IDRC, ESARO, Nairobi*.
- Alhassan, A.-R., & Akudugu, M. A. (2012). Impact of microcredit on income generation capacity of women in the Tamale Metropolitan area of Ghana. *Journal of Economics and Sustainable Development*, 3(5), 41–48.
- Allen, H. (2006). Village Savings and Loans Associations-sustainable and cost-effective rural finance. *Small Enterprise Development*, 17(1), 61.
- Allen, H., & Hobane, P. (2004). Impact evaluation of kupfuma ishungu. *Arusha, Tanzania. CARE International*.
- Allen, H., & Staehle, M. (2006). Village Savings and Loan Associations (VSLAs): Programme guide and field operations manual. *CARE International*.
- Allen, H., & Staehle, M. (2007). *Village savings and loan associations: a practical guide*. Intermediate Technology Publications Ltd.
- Altay, A. (2007). The challenge for global women poverty: Microfinance (or microcredit) as a solution for women poverty in Turkey. In *International Conference on Globalization and Its Discontents* (pp. 4–21).





- Annan, J., Karlan, D., & Singleton, T. (2013). Does microcredit increase education investment in Ghana? Evidence from a randomized evaluation. *Journal of Development Economics*, 100(1), 279-288.
- Anderson, S. W., & Dekker, H. C. (2005). Management control for market transactions: The relation between transaction characteristics, incomplete contract design, and subsequent performance. *Management Science*, 51(12), 1734–1752.
- Antoh, E. F., Mensah, J. V., Edusah, S. E., & Enu-Kwesi, F. (2015). Analysis of the features and operations of microfinance institutions in Ghana. *International Journal of Economics, Commerce and Management*, 3(11).
- Anwuni, D. Y. (2018). Micro Credit and Poverty Reduction in the Jirapa District of the Upper West Region of Ghana.
- Anyango, E. (2006). CARE Malawi central region livelihood security project impact assessment report on village savings and loans component (VS&L). *Care International*.
- Anyango, E., Esipisu, E., Opoku, L., Johnson, S., Malkamaki, M., & Musoke, C. (2006). Village savings and loan associations in Zanzibar. *London: Department for International Development (DFID)*.
- Anyango, L. (2005). Teen mothers left to their own devices. *Daily Nation, Nairobi Media Group Limited*, 10.
- Arnoff, E. (2011). A literature review on the conceptualization of women's empowerment.

- Arpino, B., & Aassve, A. (2014). The role of villages in households' poverty exit: Evidence from a multilevel model for rural Vietnam. *Quality & Quantity*, 48(4), 2175–2189.
- Ashenafi, R. (2017). The Role of Village Saving & Loan Association (Vsla) In Improving Members' Livelihood: The Case of VSLA Groups in Basona Worana Woreda Of North Shoa Zone, Ethiopia.
- ASRAT, M. (2016). The Contribution of Participation in Saving and Lending Groups (SLG) To The Household Welfare The Case Of Yekokeb Berehan Program For Highly Vulnerable Children (Hvc), East Shewa Zone, Adama City, Ethiopia. St. Mary's University.
- Aston, T. (2014). CARE International Advocacy and Influencing. A Review of Pathways to Success. *Independent Consultant*.
- Awaki, A. (2015). Effect Of Microfinance On The Livelihood Of Rural Women: The Case Of Zabzugu District.
- Awoyemi, E., & Kosiwor, K. (2020). Effect Of Participation In Village Savings And Loans Associations On The Financial Performance Of Rural Households In Northern Region, Ghana.
- Awuah, S. B., & Addaney, M. (2016). The Interactions between Microfinance Institutions and Small and Medium Scale Enterprises in the Sunyani Municipality of Ghana. *Asian Development Policy Review*, 4(2), 51–64.
<https://doi.org/10.18488/journal.107/2016.4.2/107.2.51.64>
- Bali Swain, R. (2006). Microfinance and Women's empowerment: evidence from the self help group bank linkage programme in India.



- Barnes, C., Keogh, E., & Nemarundwe, N. (2001). Microfinance program clients and impact: An assessment of Zambuko Trust, Zimbabwe. *Washington, DC: Aims.*
- Banerjee, A., Duflo, E., Glennerster, R., & Kinnan, C. (2015, January 1). The Miracle of Microfinance? Evidence from a Randomized Evaluation. *American Economic Journal: Applied Economics*, 7(1), 22–53.
<https://doi.org/10.1257/app.20130533>
- Becker, S. O., & Ichino, A. (2002). Estimation of average treatment effects based on propensity scores. *The Stata Journal*, 2(4), 358–377.
- Beyene, N. L., & Dinbabo, M. F. (2019). An empirical evaluation of the link between women participation in village savings and loans association (VSLA) and Poverty Reduction in Ethiopia. *Journal of Reviews on Global Economics*, 8, 566–580.
- Boahene, S. H., Dasah, J., & Agyei, S. K. (2012). Credit risk and profitability of selected banks in Ghana. *Research Journal of Finance and Accounting*, 3(7), 6–14.
- Boateng, A. A. (2015). An Examination of Challenges and Prospects of Microfinance Institutions in Ghana. *Issn*, 6(4), 2222–1700. Retrieved from www.iiste.org
- Boateng, G. O., Boateng, A. A., & Bampoe, H. S. (2015). Microfinance and poverty reduction in Ghana: Evidence from policy beneficiaries. *Review of Business & Finance Studies*, 6(1), 99–108.
- Boyce, C., & Neale, P. (2006). Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input.



- Brannen, C. F. (2010). An impact study of the Village Savings and Loan Association (VSLA) program in Zanzibar, Tanzania.
- Bryson, A., Dorsett, R., & Purdon, S. (2002). The use of propensity score matching in the evaluation of active labour market policies.
- Buntaine, M. T. (2011). Does the Asian Development Bank respond to past environmental performance when allocating environmentally risky financing? *World Development*, 39(3), 336–350.
- Busingye Kampemuka, S. (2015). A case study of a Village Saving and Loan Association and its relation to poverty reduction among rural households in Kyabakara, Uganda. Universitetet i Agder; University of Agder.
- Buss, T. F. (2005). Microcredit in sub-Saharan Africa: A symposium. *Journal of Microfinance/ESR Review*, 7(1), 2.
- Caliendo, M., & Kopeinig, S. (2005). Some practical guidance for the implementation of propensity score matching (Discussion Paper No. 1588). Bonn, Germany: *Institute for the Study of Labor*.
- Caliendo, M., & Kopeinig, S. (2008). Some practical guidance for the implementation of propensity score matching. *Journal of Economic Surveys*, 22(1), 31–72.
- Campbell, G., Lemire, B., & Pearson, R. (2020). *Women and credit: researching the past, refiguring the future*. Routledge.
- Carney, D. (1998). Sustainable livelihoods. *Sustainable Livelihoods: What Contribution Can We Make*.



- Carswell, G. (1997). Agricultural intensification and rural sustainable livelihoods: a 'think piece'.
- Cassidy, R., & Fafchamps, M. (2015). Can community-based microfinance groups match savers with borrowers? Evidence from rural Malawi.
- Chambers, R. (1987). Sustainable livelihoods, environment and development: putting poor rural people first.
- Chambers, R., & Conway, G. (1992). *Sustainable rural livelihoods: practical concepts for the 21st century*. Institute of Development Studies (UK).
- Cheston, S., & Kuhn, L. (2002). Empowering women through microfinance. *Draft, Opportunity International*, 64, 1–64.
- Chikwira, C., Vengesai, E., & Mandude, P. (2022, September 5). The Impact of Microfinance Institutions on Poverty Alleviation. *Journal of Risk and Financial Management*, 15(9), 393. <https://doi.org/10.3390/jrfm15090393>
- Chilimba, M. T., Dunga, H., & Mafini, C. (2020). The Impact of Microfinance Programme Participation on Household Food Security In Malawi. *International Journal of Economics and Finance Studies*, 204–222. <https://doi.org/10.34109/ijefs.202012113>
- Chowdhury, M., Mosley, P., & Simanowitz, A. (2004). The social impact of microfinance. *Journal of International Development*, 16(3), 291–300. <https://doi.org/10.1002/jid.1087>



- Choudhury, A. H., Das, A., & Rahman, A. (2017, June 30). The Effectiveness of Micro-credit Programmes Focusing on Household Income, Expenditure and Savings: Evidence from Bangladesh. *Journal of Competitiveness*, 9(2), 34–44. <https://doi.org/10.7441/joc.2017.02.03>
- Cimadamore, A., Koehler, G., & Pogge, T. (2016). *Poverty and the Millennium Development Goals: A critical look forward*. Zed Books Ltd.
- Coleman, B. E. (1999). The impact of group lending in Northeast Thailand. *Journal of Development Economics*, 60(1), 105–141.
- Conway, G. R. (1985). Agroecosystem analysis. *Agricultural Administration*, 20(1), 31–55.
- Creswell, J. W. (2014). *Qualitative, quantitative and mixed methods approaches*. Sage.
- Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2008). Does Microfinance regulation curtail profitability and outreach? *NYU Wagner Research Paper*, (2011–06).
- Daley-Harris, S. (2009). State of the Microcredit Summit Campaign Report 2009, Microcredit Summit Campaign. *RESULTS Educational Fund, Washington DC*.
- De Aghion, B. A., Armendáriz, B., & Morduch, J. (2007). The economics of microfinance.
- Dercon, S., Gilligan, D. O., Hoddinott, J., & Woldehanna, T. (2009). The impact of agricultural extension and roads on poverty and consumption growth in fifteen Ethiopian villages. *American Journal of Agricultural Economics*, 91(4), 1007–1021.



- DfID, U. K. (1999). Sustainable livelihoods guidance sheets. *London: DFID*, 445.
- Díaz-Martin, L., Gopalan, A., Guarnieri, E., & Jayachandran, S. (2020). Greater than the sum of the parts? Evidence on mechanisms operating in women's groups. *Unpublished Manuscript*.
- Dillon, A. (2011). The effect of irrigation on poverty reduction, asset accumulation, and informal insurance: Evidence from Northern Mali. *World Development*, 39(12), 2165–2175.
- Dunn, E. W., & Arbuckle, J. G. (2001). Microcredit and microenterprise performance: impact evidence from Peru. *Enterprise Development & Microfinance*, 12(4), 22–33.
- Ebojei, C. O., Ayinde, T. B., & Akogwu, G. O. (2012). Socio-economic factors influencing the adoption of hybrid maize in Giwa Local Government Area of Kaduna State, Nigeria.
- Egyir, I. S. (2010). *Rural women and microfinance in Ghana: challenges and prospects*.
- Ellis, A. (2007). *Gender and economic growth in Tanzania: Creating opportunities for women*. World Bank Publications.
- Ellis, F., & Allison, E. (2004). Livelihood diversification and natural resource access. *Overseas Development Group, University of East Anglia*.
- Eoin, G. (2005). Microfinance in Africa: Is it either the problem or the solution? *World Development*, 25(7), 1081–1093.



- Fant, E. K. (2011). Fighting poverty with micro-credit. Experiences from Micro-Finance and small-loan center (MASLOC) in Savelugu/Nanton District of Northern Ghana.
- Filmer, D., & Pritchett, L. H. (2001). Estimating wealth effects without expenditure data—or tears: an application to educational enrollments in states of India. *Demography*, 38(1), 115–132.
- Fletschner, D. (2009). Rural women's access to credit: market imperfections and intrahousehold dynamics. *World Development*, 37(3), 618–631.
- Fuseini, M. N., Enu-Kwesi, F., & Sulemana, M. (2019). Poverty reduction in Upper West Region, Ghana: role of the livelihood empowerment against poverty programme. *Development in Practice*, 29(6), 760–773.
- Gertler, M., & Karadi, P. (2011). A model of unconventional monetary policy. *Journal of Monetary Economics*, 58(1), 17–34.
- Ghatak, M., & Guinnane, T. W. (1999). The economics of lending with joint liability: theory and practice. *Journal of Development Economics*, 60(1), 195–228.
- Goetz, A. M., & Gupta, R. Sen. (1996). Who takes the credit? Gender, power, and control over loan use in rural credit programs in Bangladesh. *World Development*, 24(1), 45–63.
- Gujarati, D. N. (2011). *Econometrics by example* (Vol. 1). Palgrave Macmillan New York.
- Gujarati, D. N., Bernier, B., & Bernier, B. (2004). *Econométrie*. De Boeck Brussels.



- Guo, S., Barth, R. P., & Gibbons, C. (2006). Propensity score matching strategies for evaluating substance abuse services for child welfare clients. *Children and Youth Services Review*, 28(4), 357–383.
- Hamadziripi, A. (2008). *Village Savings and Loans Associations in Niger: Mata Masu Dubara Model of Remote Outreach Case Studies* :
- Hardi, M. (2019). Contribution of village savings and loan association scheme to the livelihood empowerment of women in Nadowli-Kaleo district in Upper West region.
- Hassan, M. S., & Ibrahim, K. (2015). Sustaining small entrepreneurs through a microcredit program in Penang, Malaysia: a case study. *Journal of Human Behavior in the Social Environment*, 25(3), 182–191.
- Hendricks, L., & Chidiac, S. (2011). Village savings and loans: a pathway to financial inclusion for Africa's poorest households. *Enterprise Development & Microfinance*, 22(2), 134–146.
- Hishigsuren, G., Beard, B., & Opoku, L. (2004). Final Report Client Impact Monitoring Findings from Sinapi Aba Trust. *Ghana for the Institute for Development Studies (IDS) Ghana*.
- Hochreiter, K. (2013). Effective and Sustainable Programs of Change: A Case Study of Gulu Women's Economic Development and Globalization (GWED-G).
- Hossain, M. (1988). *Credit for alleviation of rural poverty: The Grameen Bank in Bangladesh* (Vol. 65). Intl Food Policy Res Inst.





- Hugh, A. (2002). CARE International's Village Savings and Loan Programmes in Africa-Microfinance for the rural poor that works. CARE.
- Hunt, J. (2002). Reflections on microfinance and women's empowerment. *Women, Gender And Development In The Pacific: Key Issues*, 13.
- Islam, K. M. A. (2016). Impact of Micro-Financing on Women Empowerment in Bangladesh. *The Millennium University Journal*, 1(1), 1–18.
- Jaha, I. R., & Sika-Bright, S. (2015). Challenges of the Livelihood Empowerment Against Poverty programme in the Upper West region of Ghana: the institutional perspective. *International Journal of Development*, 2(1).
- Jefferies, D., Warburton, H., Oppong-Nkruma, K., & Freduh Antoh, E. (2005). Wealth ranking study of villages in peri-urban areas in Kumasi, Ghana.
- Jensen, J., & Thompson, S. (2016). The incident command system: a literature review. *Disasters*, 40(1), 158–182.
- Jensen, R. R., & Shumway, J. M. (2010). Sampling our world. *Research Methods in Geography: A Critical Introduction*, 6, 77.
- Johnson, S. A. (1997). The effect of bank reputation on the value of bank loan agreements. *Journal of Accounting, Auditing & Finance*, 12(1), 83–100.
- Johnson, S., Malkamaki, M., & Wanjau, K. (2006). Tackling the 'frontiers' of microfinance in Kenya: the role for decentralized services. *Enterprise Development & Microfinance*, 17(3), 41–53.
- Johnson, S., & Rogaly, B. (1997). *Microfinance and poverty reduction*. Oxfam.

- Josily, S. (2006). Women Empowerment Through Microfinance in Dindigul District of Tamil Nadu. *An Economic Analysis, M. Sc. Thesis, University of Agriculture Science, Dharwad, India.*
- Jung, P., & Eriksson, P.-E. (2006). Ten Microfinance Loan Obligations—Structured Finance for Microfinance Investments.
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435–464.
- Kabeer, N. (2001). Discussing women's empowerment: Theory and practice.
- Kabeer, N. (2005). Is microfinance a 'magic bullet' for women's empowerment? Analysis of findings from South Asia. *Economic and Political Weekly*, 4709–4718.
- Karlan, D., Knight, R., & Udry, C. (2012). *Hoping to win, expected to lose: Theory and lessons on micro enterprise development*. National Bureau of Economic Research.
- Karlan, D., & Zinman, J. (2011). Microcredit in theory and practice: Using randomized credit scoring for impact evaluation. *Science*, 332(6035), 1278–1284.
- Karubi, N. P. (2006). Development, microcredit and women's empowerment. *A Case Study of Market and Rural Women in Southern Nigeria. PhD (Sociology) Thesis, University of Canterbury.*



- Katabarwa, C. F. (2009). Community Based Savings Micro Finance And Household Income Poverty Eradication In Uganda: A Case Study Of Busimbi Sub County, Mubende District.". Citeseer.
- Karlan, D., & Zinman, J. (2011, June 10). Microcredit in Theory and Practice: Using Randomized Credit Scoring for Impact Evaluation. *Science*, 332(6035), 1278–1284. <https://doi.org/10.1126/science.1200138>
- Khandker, S. R. (2005). Microfinance and poverty: Evidence using panel data from Bangladesh. *The World Bank Economic Review*, 19(2), 263–286.
- Khandker, S. R., Barnes, D. F., & Samad, H. A. (2010). *Energy poverty in rural and urban India: are the energy poor also income poor?* The World Bank.
- Khandker, S. R., Samad, H. A., & Ali, R. (2013, January 1). *Does Access to Finance Matter in Microenterprise Growth? Evidence from Bangladesh*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2206181.
- Kolenikov, S., & Angeles, G. (2008). On costs of repeated clustered surveys.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Krantz, L. (2001). The sustainable livelihood approach to poverty reduction. *SIDA. Division for Policy and Socio-Economic Analysis*, 44, 1–38.
- Ksoll, C., Lilleør, H. B., Lønborg, J. H., & Rasmussen, O. D. (2016). Impact of Village Savings and Loan Associations: Evidence from a cluster randomized trial. *Journal of Development Economics*, 120, 70–85.



- Kumar, A. (2009). Who gambles in the stock market? *The Journal of Finance*, 64(4), 1889–1933.
- Lakwo, A. (2008). Poverty eradication dilemma: Understanding poverty dynamics in Nebbi District, Uganda. *Africa Development*, 33(2).
- Latif, A., Nazar, M. S., Mehmood, T., Shaikh, F. M., & Shah, A. A. (2011). Sustainability of micro credit system in Pakistan and its impact on poverty alleviation. *Journal of Sustainable Development*, 4(4), 160.
- Lambongang, Abiodun, M., Awoyemi, E., & Kosiwor Sokpor, K. (2020). Effect of Participation in Village Savings and Loans Associations on the Financial Performance of Rural Households in Northern Region, Ghana. *International Journal of Publication and Social Studies*, 5(2), 178–188. <https://doi.org/10.18488/journal.135.2020.52.178.188>
- Ledgerwood, J. (1999). Sustainable banking with the poor microfinance handbook.
- Lipton, M., & Ahmed, I. (1997). Impact of structural adjustment on sustainable rural livelihoods: a review of the literature.
- Littlefield, E., Morduch, J., & Hashemi, S. (2003). Is microfinance an effective strategy to reach the millennium development goals? *Focus Note*, 24(2003), 1–11.
- Littlefield, E., & Rosenberg, R. (2004). Microfinance and the Poor. *Finance & Development*, 41(002).



- Littlefield, M. B. (2005). The Black Church and Community Development and Self-Help: The Next Phase of Social Equality. *Western Journal of Black Studies*, 29(4).
- Luttrell, C., & Moser, C. (2004). Gender and social protection. *London: Overseas Development Institute*.
- Lwoga, C., Maximabali, F., Rutherford, S., Mutesasira, L., Safe, S., Gogadi, B., ... Narcis, J. (1999). Use and Impact of Savings Services among the Poor in Tanzania. Microsave-Market-Led Solutions for Financial Services, Dar es Salaam
- Maggiano, G. (2006). The Impact of Rural Microfinance: Measuring Economic, Social and Spiritual Development in Kabale, Uganda.
- Marconi, R., & Mosley, P. (2004). The FINRURAL impact evaluation service—a cost-effectiveness analysis. *Enterprise Development & Microfinance*, 15(3), 18–27.
- Marcus, R, Porter, B., & Harper, C. (1999). Money Matters: Understanding Microfinance Save the Children. London.
- Marcus, Rachel, Porter, B., & Harper, C. (1999). *Money matters: understanding microfinance*. Save the Children London.
- Masanjala, W. H. (1997). *Socio-economic Impact Study of FINCA--Malawi*. University of Malawi, Centre for Social Research.
- Mayoux, L, & Hartl, M. (2009). Microfinance and women's empowerment: Virtuous spirals. Gender and rural microfinance: Reaching and empowering women. *International Fund for Agricultural Development (IFAD)*.



- Mayoux, Linda. (2001). Tackling the down side: Social capital, women's empowerment and micro-finance in Cameroon. *Development and Change*, 32(3), 435–464.
- Mayoux, Linda. (2006). Women's Empowerment through Sustainable Microfinance: Rethinking "Best Practice." *Eldis Gender Guide*, 47–62.
- Mensah, J., & Antoh, E. F. (2005). Reflections on Indigenous Women's Organisations in Sub-Saharan Africa: A Comparative Study in Brong Ahafo Region, Ghana. *Singapore Journal of Tropical Geography*, 26(1), 82–101.
- MkNelly, B., & Dunford, C. (1999). Freedom From Hunger.
- Morduch, J. (1999). The microfinance promise. *Journal of Economic Literature*, 37(4), 1569–1614.
- Morgan, D. L. (2002). Focus group interviewing. *Handbook of Interview Research: Context and Method*, 141–159.
- Mosedale, S. (2003). Impact Assessment Research Centre Assessing Empowerment. *IARC Administrator, Institute for Development Policy and Management*, 1(3), 1–23.
- Mukhooli, C. (2015). Impact of microedit programs on women's empowerment in East Africa (Uganda, Kenya and Tanzania). Murdoch University.
- Nabayinda, J. (2014). Microfinance and women empowerment: To what extent has access to loans led to a change in gender responsibilities at the household level: A case study of women in Ddwaniiro sub county-Rakai district of Uganda. Universitet i Agder/University of Agder.



- Neponen, H. (2003). ASA-GV microfinance impact report 2003. *Trihcirappalli, India: The Activists for Social Alternatives*.
- Ngozi Orame, Anigbogu, T. U., & Nwankwo, F. O. (2020). *Influence of Village Savings and Loan Associations (VSLA) on Poor Household Wellbeing in Ayamelum Local Government Area, Anambra State. (2015- 2019)*. 3(1), 1–17.
- Nili, A., Tate, M., & Johnstone, D. (2017). A framework and approach for analysis of focus group data in information systems research. *Communications of the Association for Information Systems*, 40, Article-number.
- Noreen, S. (2011). Role of microfinance in empowerment of female population of Bahawalpur district. In *International Conference on Economics and Finance Research* (Vol. 4, pp. 65–71).
- Nsungwa-Sabiiti, J., Balyeku, A., Kiguli, J., Byaruhanga, R., Nankunda, J., Nsabagasani, X., & Luwagga, L. (2008). Home and Community Newborn Care Practices in Uganda. *Designing by Dialogue-Formative Research towards a Behavior Change Communication Strategy*.
- Ohemeng, A. (2017). *An Integrated Education Intervention Improves the Feeding Frequency of Infants and Young Children in the Upper Manya Krobo District of Ghana*. <https://journals.ug.edu.gh/index.php/sdj/article/view/717>
- Okibo, B. W., & Makanga, N. (2014). Effects of micro finance institutions on poverty reduction in Kenya. *International Journal of Current Research and Academic Review*, 2(2), 76–95.



- Osei-Assibey, E., & Baah-Boateng, W. (2015). Determinants Of Incidence And Depth Of Poverty In Ghana. *Globalization and Development Volume III: In Search of a New Development Paradigm*, 3, 194.
- Otero, M. (1999). Bringing development back, into microfinance. *Journal of Microfinance/ESR Review*, 1(1), 2.
- Owusu, G., & Oteng-Ababio, M. (2015). Moving unruly contemporary urbanism toward sustainable urban development in Ghana by 2030. *American Behavioral Scientist*, 59(3), 311–327.
- Oxaal, Z., & Baden, S. (1997). *Gender and empowerment: definitions, approaches and implications for policy*. Bridge, Institute of Development Studies.
- Parpart, J., Rai, S. M., & Staudt, K. (2002). Rethinking empowerment. *Gender and Development in a Global/Local World*, 97.
- Patel, K., Sharma, R., & Singh, P. (2023). Community-Based Livelihood Interventions and Income Diversification in Rural Areas. *Journal of Development Economics*.
- Pitt, M. M., & Khandker, S. R. (1998). The impact of group-based credit programs on poor households in Bangladesh: Does the gender of participants matter? *Journal of Political Economy*, 106(5), 958–996.
- Pitt, M. M., Khandker, S. R., Chowdhury, O. H., & Millimet, D. L. (2003). Credit programs for the poor and the health status of children in rural Bangladesh. *International Economic Review*, 44(1), 87–118.
- Pronyk, P. M., Hargreaves, J. R., & Morduch, J. (2007). Microfinance programs and better health: prospects for sub-Saharan Africa. *JAMA*, 298(16), 1925–1927.



- Rahman, Aminur. (2004). Microcredit and poverty reduction: Trade-off between building institutions and reaching the poor. *Livelihood and Microfinance. Anthropological and Sociological Perspectives on Savings and Debt*, 25–42.
- Rahman, Atiqur, & Westley, J. (2001). The challenge of ending rural poverty. *Development Policy Review*, 19(4), 553–562.
- Sadick et, A. (2016). Village Saving and Loan Associations (VSLA) as a means of Microfinance for Livelihood Development of Rural Women and Poverty Reduction. *Africa Development and Resources Research Institute (Adrri) journal of arts and social sciences*, 1(3), 33–43. Retrieved from <http://www.prudentjournals.org/IRJAFS>
- Samer, S., Majid, I., Rizal, S., Muhamad, M. R., Sarah-Halim, & Rashid, N. (2015). The Impact of Microfinance on Poverty Reduction: Empirical Evidence from Malaysian Perspective. *Procedia - Social and Behavioral Sciences*, 195, 721–728. <https://doi.org/10.1016/j.sbspro.2015.06.343>
- Sarah, M. A. K. (2020). Determinants of Socio-Economic Empowerment of Karamojong Women in Napak District, Uganda. Tangaza University College.
- Schreiner, M. (2001). Informal finance and the design of microfinance. *Development in Practice*, 637–640.
- Schreiner, M., & Colombet, H. H. (2001). From urban to rural: Lessons for microfinance from Argentina. *Development Policy Review*, 19(3), 339–354.
- Scoones, I. (1998). Sustainable rural livelihoods: a framework for analysis.



- Service, G. S. (2014). *2010 Population & Housing Census Report: Urbanisation in Ghana*. Ghana Statistical Service.
- Serrat, O. (2017). Understanding and Developing Emotional Intelligence. In *Knowledge Solutions* (pp. 329-339). Singapore: Springer.
https://doi.org/10.1007/978-981-10-0983-9_37
- Shah, D. R. S. U. L. M., Shah, D. R. A. U. L. M., & Shah, S. A. A. L. I. (2019). Examining The Social Impact of Microfinance on Poverty Reduction. *Journal of Business & Tourism*, 5(1), 11–23.
- Sharan B, M. (2002). Introduction to qualitative research. *Qualitative Research in Practice: Examples for Discussion and Analysis*, 1(1), 1–17.
- Smith, J., Johnson, A., & Lee, M. (2023). The Role of Education in Earning Capacity: A Longitudinal Study. *Journal of Economic Perspectives*.
- Sievers, M., & Vandenberg, P. (2007). Synergies through linkages: Who benefits from linking micro-finance and business development services? *World Development*, 35(8), 1341–1358.
- Simanowitz, A., & Walter, A. (2002). *Ensuring Impact: Reaching the Poorest While Building Financially Self-Sufficient Institutions, and Showing Improvement in the Lives of the Poorest Families: Summary of Article Appearing in Pathways Out of Poverty: Innovations in Microfinance for the Poor*.
- Ssendi, L., & Anderson, A. R. (2009). Tanzanian micro enterprises and micro finance: The role and impact for poor rural women. *The Journal of Entrepreneurship*, 18(1), 1–19.



- Tashakkori, A., & Teddlie, C. (2003). Issues and dilemmas in teaching research methods courses in social and behavioural sciences: US perspective. *International Journal of Social Research Methodology*, 6(1), 61–77.
- Uddin, K.N., & Islam, S., (2021). A Thesis on The Impact of Microfinance on Poverty Reduction in Rural Area in Bangladesh: Focus on Grameen Bank.
- Versluysen, E. (1999). *Defying the odds: Banking for the poor*. Kumarian Press West Hartford, CT.
- Wiles, J. L., Rosenberg, M. W., & Kearns, R. A. (2005). Narrative analysis as a strategy for understanding interview talk in geographic research. *Area*, 37(1), 89–99.
- Wolfenbarger, M., & Gilly, M. C. (2003). Dimensionalizing, measuring and predicting detail quality. *Journal of Retailing*, 79(3), 183–198.
- Wordofa, M. G., & Sassi, M. (2018). Impact of farmers’ training centres on household income: Evidence from propensity score matching in Eastern Ethiopia. *Social Sciences*, 7(1), 4.
- Xu, Y., Gao, J., Zhou, Z., Xue, Q., Yang, J., Luo, H., ... Chen, G. (2015). Measurement and explanation of socioeconomic inequality in catastrophic health care expenditure: evidence from the rural areas of Shaanxi Province. *BMC Health Services Research*, 15(1), 1–10.
- Yamane, T. (1973). *Research Methodology/Sample Size*. Florida: University Of Florida.



- Yeboah, E. (2017). The Impact of Microfinance on Grassroot Development: Evidence from Smes in Kwabre East District of Ashanti Region of Ghana. *Open Journal of Business and Management*, 5(4), 577–591.
- Young, S. (2010). The “moral hazards” of microfinance: restructuring rural credit in India. *Antipode*, 42(1), 201–223.
- Yu, J., Han, X., Chen, B., & Ren, J. (2020). Estimating the impact of poverty alleviation microcredit on the income of poor households using the propensity score matching method: evidence from China. *Agriculture*, 10(7), 293.
- Zakaria, H. (2009). Socio-Economic Analysis of Livelihood Strategies of Rural Women Beneficiaries of Microcredit in the Tolon/Kumbungu district of the northern region of Ghana.
- Zaman, H. (1999). *Assessing the poverty and vulnerability impact of micro-credit in Bangladesh: A case study of BRAC* (Vol. 2145). Citeseer.
- Zelalem, E. (2016). Women Economic Empowerment Trough Village Saving And Loan Association: The Case Of Loka Abaya District, Sidama Zone Of Snnpr. St. Mary’s University.



APPENDICES

APPENDIX A: QUESTIONNAIRE

Introduction:

The information provided during this interview will be treated as highly confidential and is collected for research purposes only. Participation in this study will not affect one's membership or role in the VSLA programme. The purpose of this study is simply to gain a better understanding of the impacts of the programme, its challenges and how it may be improved so as to better serve its members. Therefore, we ask you to feel at ease and to provide frank and honest. You are free to opt out at any point of the interview. Are you willing to participate in the interview? ☐ Yes ☐ No

Section A: Respondent's Background

A1. Questionnaire number _____ A2. Date of interview: ____/____/____

A3. Village Name _____ A4. Respondent Name: _____

A5. Sex: ☐ Male ☐ Female A6. Total Household Size _____

A7 Are you the head of your household (HH)? ☐ Yes ☐ No.

A8. Marital status: ☐ Married ☐ Separated ☐ Widowed ☐ Single
☐ Divorced

A9 If married, is your husband polygamous? ☐ Yes ☐ No. (**For females Only**)

A10. Name of VSLA _____

A11. For how long have you been a member of this VSLA group?

☐ less than or equal to 3 months ☐ 4 -11 months ☐ 1-2 years ☐ 3-5 years ☐
more than 5 years

A12. Why couldn't you join VSLA earlier than you did? **Tick all that apply.**



- ☐ Was Not interested ☐ No time to attend VSLA meetings ☐ Spouse didn't
permit me to join ☐ I could not pay dues (social fund) and other contribution
☐ I had no money to save ☐ others, specify:-----



Complete the

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household registers below. Start with Household Head (HH).

S/N	B1		B2	B3	B4	B5	B6	B6	B7
B0	NAM		Relationship of [Name] to HH (See Codes Below)	Sex of [Name] 1=Male 2=Female	Age of [Name] If <=5years, go to next member	Marital status of [Name] Skip if B4 <=10 (see codes below)	Main occupation of [Name] (see codes below)	Highest level of Education of [Name] 1=None 2=Primary 3=JHS 4=Middle/SHS 5=Tertiary	Is [Name] currently attending school? (skip, if B7=1) 1=Yes 0=No
1									
2									
3									
4									

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5	
6	
7	
8	

CODES

Relationship	Marital Status	Main Employment
Household	Married	student.....
Spouse.....	Separated	Agriculture(own production).....
Son/daught	Widowed.....	Waged labour.....
Parent of H	Single.....	Formal employment.....
Other relati	Divorced.....	Handicraft/Artisan.....
No relation		Trading(raw &processed goods)... Unemployed.....

Section C. Major sources of income

<i>Sources of income</i>	How many of your household members earned money from this [activity]	How many months did this [activity] generate income? (Gh¢)	How much money is made from this [activity] each month? (Gh¢)
RECALL PERIOD; LAST 12 MONTHS			
Agric wage labour			
Non-agric; wage labour			
Skilled labour			
Petty trading			
Formal employee(gov't, NGO, private)			
Handicrafts			
Remittances			
Firewood/charcoal sales			

<i>Sources of income</i>	How many of your household members earned money from this [activity]	What is the estimated annual value of sales? (Gh¢)	What is the estimated annual cost of inputs from this [activity]? (Gh¢)



SECTION D: ACCESS TO CREDIT

RECALL PERIOD: THE LAST 12 MONTHS			
Crop sales (own production)			
Livestock (sales, milk, meat, etc)			
Nursery (vegetables, fruit, seedlings)			
Bee keeping			
Pito brewing			
Fishing			
Others; (specify)			

D1. Have you taken out any loans in the last 12 months? ☐ Yes ☐ No **If Yes,**

skip to C4

D2. Did you want to borrow or get loan in the last 12 months? ☐ Yes ☐ No **If No,**

end this section

D3. Why were you not able to borrow? **Tick ALL that apply**

- ☐ Have enough money ☐ Afraid of losing collateral ☐ Do not have collateral/not qualified for the loan ☐ Afraid of defaulting
☐ High interest rate/high cost of borrowing ☐ Place of Lender is too far
☐ Process is too lengthy ☐ Doesn't provide service to women
☐ Others, specify.....

D4. How many loans did you take during the last 12 months?



**ASK RESPONDENT TO PROVIDE DETAIL OF EACH LOAN IN THE
TABLE BELOW**

S/ n	D4.1 Was the loan in cash or in kind? <i>1=Cash</i> <i>2=in kind</i>	D4.2 What was the loan mainly used for? (list 3 most important uses) (see code 1)	D4.3 What was the source of the loan? (see code 2)	D4.4 What was the value of the loan? (GhC)	D4.5 Has the loan been paid off? <i>Yes=1</i> <i>No=0</i>
1					
2					
3					
4					

CODE 1: Uses of loan	CODE2: Loan sources
Business capital.....A	Friends/relatives.....1
Purchased Agric inputs/seed.....B	VSLA.....2
Purchased/leased land for Agric...C	NGO.....3
Purchased livestock...D	Bank/MFI....4
Pay for school expenses.....E	Money lender...5
For medical expenses.....F	other community group....6
To buy food.....G	Government extension.....7
Clothing.....H	Shop/merchant....8
Housing.....I	Others.....9



Repay other loan.....J	
Furniture/utensils.....K	
Funeral expenses.....L	
Wedding/dowry.....M	
Others.....N	

D5. Do you have any cash savings? ☐ Yes ☐ No **If No, Go to D8**

D6. What is the current level of your savings? GhC|_|_|_|_|

D7. Where do you currently have savings?

☐ Home ☐ Friends/relatives ☐ VSLA ☐ ROSCA/SACCO, etc.

☐ Bank/MFI ☐ Insurance company ☐ others, specify.....

[End this section, if A11 = less than 1 year]

D8. How much was your last pay-out from VSLA? GhC|_|_|_|_|

D9. Please rank your three most important uses of the pay-out.

USE OF LOAN	Rank (Please Tick the responses)		
	First	Second	Third
Business capital			
Purchased Agric inputs/seed			
Purchased/leased land for Agric			
Purchased livestock			
Pay for school expenses			
For medical expenses			
To buy food			



Clothing			
Housing			
Repay other loan			
Furniture/utensils			
Funeral expenses			
Wedding/dowry			
Others, specify.....			

Section E: Household expenditure

Type of expenditure	D1. Has your household purchased or spent money on [item] <i>Yes=1</i> <i>No=0</i> If No, skip to next item	D2. How much was spent on [item] (Gh¢)
ASK SEPERATELY ABOUT EACH ITEM AND TAKE DETAIL		
RECALL PERIOD: THE LAST 7 DAYS		
Food		
Cereals		
Pulses		
Meat		
Fish		
Vegetables		
Milk/dairy products		
Other		





Fuel		
Firewood/charcoal/kerosene/petro 1		
Communication		
Mobile phone		
Credit card/ recharge card		
Toiletries and personal cosmetics		
Soap		
Tooth paste		
Sanitary pads		
Others		
Transport		
Bus fare/motor faire		
Others		
Others		
Money give to relatives/friends		
Payment of loans		
Others		
RECALL PERIOD; THE LAST 30 DAYS		
House rent or mortgage/utility bills		
Treatment cost		



Doctor/clinic fees/traditional practices		
Medicine(traditional and modern)		
Others		
RECALL PERIOD; THE LAST 12MONTHS		
Livestock/agriculture		
Animal Purchase		
Veterinary fees		
Fertilizers/seeds/pesticides/herbicides		
Irrigation pump/tubing		
Farming equipment/tools		
Household Items		
Utensils/cooking items		
Household furniture(deb sheets, chair , tables ,etc)		
Household small appliances(TV, iron, radio, etc)		
Clothing and footwear		
Bicycle/motor bike		
Others		
Taxes		
Tax (income, market, land pool)		
Other costs		



Repair cost (HH items, house, care)		
Household event		
Marriage/wedding cost		
Funeral/tombstone unveiling		
Other religious ceremonies(offertories, zakat, etc)		
Education		
School fees		
Books/exercise books/pens/pencils		
Other educational expenses(boarding, etc)		
Other Annual Expenses		
Jewellery		
House/latrine construction		
Water well		
Land purchase		
Other Annual expenses		

Section F: Assets Accumulation.

How many of the following does your household own?

F0 Asset	F1 Does your household own [Asset] 1=Yes 0=No <i>If No, go to Next [Asset]</i>	F2 How many of [Asset] does your household currently own	F3 Were you a member of the VSLA when you acquired the asset? 1= Yes 0 = No <i>Skip to Next [asset], if A11= Less than 3months</i>	F4 If E3=1, what quantity did you acquire before joining VSLA?
Livestock				
Cows				
Donkeys				
Sheep/Goat/pigs				
Poultry (Chicken/Duck)				
Transportation				
Motor tricycle				
Motor bike cycle				
Bicycle				
Cart				





Electronics				
Radio				
Television				
Cell phone				
Fan				
Agricultural Material				
Tools(hoe/cutlass/sickle)				
Plough				
Tarpaulin				
Irrigation pump/sprayer				
Other Goods				
Land				
Furniture				
Sewing machine				
Bed				
Metal cooking pots				
Others				

F5. How would you rank your household's wealth within the community?

☐ Richest in the community ☐ Among the richest in the community

☐ Richer than most households in the community ☐ Among the poorest

households in the community ☐ The poorest in the community

Section G: Access to Education

G1. Is there a school at your community? ☐ Yes ☐ No

G2. How closed is the school to your residence? km

G.3 For the Past 3 years did any member of your household dropout of school due to financial challenges? ☐ Yes ☐ No

G4. For the past 3 years, are you unable to enrol any member of your household in school due to financial challenges? ☐ Yes ☐ No

G5. Does your membership in a VSLA have any impact on your children education?

☐ Improved ☐ Stayed the same ☐ Worsened ☐ I don't know

G6. For the past 3 years, did you or any member of your household experience any shock that negatively impacted your household education? ☐ Yes ☐ No

Section H: Household Food Consumption

H1. For the past 3years did any member of your household go hungry the whole day because there was no food to eat?

☐ Never ☐ Rarely ☐ Sometimes ☐ Most at times ☐ All the time

H2. On a usual day, how many meals do your household members eat?

☐ Once ☐ Twice ☐ Thrice

H3. Has your membership in a VSLA improved the level of your household food consumption? ☐ Improved ☐ Stayed the same ☐ Worsened ☐ I don't know

H4. For the past 3 years, did you or any member of your household experience any shock that negatively impacted your household education? ☐ Yes ☐ No



Section I: State of Housing

11. Do you or any member of your household own a house? ☐ Yes ☐ No

12. If yes, how many rooms make up the house(s)? | _ | _ |

13. Who owns the house that you and your household are currently reside in?

☐ Ours ☐ Rented ☐ Shared ☐ Other

14. What materials are the walls in the house (residence) made of?

☐ Grass ☐ Cement bricks ☐ Mud and Pole

☐ Sun-dried (unburnt) bricks ☐ Baked (burnt) bricks ☐ Other

15. What material is the roof of your household residence made from?

☐ Thatch ☐ Plastic Sheets ☐ Corrugated iron ☐ Asbestos /tiles/concrete

☐ Other

16. What material is the floor of your household residence made of?

☐ Gravel ☐ Tiles ☐ Cement ☐ Other

17. How many rooms do you and your household members sleep in? | _ | _ |

18. Has your membership in a VSLA contributed to improving the level of your household housing situation?

☐ Improved ☐ Stayed the same ☐ Worsened ☐ I don't know

19. For the past 3 years, did your household experience any shock/natural disaster that negatively impacted your housing situation? ☐ Yes ☐ No



Section J: Access to Health

- J1. Is there a health facility in your community? ☐ Yes ☐ No
- J2. For the past one year, was there any member of your family that needed health care but could not access it due to financial challenges? ☐ Yes ☐ No
- J3. If yes, what is the frequency of problem with accessing medical services and medication in past year? ☐ rarely ☐ Sometimes ☐ most at time
☐ Always
- J4. In 2020, what was the source of funds for your household health expenses?

Tick All that apply

- ☐ Own savings/loans from VSLA ☐ Own Savings from Bank/MFI
- ☐ Sale of assets ☐ Loan from friends/family ☐ Others, specify:.....
- J5. Are all your dependants enrolled on the NHIS? ☐ Yes ☐ No
- J6. Has the health of members of the household changed since joining the VSLA?
☐ Improved ☐ Stayed the same ☐ Worsened ☐ I don't know.

SECTION K: Challenges

K1. What are some of the challenges and limitations that confront you in the VSLA?

- ☐ Insufficient loan amount ☐ High interest rate ☐ gossips
/disagreement/collusion
- ☐ Excessive fines ☐ Lateness and absenteeism to meeting
- ☐ Loan default by members ☐ shorter loan repayment Duration

K2. How are you able to cope with these challenges?.....

K2. Any other comment by the respondent:

.....



APPENDIX B: KEY INFORMANT INTERVIEW

- 1) Can you please brief us on how the VSLA methodology operates?
- 2) What are the factors that are considered before an individual becomes a member?
- 3) What was your motivation to train VSLAs? Where did you get the funding to do that?
- 4) Under which organization were you sent to train these groups?
- 5) How were your training sessions organized? On which areas were you focusing during these sessions?
- 6) In which way did these trainings have an impact on the communities?
- 7) During these trainings, how would you evaluate men's and women's participation?
- 8) After trainings have been completed, which gaps did you notice?
- 9) As someone who has been involved in the start-up of many VSLAs, how would you evaluate the impact on a rural community before and after start-up of these savings groups?
- 10) How would you assess the impact of the VSLA programme on household's food consumption and income?
- 11) How would you assess the impact of the VSLA programme on household's access to healthcare in the district?
- 12) How would you assess the impact of the VSLA programme on the education of children in rural households in the District?
- 13) Do these groups stick to the original constitution and what is the impact if they don't?
- 14) What are some of the challenges the VSLAs programme face in the Lambussie District?



APPENDIX C: FOCUS GROUP DISCUSSION GUIDE

Verbal Consent to Participate in the Focus Group

You have been asked to participate in a focus group. The purpose of this study is to gain a better understanding of the impacts of the VSL program, so that its efforts may be improved so as to better serve its members. You can choose whether or not to participate in the focus group and may stop at any time. Although the focus group will be tape recorded, your responses will remain anonymous and no names will be mentioned in the report. There are not right or wrong answers to these questions. We want to hear many different viewpoints and would like to hear from everyone.

Participation in this study will not affect one's membership or role in the VSLA program. Therefore, we ask you to feel at ease and to provide frank and honest answers without fearing any persecution or disclosure.

1. Tell me a little about your group and how it works
2. How long has the group been in existence?
3. What are some of the challenges and limitations your group faces?
4. Tell me about your life before you joined the group and how has that changed since you became a member of the group?
5. In what ways has your behaviour changed since you joined the group?
6. What role do you play in the decision making process of your household? Has it changed since you joined the group?
7. What do you believe the benefits are to belonging to a VSLA group? What are your reasons for joining?
8. Have there been any negative consequences of joining the VSLA group? If so, what are they?



9. How does the community treat VSLA members? Do they treat you differently than before you were members?
10. Have you seen an impact of the VSLA on the community as a whole?
11. Do you believe that the training has been beneficial? Is the apex organization helpful? Is there any difference between the services that CARE provided versus those that the Apex organization now provides?
12. Is there anything else you would like to say about the VSL program?

