

**INFLUENCE OF SAVINGS AND LOANS ASSOCIATIONS IN  
EMPOWERING WOMEN TOWARDS HOUSEHOLD FOOD  
SECURITY IN BONDO DISTRICT, KENYA**

**BY**

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**DECLARATION**

This research project is my original work and has not been presented for an award of a degree in any other university.

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## **DEDICATION**

This research project is dedicated to my parents John Awiti and Mary Awiti and to my dear fiancée Christine Awuor.

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## **ABBREVIATIONS AND ACRONYMS**

<b>A4N</b>	Agriculture for Nutrition
<b>ACP</b>	Agricultural Credit Program
<b>ARV</b>	Anti-Retroviral Therapy
<b>ASCA</b>	Accumulating Savings and Credit Association
<b>BMI</b>	Body Mass Index
<b>CBTs</b>	Community Based Trainers
<b>CLP</b>	Chars Livelihood Programme
<b>CLP</b>	Chars Livelihood Programme
<b>COSAMO</b>	Community Savings Mobilization Project
<b>CREAM</b>	Community Organization for Rural Enterprise Activity Management
<b>CRS</b>	Catholic Relief Services
<b>DGSDO</b>	District Gender and Social Development Officer
<b>FAO</b>	Food and Agriculture Organization
<b>FHH</b>	Female Headed Household

<b>GDP</b>	Gross Domestic Product
<b>GNI</b>	Gross National Income
<b>IFPRI</b>	International Food Policy Research Institute
<b>JFFLS</b>	Junior Farmer Field and Life School
<b>MDG</b>	Millennium Development Goals
<b>MFI</b> s	Microfinance Institutions
<b>MHH</b>	Male Headed Household
<b>MRHP</b>	Mwanza Rural Housing Programme
<b>ROSCAs,</b>	Rotating Savings and Credit Associations
<b>SACCO</b>	Savings and Credit Corporative Organization
<b>SG</b>	Saving Groups
<b>SSA</b>	Sub-Saharan Africa
<b>UWESO</b>	Uganda Women’s Effort to Save Orphans
<b>VSLAs</b>	Village Savings and Loan Associations
<b>WHO</b>	World Health Organization

## ABSTRACT

Savings and Loans Associations have often been argued, but not without controversy, to be a tool for empowering women and especially towards ensuring food security. Women make essential contributions to economic development, household income and ultimately household food security. However, women have always suffered inadequate credit facilities, weakening their role of ensuring food security. Women remain an invisible workforce in global production chains, where they dominate as house-workers and temporary laborers, while their role in ensuring household food security is significant, it hardly valued. Savings and loaning services have led to women's empowerment by positively influencing their decision-making power. The purpose of the study was to investigate the influence of Savings and Loans Associations in empowering women towards household food security in Bondo District. The study was guided by the following objectives: To assess how Savings and Loans Associations empower women towards enhancing food availability for households in Bondo District, To assess how Savings and Loans Associations empower women towards enhancing food accessibility for households in Bondo District, To examine how Savings and Loans Association empower women towards enhancing nutrition and utilization of food for households in Bondo District, To examine how Savings and Loans Associations empower women towards enhancing risk management and resilience for households in Bondo District. In order to conclusively address the objectives of the study, descriptive research design was adopted. Both quantitative and qualitative approaches to data collection and analysis were used. For quantitative data collection, a sample determination formula by Fisher et al. (2003) was used to establish a sample size of 72 respondents from a population of 7068 women. The test retest technique was used to ensure reliability of research instruments while validity was ensured through pilot testing and reviews. Systematic random and purposive sampling methods were used to pick the sample, data obtained was cleaned, verified and analyzed by Statistical Package for Social Sciences (SPSS) and content analysis. The study findings indicate that VSLAs have enhanced the ability of 78.6% of the women to produce more food, 88.6% to purchase food of higher quality and greater quantities, increasing their ability of 77.1% of women to engage more in decisions relating to food variety and quality. Moreover, 85.7% of the women had been cushioned from risks hence enhancing their nutritional stability. The researcher concluded that women's ability to ensure availability, access and nutrition has been enhanced. However, purchase and ownership of productive assets is still minimal. The researcher recommends that Plan international and CARE-Kenya should introduce a wide range of financial services not just savings and credit to increase women's ability to generate and control income. The government should invest in time-saving infrastructure and enhance women's ability to access input and output markets as well as increasing women's access to resources, technology and information. Whereas this study revolves around influence of VSLAs in empowering women towards

household food security, it further recommends an investigation on influence of VSLAs in empowering men towards household economic and social stability in Bondo District.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the study

Since the 1970s, and especially since the new wave of microfinance in the 1990s, microfinance has come to be seen as an important development policy and a poverty reduction tool. Some argue (e.g. Littlefield et al.,2003; World Savings Bank Institute,2010) that microfinance is a key tool to achieve the Millennium Development Goals (MDGs).The third MDG touches on promoting gender equality and women empowerment. Microfinance encompasses Village Savings and Loans Associations (VSLAs) which provide financial services to low-income clients who generally lack access to more formal banking services. Over the past twenty years, microfinance has become one of the hottest topics in development economics. In 2007, more than 100 million of the world's poorest families received microfinance services. Microfinance encompasses the provision of financial services, including loans, savings and insurance, to low-income clients who generally lack access to more formal banking services. The promise of microfinance lies in its ability to empower people to work their own way out of the poverty trap, while avoiding dependency and the 'hand out' shame of conditional aid (Daley-Harris 2009, 1).

Female "empowerment" has increasingly become a policy goal, both as an end to itself and as a means to achieving other development goals. A growing literature on intra-household bargaining finds that exogenous increases in female share of income, interpreted as providing the female more power in the household, lead to an allocation of resources that better reflect preferences of the woman (Duflo,2003;Rangel,2005). This often leads to

greater investment in education, housing, and nutrition for children (Thomas, 1990; Thomas, 1994; 1995; 2003). The concept of women's empowerment was first invoked by third world feminists and women's organizations in 1970s (Bisnath, 2001; Datta & Kornberg, 2002; Mosedale, 2003). Women's empowerment can be understood as a process whereby women, individually and collectively, become aware of how power relations operate in their lives and gain the self-confidence and strength to challenge gender inequalities (Oxaal and Baden, 1997). Empowerment is related to change and microfinance has changed women status socially, economically and politically. Micro credit is a mechanism under which credit is provided to the poorest of the poor on a group liability basis instead of any collateral. From the evidence of millions of microfinance clients around the world, Littlefield *et al.* (2003) demonstrate that access to financial services enables poor people to increase their household incomes, build assets and reduce their vulnerability to the crises that are so much a part of their daily lives.

Globally, for a long time the role of women in ensuring household food security had not been recognized, as a result women have faced a lot of difficulties in delivering on this role because of inadequate of credit facilities. Women produce between 60 and 80 per cent of the food in most developing countries and are responsible for half of the world's food production, yet their key role as food producers and providers, and their critical contribution to household food security, is only recently becoming recognized. (Women in Development Service, 2005). Globally, Saving-led approaches to microfinance is now recognized as one of the most effective means of reaching poor rural households and especially women. This has a potential of improving the household incomes and empower the women towards more sustainable household food security. With the improved income women will be able to

ensure availability, access, proper utilization and buffer their resilience to adverse negative conditions (CARE, 2005).

As the number of VSLAs as a form of microfinance institutions has increased across the globe, so has an interest in understanding the nature of the clients and how they are impacted by program participation. Although impact studies face a variety of methodological limitations, numerous studies have found substantial positive impacts of participation in microfinance programs, specifically in the areas of eradicating poverty, promoting children's education, improving health outcomes for women and children, and empowering women. (Conner, 2010).

The problem of women's access to credit was given particular emphasis at the first International Women's Conference in Mexico in 1975 as part of the emerging awareness of the importance of women's productive role both for national economies, and for women's rights. This led to the setting up of the Women's World Banking network and production of manuals for women's credit provision. Other women's organizations world-wide set up credit and savings components both as a way of increasing women's incomes and bringing women together to address wider gender issues. From the mid-1980s there was a mushrooming of donor, government and NGO-sponsored credit programmes in the wake of the 1985 Nairobi women's conference (Mayoux, 1995a).

In Central America—El Salvador, Honduras, Guatemala, and Nicaragua—Catholic Relief Services (CRS)'s Agriculture for Nutrition programme (A4N) works through saving and loans initiative to help women acquire skills in five areas: agricultural production; marketing; saving and lending; group organization and management; and innovation and learning. Local implementing partner agencies were encouraged to start Savings Groups as a

means of helping women acquire those skills, particularly savings and lending, group organization, and innovation and learning. Although partner staff, specialized in agriculture, were skeptical of the value of Savings Groups and reluctant to integrate them into their on-going agricultural programmes, the initial success of the groups largely won them over and the groups have subsequently expanded to 257 with 3,283 members (2010). In all four countries, free goods and services were also made available, including veterinary kits, agricultural inputs, and training. (Andrew, Kim, Gaye, & Jose, 2010).

In Asia-Pakistan, Bangladesh and Nepal, VSLA initiatives had positive impacts in empowering women towards nutritional security. In Pakistan, studies by Malik and Luqman (2005) discussed the relationship between microcredit and women empowerment. They assert that “from the previous research studies it was concluded that microfinance and microcredit programmes had the potential and powerful impact on women's empowerment. Although these were not always empowering all women, most women did experience some degree of empowerment because it was a complex process of change experienced by all individuals somewhat differently and varied from culture to culture. In Bangladesh, the Chars Livelihood Programme (CLP), a seven-year initiative (2004-2010) aimed at assisting 55,000 extremely poor people in northern Bangladesh. The CLP, of which an asset transfer programme was the primary intervention, providing cash and productive assets to all participating households. The programme recognized that many clients did not access formal savings or insurance products to smooth their consumption patterns, causing them to rely on harmful coping strategies including the drawdown of productive assets (Panetta & Kate, 2010). In Nepal, the WORTH programme started by Pact Inc., was a woman's empowerment programme, with not only a Savings Group component but also literacy,



business development, and rights and advocacy training. These interventions were delivered more or less simultaneously, and were seen to be mutually reinforcing: literacy made women better group managers, stronger groups helped in business development, and so on. The programme's fieldwork began in 1999, ultimately reaching 125,000 members in 6,000 groups. (Odel, 2010).

In Sub-Saharan Africa, there are those studies that show mixed impacts. For example, benefits for the poor but not for the poorest (e.g. Copestake et al. 2001; Hulme & Mosley 1996; Morduch 1998; Mosley & Hulme 1998; Zaman 2001); or helping the poor to better manage the money they have (Rutherford 1996:2) but not directly or sufficiently increasing income, empowering women, etc. (e.g. Husain et al. 2010; Mayoux 1999; Rahman 1999). Karnani (2007) argues that money spent on VSLAs could be better used for other interventions, like supporting large labour-intensive industries for job creation. And there is literature that argues that a single intervention (like microfinance) is much less effective as an anti-poverty resource than simultaneous efforts that combine microfinance, health, education, etc. (Lipton 1996). Other researchers have also allude to negative impacts, such as the exploitation of women, unchanged poverty levels, increased income inequality, increased workloads, high interest rates and loan repayment, creating dependencies, and creating barriers to sustainable local economic and social development (e.g. Adams & Von Pischke 1992; Bateman & Chang 2009; Buckley 1997; Copestake 2002; Goetz & Sen Gupta 1996; Kabeer 1998; Rogaly 1996);

In East Africa-Ethiopia, Tanzania, Rwanda, Ethiopia and Kenya Village Savings and Loans Associations have contributed immensely to household food security. In Ethiopia, there were few significant differences in the use of coping mechanisms between established

clients, incoming clients and community controls with regard to food. Prevalence of consumption of seed crop was similar among established clients and community controls at 17.1% and 19.2% respectively, while incoming clients had a significantly lower rate of seed crop consumption at 11.4% (Doocy et al. 2005). Evidence from Tanzania suggests that participation in the Village Savings and Credit Association is associated with a significant positive increase in meal quality, with an increase in consumption of meat and fish (Brannen 2010). Evidence from Rwanda shows that participation in the Red Cross credit programme is associated with a significant positive increase in meal quality, with an increase in consumption of meat (Lacalle et al. 2008). Data from Ethiopia show little significant difference in household diet and food security, with additional analysis showing that female client households were more successful in maintaining quality diets than households of male clients or community controls. Differences in current receipt of food aid and length of time receiving food were not significant between the three comparison groups (Doocy et al. 2005). In Kenya, micro-savings impacts suggest that food expenditures increased significantly for client women (Dupas & Robinson 2008).

In Siaya and Bondo Districts, the strong interrelationship between the high incidences of both poverty and HIV&AIDS in this region that informed the choice of the two districts as the areas of focus in CARE Kenya's Household Livelihood Security Project (*Lok Pachi*). The project aimed at enhancing the household livelihood security of approximately 25,000 people sustainably. This was expected to be the major outcome of two major strategies that involved mobilization of at least 5,000 persons especially women, into savings and lending groups to improve their economic capacities and improve access to

HIV&AIDS information among the 5,000 household (25,000 beneficiaries), mainly women (CARE,2010).

In Bondo district, the participation of women in VSLAs has had impact though there is little documentation to the exact extent. According to Plan International (2011), the women have been able to have a more active participation in so far as agricultural activities are concerned and this has seen a positive change in household food security. Food production has been up scaled because the women have been able to access credit facilities which they have used to purchase farm inputs and implements. Consumptive expenditures and behaviors have also changed; food accessibility has been enhanced through purchases for women participating in VSLAs. However, the effect on VSLA in women empowerment towards household food security has not been homogenous among the participating women. There are cases where the women seem to have been disempowered because of increased workload and control and misuse of loans and saving by spouses, this has been reported to plunge the women into indebtedness and erode the gains of food security.

## **1.2 Statement of the problem**

Women in Bondo District have long suffered powerlessness, discrimination and gender inequality in terms of access, use and ownership of vital resources despite their key role in enhancing food security and development in general. According to World Food Program (2009), gender inequality is a major cause and effect of hunger and poverty. Food security can be a major concern for people who are incapable of or denied access to participating in labor, formal, informal, or agricultural. In 2009, the United Nations (U.N.) estimated that 60 percent of the world's chronically hungry people are women and girls, 98% of which live in developing nations.

Attempts have been made to enhance access to affordable credit through VSLAs. One of the core objectives of Village Savings and Loans Association models is to empower the women towards household food security this has however not always been the case. Women being clients of MFIs does not mean they will automatically become empowered. Hulme and Mosley (1996, p.128) also make this point when they refer to the “naivety of the belief that every loan made to a woman contributes to the strengthening of the economic and social position of women”. Food insecurity is a major concern for women in Bondo District because they are often deemed incapable of or denied access to actively participating in labor, formal, informal, or agricultural decision making. In some parts of Bondo District e.g. Nyang’oma division, participation of women in the VSLA methodology has been said not have had any impact on food availability, accessibility, nutrition and utilization.

In some cases the involvement of women in Village Savings and Loans Association has been found to be disempowering to women. Some studies in Sub-Saharan Africa have allude to negative impacts of VSLAs, such as the exploitation of women, unchanged poverty levels, increased income inequality, increased workloads, high interest rates and loan repayment, creating dependencies, and creating barriers to sustainable local economic and social development (e.g. Adams and Von Pischke 1992; Bateman and Chang 2009; Buckley 1997; Copestake 2002; Goetz and Sen Gupta 1996; Kabeer 1998; Rogaly 1996). Microfinance on the other hand often targets women, in some cases exclusively (ILO 1984). Female clients represent eighty-five percent of the poorest microfinance clients reached. Therefore is not obvious to say that the VSLAs empower women towards household economic stability and food security.

In Uganda, the findings showed that 84% of households participating in VSLAs did not have enough food at some point during the last 12 months, many households report reducing meals for adults or kids (80% and 70% respectively) in the past year. There was no impact on food security as well as the type and amount of food taken. In Uganda, Malawi, Mali and Ghana the study revealed that that there is no significant impact on agricultural inputs or production (Karlan and Udry, 2012).

CARE Kenya and Plan International have initiated Savings and Loans Methodology in Bondo District to enhance access to credit for women. This is aimed at empowering the women economically and socially to enhance food security at the households. This study therefore seeks to investigate the influence of VSLA in empowering women towards household food security in Bondo.

### **1.3 Purpose of the study**

The purpose of the study was to investigate the influence of savings and loans associations in empowering women towards household food security in Bondo District.

### **1.4 Objectives of the study**

The study sought to achieve the following objectives:

1. To assess how savings and loans associations empower women towards enhancing food availability for households in Bondo District.
2. To assess how savings and loans associations empower women towards enhancing food accessibility for households in Bondo District.

3. To examine how savings and loans association empower women towards enhancing nutrition and utilization of food for households in Bondo District.
4. To examine how savings and loans associations empower women towards enhancing risk management and resilience for households in Bondo District.

### **1.5 Research Questions**

The study sought to answer the following questions:

1. How do savings and loans association empower women towards enhancing food availability for households in Bondo District?
2. How do savings and loans associations empower women towards enhancing food accessibility for households in Bondo District?
3. How do savings and loans associations empower women towards enhancing nutrition and utilization of food for households in Bondo District?
4. How do savings and loans association empower women towards enhancing risk management and resilience for households in Bondo District?

### **1.6 Significance of the study**

It is anticipated that the results of this study has provided documented evidence on the milestones made by the VSLAs of the 3<sup>rd</sup> Millennium Development Goal (MDG): promoting Gender Equality and Women Empowerment for enhanced household food, in rural Kenya with specific focus on Bondo District. Moreover, the researcher hopes that the study has provided opportunities for development practitioners and existing micro-financial institutions targeting the rural poor to make informed decisions on how best to empower the

rural women. This is expected to have enabled the development practitioners to establish workable models that would ensure sustainable women empowerment towards ensuring household food security. The researcher hopes the study has contributed to the existing body of knowledge on socioeconomic protection and empowerment models by the government targeting the rural poor. Finally, researcher look forward to the study to offer suggestions for improvement of VSLAs and recommend areas that would demand further inquiry. The researcher has not come across literature assessing the role of the Village Savings and Loans Associations in empowering women towards household food security. This study therefore intended to provide information on the actual role of the various components of VSLAs in women empowerment in to ensure household food security according to the World Banks Model.

### **1.6 Basic Assumptions of the study**

This study assumes that there exist women who participate and have benefitted from the Village Savings and Loans Associations which they belong to and that there is direct linkage between women benefiting from the Village Savings and Loans Associations and their ability or inability to ensure household food security. The study assumed that women participating in the VSLAs would be willing to give information on how the groups have benefitted them in enhancing their household food security. It was also assumed that the responses given by the women were accurate and a true reflection of the influence of VSLA in empowering women towards household food security.

### **1.7 Limitations of the study**

This study might be limited by the fact that very little literature exists on the milestones so far made by the Village Savings and Loans Associations in empowering

women towards ensuring household food security. This was overcome by keenly perusing through literature on women empowerment and household food security to get the link. Furthermore, the study was limited by the extent to which the findings of the study could be generalized beyond the study area. This was however overcome by the fact that the VSLA methodology is uniform and women's key role in ensuring household food security as a common phenomenon, hence finding can be generalized with minimal error. Another limitation was that it might not be possible to link all the milestones made on women empowerment towards ensuring household food security in the study area to Village Savings and Loans Associations since there are other microfinance initiatives that promote women's well-being. This was overcome by limiting the question to VSLA and ensuring that the milestones are not a contribution of other microfinance initiatives.

### **1.8 Delimitations of the study**

The study focused only on Village Savings and Loans Associations as a form of Microfinance that seeks to empower women. The study only investigated women empowerment to the extent in which it helps women in ensuring household food security. Majority of the Village Savings and Loans Associations are women and since they play a major role in ensuring household food security, the study was limited to them. The study also benefited from the fact that there exist reports by CARE Kenya on the Village Savings and Loans Associations Program Activities. There are also government statistics on gender disparities and poverty indices that would inform the study. The researcher has also chosen to undertake this study in Bondo because the District is one of the UN Habitat model towns with massive focus and resource investment undertaken to facilitate community driven development, women empowerment, and food security projects.



## 1.9 Definitions of significant terms in the study

<b>Savings and Loans Association</b>	Refers to a group of women who save together and take small loans from those savings. They are trained on how to save, how to make loans, how to manage funds – and on the entrepreneurial and personal development of the group members.
<b>Women Empowerment</b>	Refers to expansion in women’s ability to make economic choices and implement them for sustainable food security, hence not depending on the husband.
<b>Household Food Security</b>	Refers to a situation where all those people having a common cooking, eating and sleeping arrangements at all times have both physical and economic access to the basic food that they need.
<b>Microfinance</b>	Refers to an institution providing financial services such as savings, loans and insurance to poor people living in the rural settings who are unable to obtain such services from the formal financial sector.
<b>Enhanced Food Availability</b>	Refers an improved situation of presence of food determined by the level of food production, stock levels and net trade.
<b>Enhanced Food Accessibility</b>	Refers to improved food presence at the point of need and use in the right quantity at the right time for the household

members depending, income purchasing power, markets and prices.

**Enhanced Food Nutrition and Utilization** Refers to improved energy and nutrient intake by individuals is the result of good care and feeding practices, food preparation, and diversity of the diet and household distribution of food.

**Enhanced Risk management and resilience** Refers to the degree to which households can cope with and withstand stressful situations and shocks.

### **1.10 Organization of the study**

The study shall be organized into five chapters. Chapter shall introduce the study. This entailed looking at the background to the study, a statement of the problem, the purpose of the study, the study objectives, research questions, and significance of the study, the basic assumptions, and limitations of the study, delimitations of the study, definition of significant terms and organization of the study. Chapter two of the study shall focus on the review of relevant literature. Review of general literature has been discussed out followed by comprehensive review of available empirical literature. A theoretical and conceptual framework has been formulated and discussed and knowledge gaps identified. Chapter three shall outline the study methodology to be employed to obtain information that would respond to the research questions and ultimately achieve the research objectives. The chapter shall further describe the research design, target population, the sample size and the sampling procedures, the data collection instruments and methods, the data analysis techniques and ethical considerations.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews literature related to the VSLA Methodology, women's involvement in it and how these women have been empowered towards meeting their household security. It discusses VSLA Methodology as microfinance, women's empowerment, influence of VSLA as microfinance for women's empowerment, effect of women empowerment on household food security. Also reviewed here is the contribution of women to household food security, Influence of VSLAs in empowering women towards enhancing availability of food, accessibility of food, utilization and nutrition and risk management and resilience for household.

#### **2.2 The VSLA Methodology as microfinance.**

The costs of bringing microfinance services to Africa is often considered prohibitive, because of the abundance of sparsely populated areas, the higher rates of illiteracy and HIV/AIDS, and a widespread lack of identity papers, all of which serve to increase credit risk and transaction costs. The VSLA model overcomes many of these obstacles and promises to reach the very poor and rural population better than formal, centralized microfinance institutions. It essentially enables the poor to become their own bankers (CARE, 2004).

A VSLA is an Accumulating Savings and Credit Association (ASCA), which requires no external borrowing by, or donations to, the loan portfolio – it is entirely self-sufficient. Its work, therefore, falls within the informal sector. It differs from a Savings and

Credit Cooperative Organization (SACCO) in that it does not receive external funding; only training, and is not formally registered with the government, which allows it to operate with less formal book-keeping and thus be more users friendly for illiterate members. A VSLA allows for variable savings, unlimited savings withdrawal, and loans with variable terms and flexible repayment conditions. A single association consists of 15 to 30 people who save a small amount every week (Allen & Staehle, 2007).

After several months, the savings shares accumulated by the group become large enough to launch the loan function. All members have the right to take out a loan regardless of the number of shares they have contributed, but can only take out a loan equal to at most three times the value of their shares. Most loans are short-term, generally around one month, at an interest rate determined by the group, usually 5 percent per month – this is low compared to moneylenders who often charge up to 30 percent per month, but slightly higher than NGO-MFIs, which generally charge less than 4 percent per month (Mutesasira, 1999). Each group is able to set their own repayment terms. However, a VSLA never fines borrowers for late loan repayment as this may aggravate any underlying crisis the household may be facing. It is assumed that the embarrassment of being late is sufficient penalty (Allen & Staehle, 2007).

On a date chosen by the members, usually after about a year, the savings and accrued interest are divided among the members in proportion to each individual's savings. This event, known as an “auction audit,” is usually scheduled so as to occur when members are most likely to need money, such as at the start of the school year or before a major holiday, in order to encourage the use of savings to meet pressing needs and discourage their use for

unnecessary expenditures. After the disbursement of funds, the groups normally re-form immediately and start a new cycle of savings and lending (Training Guide...2004).

### **2.3 Women's Empowerment in the context of the household and food security.**

Different scholars have identified the indicators of women's empowerment, likewise, Schuler & Hashemi (1994) outlined six elements of women's empowerment in Bangladesh which includes a sense of self and vision of a future, mobility and visibility, economic security, status and decision making power within the household, ability to interact effectively in the public sphere and participation in non-family groups. While on other hand, Friedmann's (1992) analysis of women's empowerment identified different kinds of power: economic, social, political and psychological. Economic power means access to income, assets, food, markets and decision-making power in the economic activities. Social power means access to certain bases of individual production such as financial resources, information, knowledge, skills and participation in social organizations. Political power means the access of individual household members to the process by which decisions, particularly those that affect their own future, are made. Psychological power means the individual's sense of potency, which is demonstrated in self-confident behavior and self-esteem.

While on other hand Rowlands (1995) describe it as “a process whereby women become able to organize themselves to increase their own self-reliance, to assert their independent right to make choices and to control resources which will assist in challenging and eliminating their own subordination”. For the analysis of the present research we used both Schuler & Hashemi (1994) and Friedmann's (1992) definitions of the term women empowerment.

Through microfinance programs, poor women are targeted to get them out of the poverty. In this regard, Microcredit Summit Campaign Report (2011) stated that of the 128.2 million poorest clients reached at the end of 2009, 81.7 percent or 104.7 million are women. The growth in the number of very poor women reached has gone from 10.3 million at the end of 1999 to 104.7 million at the end of 2009. This is a 919 percent increase in the number of poorest women reached from December 31, 1999 to December 31, 2009. The increase represents an additional 94.4 million poorest women receiving microloans in the last 10 years.” So, the focuses of the microfinance programs have been deeply concerned to the women. While on other hand few scholars working in the same line stated that the microcredit schemes of different banks, NGOs and other organizations reduced poverty, increased mobility and strengthened networks among women who were previously confined to their homes among other following researches are more important (Schuler & Hashemi, 1994; Hashemi & Morshed, 1997; Chowdhury & Alam, 1997; Carr *et al.*, 1996; Hulme & Mosley, 1996; Pitt & Khandker, 1996; Latif, 1994; Lovell, 1992; Rahman, 1990). According to Central Bureau of Statistics (2002), a study done in Bondo indicated that unemployed women constituted 4%, women who worked for pay were 9%. Women who were doing unpaid work but engaging in family business were 24%, while those doing unpaid work but engaging in family business were the majority at 63%.

#### **2.4 Influence of VSLA as a microfinance for women’s empowerment.**

There is obviously a positive association between microcredit and women’s empowerment. White et al. (1992) identified that microcredit program has a positive impact on women empowerment, the largest part of the existing studies promotes a vision that microcredit contributes towards women’s empowerment. Zaman (2001) reported that micro-

credit played valuable roles in reducing the vulnerability of the poor, through asset creation, income and consumption smoothing, provision of emergency assistance, and empowering and emboldening women by giving them control over assets and increased self-esteem and knowledge. Several recent assessment studies had also generally found positive impact in this connection (Simanowitz & Walker 2002; Lalitha & Nagarajan, 2002 and ESCAP, 2002). A primary function of offering women credit in this way is to enhance their economic status, that enables women to earn extra income through which they can gain greater financial autonomy (Malik & Luqman, 2005).

Excitement around the empowerment potential of improving women's access to credit is not new. Since the 1990s, microfinance has been heralded by some as a "magic bullet for women's empowerment" – a claim which has been a source of much debate (Goetz & Gupta 1996; Johnson & Rogaly 1997; Kabeer 1998, 2001, 2005b; Mayoux 2005). Based on research into the impact of credit programmes in Bangladesh, advocates have argued that women's access to credit strengthens their bargaining power within the household, improves their perception of self-worth and can lead to a long-term decrease in domestic violence (Hashemi et al., 1996; Kabeer 1998, 2001, 2005b). Critics, by contrast, have claimed that women's loans are often controlled and invested by male relatives, while women borrowers bear the liability for repayment (Goetz & Gupta 1996). In cases where men invest loans badly, this can undermine household survival strategies, forcing women to mobilize repayment funds from resources which would otherwise be used for consumption or saving purposes (ibid) or – in some cases – to borrow more money from other sources, thus falling into vicious cycles of debt. According to this analysis, loans to women do little

to alter their subordinate position within the household and may lead to heightened levels of violence against women due to conflicts over loan repayments.

Disagreement over the benefits of microcredit programmes – in terms of women’s own empowerment and their contribution to broader development goals – is partly due to different ways of measuring impact. For example, the assumption that microfinance is a successful and empowering strategy for women has often been based on an assessment of financial indicators. The logic is that if women are able to repay their credit with interest every month, it follows that they must be running effective small businesses and managing their domestic finances and providing for their families – both empowering processes. However, others have argued that financial indicators do not capture the social context in which these activities are taking place, nor do they tell us who is making decisions about expenditure within households or controlling use of credit. In response, there is a movement towards culturally relevant social indicators that can capture how and if women’s access to credit has a positive impact on their lives (Brody et al eds. 2005; Copestake et. al., 2005). Analysts drawing connections between women’s economic access and empowerment can learn much from these insights, which could and should be applied to impact assessments of women in the waged and informal sectors.

It has been observed that access to finance has given women a new-found confidence with many becoming leaders in their community. Women have also increased their purchasing power, obtaining goods formerly owned only by men, and enhanced their level of decision-making power within the household. In Uganda for example, women members of Banking on Change groups have become increasingly empowered over the last three years; indicators show that they are better able to influence their spouse’s decisions (from



29.8 to 39.7 per cent), and exert a stronger influence in making important decisions in the community (from 22 to 28 per cent). Women's control over financial resources also increased from 65.5 to 70 per cent and gender-based violence against women reduced from 22.3 to 17.9 per cent. Other countries implementing the Banking on Change project show similar trends (Training Guide...2004).

The most extensive study in Uganda was the Women's Empowerment Strategic Impact Inquiry (SII), which was completed in 2006 in .The study, finds, in terms of short-term economic empowerment, VSLA women benefit more than non-VSLA members from increased savings, more IGAs, greater food security and health, and increased education expenditures. Most VSLA women (75 percent) have increased their savings since joining VSLA group. VSLA women are more likely (68 percent) to be engaged in an IGA than non-VSLA women (13 percent), with most VSLA women reporting the VSLA group as the source of funds for their IGA. Furthermore, VSLA women's households experience greater food security compared to non-VSLA households. More VSLA households also report a great improvement in the quantity and quality of meals over the last 3 years, compared to non-VSLA households. Thirty-four percent of VSLA households report improved family health over the last three years compared to 22 percent of non-VSLA households. About twice as many VSLA households (57.3 percent) as non-VSLA households (30.4 percent) report an improvement in the education status of family members over the past three years. A higher proportion of VSLA households (79.9 percent) have made expenditures on education over the last 12 months, than have non-VSLA households (65.2 percent)(CARE, 2012).

## **2.5 The effect of women empowerment on household food security**

A number of studies have yielded a number of indicators that women play a crucial role in providing and improving household food security. Women are more likely than men to use available resources and skills to further improve the welfare of their family especially the nutrition and health aspects; this has been highlighted by various researchers (Alredaisy, 1993; Jackson, 1996, p. 497; Coonrod, 1998; Smith & Haddad, 2000; Elmasoud, 2001). Despite the additional demands on her time as housewife and mother, women in rural Sudan have successfully increased the diversification of their livelihood system. They attempt to do that through increasing the capacity of the productive resources family farm, backyard plot (called Juburaka in most rural Sudan), and domestic animals, in addition to post-harvest activity (processing and preserving food products), and collecting of forest and wild food.

Studies in SSA have shown that women work longer hours than men due to their multiple roles in food production and income activities and house chores, besides their role in collecting of water and firewood and this seems to be significant. Preparing food and baking '*kisra*' and porridge absorb number of hours daily; particularly women usually use firewood and crop residues for cooking. If women's unpaid work was properly valued they would emerge in most societies as the major breadwinners given their greater contribution of working hours than men, the unvalued economic contribution of women is such that any reasonable calculation of their labor would lead to a fundamental change in the context in which today's social, economic and the political policies are framed (Leonard, 2003).

Agricultural production and food consumption patterns have become more diversified over time, in eastern and southern Africa (Byerlee et al., 2006). It indicated by

this study and is plentifully obvious from numerous bodies of the study in SSA that women are primarily responsible for food production, food preparation, food storage, and food sale within the family (Hyder et al., 2005). In the study area, domestic animals provide household with the daily high nutrient protein items, such as meat, milk and eggs and thus enable the household to improve its diet nutritional quality.

Studies in SSA countries have shown the important role of women in animal raising activities and processing of animal products (Nelson-Fyle and Senghor, 1997; Sinn, et al., 1999). Fermentation, drying, salting and preserving in sugar are the techniques using for processing and preserving of agricultural and animal food products by women in rural Sudan. These processing techniques help in preventing growth of the micro-organisms that cause foods to decay and foods can be kept at ambient temperatures for long periods and provide nutrients in times of food scarcity. So, locally available raw material is processed into food products at relatively low cost resulting in food with a higher nutritive value compared to the raw material, a better taste and a longer shelf-life (Van de Sande, 1997). The processed food items such as, *wekah* (dried okra), dried meet (merrse), *mish* (traditional spicy yoghurt) and *samin* (ghee), constitute important high nutrient food items and can consume years after they made. Processed and preserved food items contribute to enhancing dietary diversity of household consumption on the sustainable basis. Additionally, some of the processing techniques, such as fermentation of cereals and milk products, found to improve the nutrition quality, functional properties, add flavor and increase the utilization of these food items (see El Tinay et al., 1985, p. 680; Abdelgadir et al., 1998; Wambugu, et al. 2003; Belton & Taylor, 2004). These traditional processed food products (such as *wekah*, *merrse*, *mish* and *samin*) present an existent possibility for improving food quality and

contribute to alleviate malnutrition. In the Sudan, study conducted by El Zubeir et al., (2005, p. 634) indicated that fermented milk products such as mish and rob are highly nutritious and easily digestible due to the pre-digested nutrients by bacterial starter.

The biggest constraint to the effective recognition of women's actual roles and responsibilities in agriculture and consequently household food security is the scarcity of gender-disaggregated data available to technicians, planners and policy-makers. The first step towards women's empowerment and full participation in food security strategies is the collection and analysis of gender disaggregated data, in order to understand role differences in food and cash crop production as well as men's and women's differential managerial and financial control over production, storage and marketing of agricultural products. In Sub-Saharan Africa, for example, studies have shown that women play a crucial role in many aspects of crop production. While men are often responsible for land clearing, burning and ploughing, women specialize in weeding, transplanting, post-harvest work and, in some areas, land preparation. Both take part in seeding and harvesting. Moreover, Sub-Saharan and Near Eastern women play a major role in household animal-production enterprises. They tend to have the primary responsibility for the husbandry of small animals and ruminants, and also take care of large animal systems - herding, providing water and feed, cleaning stalls and milking. In all types of animal production systems, women have a predominant role in processing, particularly of milk products, and are commonly responsible for marketing (FAO 2005).

In many countries, women are also responsible for fishing in shallow waters and in coastal lagoons, producing secondary crops, gathering food and firewood, processing, storing and preparing family food, and fetching water for the family. In many African

countries women provide: 33% of the workforce, 70% of the agricultural workers, 60-80% of the labour to produce food for household consumption and sale, 100% of the processing for basic food stuffs, 90% of household water and fuel wood, 80% of food storage and transport from farm to village, 90% of the hoeing and weeding work, 60% of the harvesting and marketing activities (FAO 2005).

Agricultural development is a complex process and a challenging one as well. Rural women farmers play a vital role in food production and food security. They account for 70% of agricultural workers, 80% of food producers, and 100% of those who process basic foodstuffs and they undertake from 60% to 90% of the marketing (Fresco, 1998). Four of ten agricultural workers in the world are women (U.N., 1986). Women take part actively in farming activities and in processing farm products, in addition to their domestic and reproductive responsibilities. It is often stated that women are responsible for more than half the world's food production overall and produce up to 60 to 80% of basic foodstuff in Africa (Fresco, 1998). The role women play in agriculture and the rural society is fundamental to agricultural and rural development in sub-Saharan Africa.

The Technical Centre for Agriculture and rural cooperation (CTA, 1993) reported that women in Africa make up more than one third of the work force. In Nigeria women produce 60-80% of the agricultural food in the country (Ogunbameru & Pandey, 1992; Buckland & Haleegoah, 1996). According to Ironkwe & Ekwe (1998) more than 60% of the agricultural production is carried out by women in the Nigerian traditional setting. The agricultural activities of women go beyond crop production to other agricultural aspects like fisheries, rabbitry, poultry and as well as sheep and goat rearing.

Mijindadi (1993) estimated that women are responsible for 70% of actual farm work and constitute up to 60% of the farming population in Nigeria. Very recently, Yahaya (2002) recorded that 76% of women from Oyo and Bauchi State are actively involved in farming activities or are engaged in their husband's farms. In Nigeria women supply most of the needed labour in agricultural activities and this is the most important factor of production to farmers, as it is needed at the stages of agricultural production. Even women in seclusion (Purdah) generate substantial income through food crop processing (Yahaya, 2002). Benjamin (1998) stated that Nigeria women generally achieved farming objectives through collective work. The spirit of cooperatives in Africa has been cultivated and expressed among its members in different ways.

It has been reported by different authors that inadequate information about the improved technologies was one of the constraints in agricultural production. Women do not have adequate access to agricultural information and innovations (Saito & Surling, 1993). Folasade (1991) emphasized that lack of separate land for women and Agricultural interventions are most likely to affect nutrition outcomes when they involve diverse and complementary processes and strategies that redirect the focus beyond agriculture for food production and toward broader consideration of livelihoods, women's empowerment, and optimal intra-household uses of resources. Successful projects are those that invest broadly in improving human capital, sustain and increase the livelihood assets of the poor, and focus on gender equality (World Bank (2007b)).

Women are crucial in the translation of the products of a vibrant agriculture sector into food and nutritional security for their households. They are often the farmers who cultivate food crops and produce commercial crops alongside the men in their households as

a source of income. When women have an income, substantial evidence indicates that the income is more likely to be spent on food and children's needs. Women are generally responsible for food selection and preparation and for the care and feeding of children. *Women are the key to food security* for their households (Quisumbing et al., 1995).

In rural areas the availability and use of time by women is also a key factor in the availability of water for good hygiene, firewood collection, and frequent feeding of small children. In sub-Saharan Africa transportation of supplies for domestic use—fetching fuel wood and water—is largely done by women and girls on foot. In Ghana, Tanzania, and Zambia women expend most of their energy on load-carrying activities involving transport of fuel wood, water, and grain for grinding. Fields dedicated to food crops are often farther from home than those related to cash crops. Because women must also perform domestic tasks, they must spend a considerable amount of time traveling between their home and the fields. This burden, together with other domestic and uses of resources. Successful projects are those that invest broadly in improving human capital, sustain and increase the livelihood assets of the poor, and focus on gender equality (World Bank, 2007b).

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Agriculture has an additional impact on food security through its impact on health. For example, poorly managed irrigation infrastructures may become a breeding ground for mosquitoes, and excessive use of groundwater for irrigation may compromise water sources needed by women to ensure good hygiene practices and clean food preparation, without which children suffer more frequently from diarrhea and compromised growth. Poverty is a major driver of food insecurity, but the two are not always linked. Poorer households headed by women have demonstrated that they often succeed in providing more nutritional food for their children than those headed by men (Kennedy & Peters, 1992). This demonstrates the importance of gender-based knowledge and roles with regard to food security. Men who lack knowledge about food preparation may not be able to translate food availability into nutritional security for their households.

## **2.6 Women empowerment towards enhancing availability of food at the Household.**

Women make up approximately 43 percent of the agricultural labor force in developing countries, ranging from 20 percent in Latin America to 50 percent in Africa and Asia. In many countries women are also those primarily responsible for field production, particularly of staple foods. Yet throughout the developing world women in agriculture have access to fewer productive resources than men. Programs aiming to increase value chain productivity need to determine women's roles in production, marketing and service provision. Where there are challenges, programs should focus on eliminating women's constraints to accessing the productive resources required to upgrade, including capacity building, access to improved inputs and access to finance. Women tell me that since we started these groups their lives have completely changed,” she says. “For example, before,



they used to cook one meal and it had to last three days. Now everybody cooks every day (CARE, 2009).

Women are key players in the farming. Their role in agriculture self-employment is notable in sub-Saharan Africa and the Middle East and North Africa. Women's role in food production within agriculture is even greater. In many societies women supply most of the labor needed to produce food crops and often control the use or sale of food produce grown on plots they manage. However, the asymmetries in ownership of, access to and control of livelihood assets (such as land, water, energy, credit, knowledge, and labor) negatively affect women's food production. Women are less likely to own land and usually enjoy only use rights, mediated through a man relative.

Studies cited in Deere & Doss (2006) indicate that women held land in only 10 percent of Ghanaian households while men held land in 16–23 percent in Ghana; women are 5 percent of registered landholders in Kenya, 22.4 percent in the Mexican *ejidos* (communal farming lands), and 15.5 percent in Nicaragua. On average, men's land holdings were almost three times the women's land holdings. This compromised land access leads women to make suboptimal decisions with regard to crop choices and to obtain lower yields than would otherwise be possible if household resources were allocated efficiently.

Insecurity of tenure for women results in lower investment and potential environmental degradation; it compromises future production potential and increases food insecurity. In Ghana the primary investment in land, given the lack of availability of fertilizer, is fallowing. However, longer fallows are likely to lead to loss of land when tenure is insecure, but shorter fallows reduce yields as soil fertility is compromised. Goldstein & Udry (2005) demonstrate that those with less political capital in a village have less tenure

security and as a result leave their land fallow for shorter periods. Within households, profits per hectare of a maize-cassava intercrop from similar plots vary according to individuals and length of fallow. Women have less tenure security and sacrifice profits per hectare with shorter fallows.

The lower production reduces not only women's potential income, but also the availability of food for household consumption. Legal reforms need to take into account multiple-use rights to land, particularly women's rights, as well as the different means by which women gain access to land, including divorce and inheritance systems. The Lowlands Agricultural Development Projects in Gambia provide a good example of how understanding the way that women obtain land rights affects the design of a successful project. The project resulted in previously landless women obtaining secure rights to land through a land reclamation program. Agricultural production depends on natural resources: land, soil, water, and plant genetic resources. Women often have unique perspectives on as well as understanding of local biodiversity and can be key partners for plant breeders as they work to develop adapted and improved varieties. In Rwanda women farmers have shown they can be more effective at selecting improved varieties for local cultivation than the men plant breeders (Sperling & Berkowitz, 1994).

The LinKS project, demonstrates how to work with a broad spectrum of stakeholders to promote food security by understanding local women and men farmers' unique understanding of agrobiodiversity. Agricultural technology transfer capacity development is one of the prime policy levers to increase agricultural productivity. But often women are not targeted because it is assumed that their husbands or fathers will share the knowledge with them, and often they are supplied with technologies that do not meet their needs. For

example, early dissemination of hybrid maize in Zambia failed to recognize that women use the crop for home consumption, which requires milling. The hybrid that was introduced required hammer mills, but only traditional mills were available locally. Poorer storage characteristics of the hybrid also compromised women's ability to conserve their agricultural produce, so women returned to growing traditional maize varieties. Involving young women and men in training opportunities from the start has proved to be a successful strategy in ensuring food security and sustainable livelihoods for households, as can be seen in the example provided by the approach used in the Junior Farmer Field Life School(JFFLS). However, adoption of new technology depends on many things, including the availability of required assets to implement the technology, how local women and men view the perceived benefits, the way information is shared, and local gender roles and other socio-cultural constraints. Even when women have access to land for food production and access to improved technologies, they face more constraints than men in accessing complementary resources for success (Quisumbing, 1996).

They have less access to credit and less access to inputs such as fertilizer, and they are less likely to benefit from agricultural extension services, and therefore they have less access to improved technologies. Women tend to process their crops more on the farm than men do theirs, but little is invested in technology research into on-farm crop processing. These constraints are not only costly to food security but also to economic growth. If women farmers in Kenya had the same access to farm inputs, education, and experience as their men counterparts, their yields for maize, beans, and cowpeas could increase as much as 22 percent (Quisumbing, 1996). This would have resulted in a one-time doubling of Kenya's Gross Domestic Product (GDP) growth rate in 2004 from 4.3 percent to 8.3 percent (World

Bank, 2007a). More important, household productivity in agriculture and food supplies could often be increased at no extra cost by reallocating existing resources inside the household toward women.

A study done in Uganda which suggest that micro-credit contributes to a women's decision-making power; however, the author notes that this is a symptom of status within the household and control in their farming businesses as much as an impact of micro-credit (Wakoko 2004).Hugh (2009) doing a study in Tanzania confirms that women's decision-making in the household and in IGAs has increased both for participants and non-participants, but is far more pronounced amongst participants.

Hugh (2009), reporting the findings of a study in Tanzania which revealed that their productive asset base (linked mainly to agriculture) was roughly the same as non-participants at the start of the programme and has not changed very much. However, Dean and Chris (2012) reported findings that households in participating in VSLA in Malawi spend slightly more on agricultural inputs as opposed to the controlled group.

In most instances, participation in VSLA has resulted into increase in food stock in the households. An evaluation of VSLA project in Bondo by CARE (2010) that 33.0% of the interviewed GS&L group members indicated that there was great improvement in food supplies, while 25.0% of the respondents reported that there was moderate change in food supplies. The remaining said that food supply improved slightly 32.0%, no change (6.0%) and that the supply of food worsened (4.0%). Hugh (2009) found that in Tanzania, food stocks of participants are higher than for non-participants across all the major staples.It was further revealed by the impact study that participant stores of maize are double that of non-participants, despite owning less land, this is to some extent in agreement to the finding of

this study. Lastarria-Cornhiel (2009) sums it all by postulating that access to credit had significantly improved the ability of women participating in VSLA to produce food.

## **2.7 Influence of VSLAs in empowering women towards enhancing access of food at the household.**

It is now widely accepted that increasing women's incomes has a disproportionate effect on household food security compared to increasing men's incomes. Women tend to spend their resources within the household on food, education, and other productive means. That said, overburdening women through income generating activities risks having a negative impact on nutrition. While programs should focus on increasing women's incomes, it is essential that in doing so, they do not increase the already heavy burden on women's time. Wherever possible increases in incomes should come from upgrading strategies that incorporate labor-saving technologies and improved efficiencies that free up women's time for more productive activities. These include reducing the time women spend on household chores such as the collection of water and fuel through improved stoves and rainwater harvesting; increasing the productivity of women's farming tasks through improved hoes, planters, and grinding mills and improved techniques such as intercropping and mulching, which results in reduced weeding time; and improving the efficiency of food processing to help them earn more income in less time or with less effort (FAO, 2005).

Access to food can be constrained physically—washed-out roads in a rainy season may cut off access to the nearby market town—or, more usually, economically. Ironically, food insecurity has a largely rural face. Despite the fact that the majority of food is grown in rural areas, most of the rural poor are net food buyers, not sellers, in many countries. Hence,

economic access to markets or lack thereof, is a fundamental determinant of food insecurity. The role of agriculture in income generation for the poor, particularly women, is more important for food security than its role in food production. The Andhra Pradesh Rice Credit Line Project and Niger's Food Bank Project are examples of initiatives in which improved income generation and food linked credit systems for women enhanced household food security and the overall well-being of the family (Sanchez et al., 2005).

This includes understanding the traditional division of labor in the agricultural sphere, as well as any changes that may have resulted from a crisis. Lessons learned reveal that food security interventions and livelihoods-saving strategies within an emergency setting are more efficient, cost effective, and timely when gender-based differences and gender-differentiated impacts on the affected population have been properly understood and addressed (FAO, 2005).

The Household Food Security and Nutrition Project in Ethiopia illustrates that it is vital that beneficiaries have a strong sense of ownership of the project and that the ability of men and women to assess their own situation and their ability to improve their livelihoods are important steps in the empowerment process. Moreover, identifying gender differentiated opportunities and constraints for improving nutrition and food security during the design phase of a project often leads to better food security interventions. Addressing poverty issues in and of themselves, while vital, does not necessarily mean that we are addressing food insecurity. India has been remarkably successful in using agricultural development to foster economic growth and poverty reduction. It has moved from food deficits to food surpluses on the national level. India has a higher gross national income

(GNI) per capita at \$730 than most of sub-Saharan Africa. However, its child stunting rates are high at 46 percent. Niger's GNI per capita is just \$240, but its stunting rate is 40 percent. The Gambia demonstrates what can be achieved despite poverty, with a stunting rate of just 19 percent against a GNI per capita income of \$290.5 Afghanistan, Bangladesh, India, and Nepal occupy four of the top five positions in the global ranking of underweight children. Bangladesh and India rank among the highest incidences of low-birth-weight babies, an indicator of maternal malnutrition. Many would argue that the inferior status of women in South Asia is a key factor in the failure to translate agriculture-led poverty reduction into nutritional improvements. Welfare improvements at the household level are not just a function of increasing incomes for households; they are related to who accrues the income within the household. In Côte d'Ivoire, significantly more is spent on food and education and less on alcohol and cigarettes when a higher share of household cash income accrues to women. To achieve the same improvements in children's nutrition and health with a \$10 increase in women's income would require a \$110 increase in men's income (Hoddinott & Haddad, 1995).

Although men often control labor input and the sale of "cash crops," women often manage production of subsistence crops, albeit some of the same crops that are sold in local markets. Therefore, improving women's productivity in agriculture not only increases food availability for the household but also raises women's incomes and enhances food security due to women's spending patterns. As discussed in Module 8, public works programs are often used as elements of social protection programs to benefit poor, landless households. Cash wages provide flexibility, but women often prefer that these programs pay food wages. In a World Food Programme (WFP) project to improve watershed management in

Rajasthan, India, women were glad that the program paid food wages as opposed to cash wages because if the program paid cash, then their husbands would participate, and they would not see any additional resources dedicated to household food security. However, women often face constraints to market engagement. Cash crops are often collected at the farm gate, whereas food crops need to be transported by the grower to local markets. In Africa this is commonly done by women head loading. Studies have found that women transport 26 metric ton kilometers per year compared to less than 7 for men. This leads some people to argue that women account for two-thirds of rural transport in sub-Saharan Africa (Blackden & Bhanu, 1999). Hammer mills, which are needed to grind many maize hybrids, are often less common and are centralized at a greater distance from individual households. Given that women bear the transport burden, they may be less likely to adopt hybrid varieties and continue to favor their traditional but lower yielding varieties.

Investment in transport and infrastructure is necessary to support women's market engagement this is an important step toward integrating women into value chains. Changes in policy and regulatory frameworks are also needed to create an equal playing field for women and men in market participation. Greater access to information, organizations, and resources is important for poor women, who disproportionately lack access compared to their men counterparts. Finally, capacity building is needed for poor women in particular, as cultural and other gender-specific constraints have hindered them from greater engagement in markets (Hoddinott & Haddad, 1995).

Some researchers have postulated that increased access to credit by women would result into positive change in expenditure patterns at the household. A few studies, however, have failed to find positive impacts on income from microfinance participation. Masanjala



and Tsoka (1997) find little impact of FINCAMalawi on living standards and expenditure patterns. Ssendi and Anderson (2009) also find little long-term effect, as measured by increases in household assets. However, both studies use a much less robust methodology and make little attempt to control for selection bias.

Helmore (2009) that participation of women in microfinance empowers by enhance their decision making ability. Dean&Chris (2012) doing a study in Uganda and Malawi, found that women expressed increased influence over household decisions as well as more frequent engagement with others in their communities.

An evaluation of VSLA in Eastern Africa by CARE (2011) established that although more money went to putting food on the table during bad times, the GS&L approach supported group members with alternative means of earning income and providing food for the families. It was found that 87.9% of the interviewed GS&L group members reported that wages and income improved, it was also implied that this made food more affordable. GS&L Members, especially women, acknowledged that the project contributed to their ability to put food on the table.

This finding concurs with the views of Helmore (2009) that when women earn more money, they invariably invest their earnings in better food. It can therefore be deduced that VSLAs has empowered women purchasing power for foodstuff at their households hence enhancing household food security.

## **2.8 Influence of VSLAs in empowering women towards enhancing utilization and nutrition of food at the household.**

The majority of the related literature has found that the households of microfinance clients have, on average, better nutrition and health statuses compared to non-client

households, especially when the client is female (Pitt et al.,2003; Pronyk et al.,2007; Barnes, 2001; Littlefield et al.,2003). A study by Conner, 2010 in Tanzania revealed quantitative data suggests that VSLA participation has little effect on meal quantity, but has a substantial positive impact on meal quality, evident through an increase in consumption of both fish and meat. The VSLA program also appears to improve access to health services for member households, by facilitating a higher level of spending on healthcare.

Households of microfinance clients, particularly those of female clients, appear to have better nutrition and health statuses compared to non-client households (Pronyk et al., 2007; Littlefield et al., 2003; Hossain, 1988). Pitt et al. (2003) find that women's credit has a large and statistically significant impact on two of three measures of children's health. A 10 percent increase in credit provided to females increases the arm circumference of their daughters by 6.3 percent - twice the increase that would be expected from a proportionately similar increase in credit provided to men. Female credit also has a significant and positive, but somewhat smaller effect on the arm circumference of sons. Female credit is estimated to have large, positive and statistically significant effects on the height-for-age of both boys and girls. However, no statistically significant effects are found for body mass index (BMI) of boys or girls.

Barnes (2001) finds that participation in Zambuko Trust in Zimbabwe has a positive impact on the frequency with which food is consumed in extremely poor households as well as on the quality of food. Specifically, participation has led to a positive impact on the consumption of high protein foods (meat, fish, chicken and milk). MkNelly & Dunford (1999) also find that children of participants of the Lower Pra Rural Bank Credit program in Ghana experience significant improvements in feeding frequency compared to children of

non-clients. However, positive impacts on the nutritional status of clients of the CRECER Credit program in Bolivia and their children are not evident. Deeper analysis of the client group alone, however, reveals that children's weight-for-age is positively related with the quality of education services provided. This finding suggests that without important improvements in caregiver practices, increases in income and even empowerment are unlikely to bring about marked improvement in children's nutritional status.

Women are central in household decisions around food selection, preparation, storage and allocation, all decisions that have major impacts on utilization. For example, research has shown that there is often little correlation between household caloric intake and individual caloric intake because households prioritize members' consumption differently. Women often play a significant role in determining that allocation, albeit guided by societal norms. Women are also the main providers of childcare, and nutrition of infants and young children is critical to preventing stunting and ensuring good cognitive development (FAO, 2005b).

Having access to food of sufficient quality does not automatically translate into good nutritional status for individuals. Women's role in food utilization for food security is perhaps the most critical and outweighs the importance of their role in food production and how they spend the income they earn. Sixty percent of the calories and proteins consumed by humans today come from just three plant species: maize, rice, and wheat. Seventy-five percent of our food supply comes from just 12 plants and five animal species (Lambrou & Laub 2004), but yet dietary diversity is extremely important. Diets dominated by cereals lack an adequate array of micronutrients such as iron, vitamin A, B vitamins (niacin, thiamine), vitamin C, zinc, iodine, and folate. Deficiencies in micronutrients are costly in

economic terms and in terms of people's well-being. Deficiencies in vitamin A, iron, and zinc all rank within the top 10 leading causes of death through disease in developing countries (WHO, 2002).

In Sierra Leone iron deficiency among women agricultural workers will cost the economy \$100 million in the next five years. Women are typically responsible for food preparation and thus are crucial to the dietary diversity of their households. Women are generally responsible for selecting food purchased to complement staple foods and to balance the household's diet. Even in the Sahel where men control the granaries, women are responsible for supplying the "relishes" that go with the grains, and it is these that provide the bulk of the micronutrients. The prime sources for micronutrients are fruits, vegetables, and animal source foods, including fish. Animal source foods are particularly good; they are high density in terms of micronutrients, and those micronutrients are also more bioavailable to the human body. (Darnton-Hill et al., 2005).

According to Holme (2009), because of microfinance, the poor can invest in income-generating activities that increase their economic security; provide more nutritious food for their families; send their children to school instead of to work; pay for their families' health care; and, increasingly, provide sanitation and clean drinking water for their homes – all of which are essential building blocks for a life of dignity and hope.

These findings differed with those of a study by Conner (2010) in Tanzania which revealed that quantitative data suggests that VSLA participation has little effect on meal quantity. This confirms otherwise and this is an indication that food security has been enhanced at the households where the members of the VSLAs come from.

Corner (2010) noted that participation in VSLA has a substantial positive impact on meal quality. It can therefore be deduced that participation in VSLA has empowered women towards household food security in the household. Also supporting this view is from Tanzania (Brannen 2010) and Rwanda (Lacalle et al. 2008) which suggest that participation in the Village Savings and Credit Association and the Red Cross credit programme respectively is associated with a significant positive increase in meal quality as a result of enhanced financial ability. On the contrary, Dean & Chris (2012) who found that in Ghana participation on VSLA had no impact on food security.

As a result of microfinance, the poor can invest in income-generating activities that increase their economic security; and, increasingly, provide sanitation and clean drinking water for their homes (Holme 2009). Data from Malawi, showed that access to credit of adult female household members improves 0–6 year old girls' (but not boys') long-term nutrition as measured by height for age (Shimamura and Lastarria-Cornhiel 2009).

## **2.9 Influence of VSLAs in empowering women towards enhancing risk management and resilience household.**

Resilience cuts across all aspects of food security (availability, access and utilization) and so it does not stand alone as a pillar of food security. Food security can be destabilized by shocks and/or cyclical events that affect individuals, households and entire communities or countries.

Common shocks that affect food security include: Food price volatility; There is increasing international volatility in food prices, caused by such factors as the policies of food exporting countries (e.g. export bans), increased investment in biofuels, and climate

change. These price spikes have multiple consequences, including shifts away from nutritious food, reduced food intake, school drop-out, and reductions in health spending and assets. For poor households, these price increases can severely reduce household access to food. Illness; Severe illness, such as that caused by HIV/AIDS, has a serious impact on the ability of food insecure populations to make use of nutritious food. The utilization aspect of food security is therefore the most frequently affected for people suffering from HIV and AIDS because the amount of energy required to undertake the same amount of daily activity is diminished. Adults with HIV have 10 to 30 percent higher energy requirements than a healthy adult without HIV, and children with HIV 50 to 100 percent higher than normal requirements. Reduced utilization can also feedback to affect production, and food availability because when a person's energy level is lower, they are eventually less likely to undertake production at the same level. While Anti-Retroviral Therapies (ARVs) can help obviate this crisis in the short term, the implications for the reorganization of family labour are that children and the elderly are often forced to work harder in order to achieve food security. Household economic loss; Conflict, drought, job loss and other sudden disruptions in household food production or income may have a dramatic impact on households' ability to produce and purchase food. Such shocks are particularly challenging for families that lack adequate coping strategies. Other factors that can impact on resiliency include the effects of climate change, information asymmetries and the lack of a predictable business enabling environment (Foyler&Nelson,2010).

During conflict and crises, food aid and agricultural assistance are both necessary components of effective interventions. The intertwining forces of food aid and agricultural support affect women's and men's food security, nutrition, health, and livelihoods. During

times of crisis, women and girls are often forced to reduce their intake in favor of other household members, particularly men and boys, which results in increased incidence of malnutrition among women. However, men are at greater risk during famines, and in many recorded famines, mortality rates are higher among men than women. Insecure conditions can also limit women's mobility and access to humanitarian aid or markets. When crises disrupt agricultural production and distribution, displace populations, and render land unusable, food aid is of critical importance, especially in the short term. The key to sustainability, however, is to ensure that the aid provided does not create dependency or harm the communities and stakeholders it hopes to assist. To plan emergency interventions properly requires substantial knowledge of the ways in which the agricultural sector works, as well as knowing what the socio-cultural reality is locally and how that dictates who does what, who has what, and who controls what. Because women (and children to some extent) are typically responsible for food production, preparation, storage, and marketing, it is crucial to include them in emergency-related food security planning and decision making as potential change agents and decision makers, rather than as the "victims" they are often portrayed to be. A key aspect of program design is to understand the differing roles, responsibilities, capacities, and constraints of women and men in the region in question. (Sanchez et al., 2005).

MFIs have often supported the participating members in a myriad ways during disasters ranging from offering loans to donations to attempts to impart the members with skills of coping with disaster. According to Gulvan (2012), In Bangladesh MFIs also perform humanity activities such as distributing emergency food support not only for their beneficiaries, but also to others after any natural calamity. After any disaster, especially

devastating ones like cyclone Aila, most of the MFIs postpone their weekly installment collection for few weeks. For example, after cyclone Aila, Uatran provided financial aid to start small businesses among the severely affected beneficiaries, material support, food and drinking water. SUS provided low interest (4% interest) business loan, housing loan and some cases housing materials. BRAC supported the poor farmers with no interest loan under the ACP (Agricultural Credit Program) to encourage farmers to produce alternative climate adaptive crops such as beans, corns and sunflower to adapt to climate change as they require very low amount of water.

Gulvan (2012), asked MFIs about their personnel expertise and knowledge about climate change and disaster management. None of the MFIs have climate change or disaster management expertise at the field level. Among the local staff the level of understanding about climate change varies. In most cases the local staffs are informed or have heard about climate change, but how that affects the local communities and up to what scale is not clear to them. Among the staffs of Prodipan and BRAC the understanding about climate change is relatively better. But recently most of MFIs are trying to incorporate climate change and disaster preparedness awareness among their staff with short training courses for the benefit of employees and beneficiaries. Most training, however, focuses on disaster preparedness and early warning system, and not climate change adaptation.

During interviews, most of the MFIs officials recognize the impacts of climate change in the study area in the forms of temperature variation, rainfall irregularities (heavy rain in the off season and low rain in the rainy reason), water stress, salinity intrusion and increase of frequency and severity of natural disasters. However, none of the MFIs in the study area have programs directly addressing food security issues of poor women in the



context of climate change. They also have no programs to address climate change impacts and adaptation issues directly. But most MFIs officials recognize different impacts of climate change along with increase of food price, debts, , and food insecurity that have affected their beneficiaries, especially after Cyclone Aila in 2009 (Gulvan, 2012). As a way of helping them to manage financial risk. Holme, (2009) observes that VSLA members do receive a year of intensive training from CARE in group dynamics and governance and in money management.

Dean & Chris (2012) evaluating VSLA participating women in Uganda noted they are more likely to own business and have higher profits, this was because of the risk management skills. However, for the study in Uganda the women's business ability and higher profits were not linked to nutritional stability and security at the household. Holme, (2009) attributes risk management by these women to a year of intensive training from CARE in group dynamics and governance and in money management, it does not lay specific emphasis on risk management. Dean and Chris (2012) however find no impact on how VSLA households react to shocks nor on the duration of the economic recovery. However in Uganda and Malawi, households were more likely to take out a loan from a savings group in response to a shock.

The social fund have sometimes been use to take care of unexpected circumstances that would destabilize household food security. Hugh (2005) noted that social fund can incorporate a number of purposes: emergency assistance, educational costs for orphans, funeral expenses etc. Social Fund is set up to cover expenses that cannot be exactly predicted.

## **2.10 Theoretical Framework**

This study was be guided by an interweave of two models. One is the Village savings and Loans Association model which according to Daley-Harris (2009) is a microfinance whose objective encompasses the provision of financial services, including loans, savings and insurance, to low-income clients who generally lack access to more formal banking services. The promise of microfinance lies in its ability to empower people to work their own way out of the poverty trap, food insecurity while avoiding dependency and the ‘hand out’ shame of conditional aid. FAO(2005b) contends to this, closing the gender gap in agriculture – or increasing women’s contribution to food production and enterprise by providing equal access to resources and opportunities – could reduce the number of hungry people in the world by 12 to 17 per cent, or by 100 to 150 million people. Women need increased access to financial services and labour markets, and the right to own land and property in order to increase their economic productivity and secure their basic human rights.

The second model, key to this study is the four pillars to food security approach originated by FAO and Modified by Mercy Corps. According to Mercy Corps (2009) for a household or community to be considered food secure, they must sustainably participate in the four pillars of food security, ‘availability,’ ‘access,’ ‘utilization’ and ‘risk management.’ These qualities are interrelated and all are necessary for long-term food security. For example, having ample availability of food is not sufficient for living a healthy and productive life unless one has both the financial access to the food and the knowledge on how to prepare it while retaining its nutritional value. Mercy Corps’ food security approach advocates programmatic impact by facilitating initiatives that address all four pillars.

Ultimately, it is the confluence of these four qualities that result in more food secure households and communities.

The study therefore sought to see how the two models play out with women being the focus. How do Village Savings and Loans Associations model empower the women towards the four pillar model of food security?

## 2.11 Conceptual framework of the study

The study was guided by the following framework:

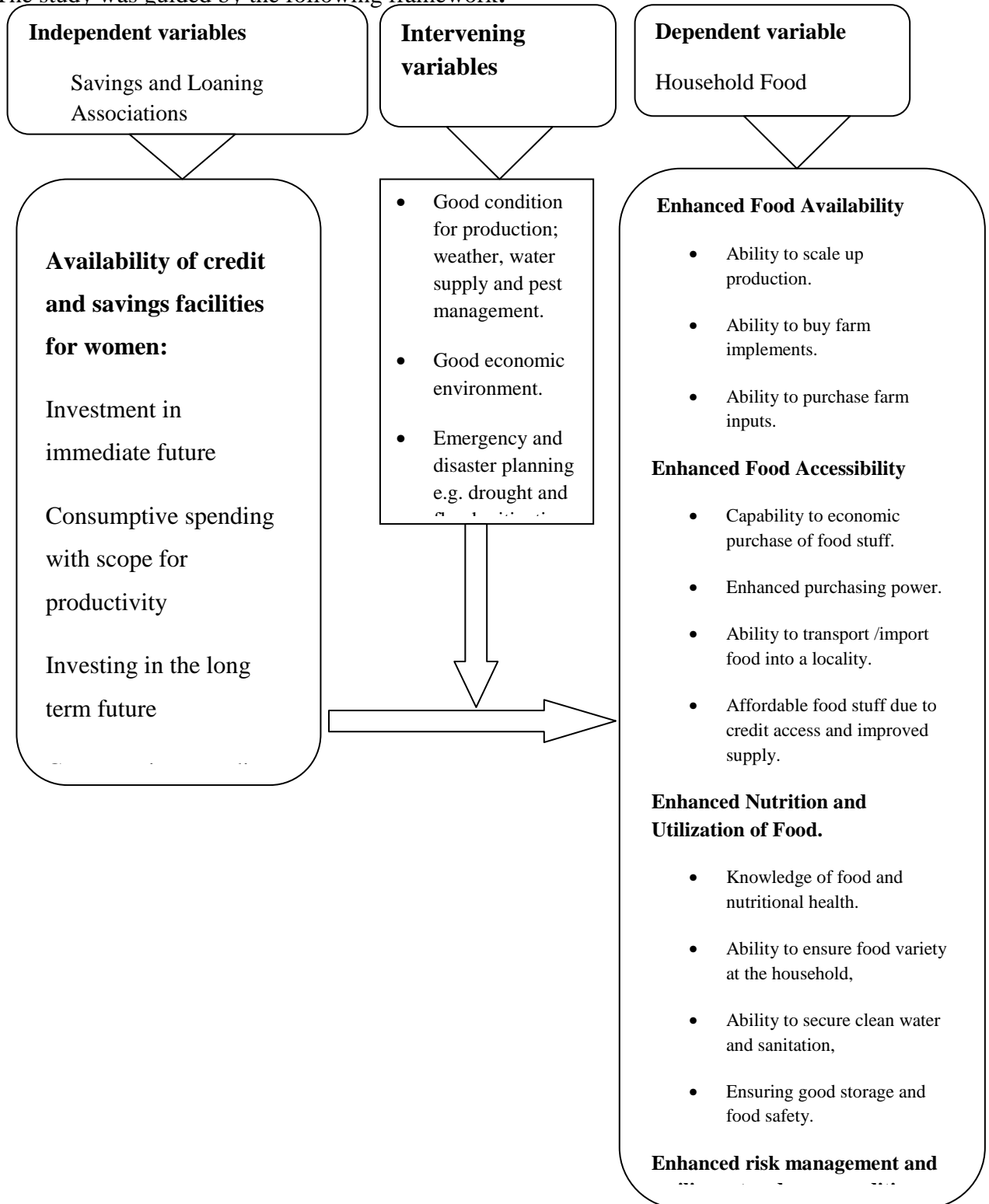


Figure 2.1: Conceptual framework for the relationship between village savings and loans associations and women empowerment for household food security in Bondo District

## **2.12 Summary of knowledge gaps**

This chapter reviewed literature related to the role of Village Savings and Loans Associations (VSLAs) in empowering women towards ensuring household food security. The study looked at the following thematic areas: Village Savings and Loans Associations as a Micro-finance, Women's empowerment, The relationship between microfinance and women's empowerment, The actual contribution of women to household food security, Empowering women towards enhancing availability of food, accessibility of food, Utilization and nutrition and resilience and risk management at the household through Village Savings and Loans Association.

Throughout the literature, women have faced a lot of difficulties over the years in accessing credit from the formal institutions mainly because of lack of collateral since in most cultures women have very minimal ownership to resources and especially land and relatively high level of illiteracy rate especially in the developing nations. The strength that microfinance has been able to command is their ability to increase access and financial inclusion to the poor and especially women.

There has been a lot of focus by governments and non-governmental organizations about women empowerment as a tool for effective and sustainable development. The concept of women empowerment has however been debated by many scholars as to what it actually involves. The uniting ideas however is that women are able to come from a state of disempowerment to a state of empowerment; whereby they become able to organize themselves to increase their own self-reliance, to assert their independent right to make

choices and to control resources. The study therefore looked at how this plays out in the context of Village Savings and Loans Associations (VSLAs) to enhance the women's ability to ensure household food security.

The literature revealed a positive relationship between microfinance and women empowerment towards household food security. Through the loans, women are able to improve: food availability through scaling up production activities, food accessibility through purchases, utilization and nutrition through use of enhanced knowledge gained from training in the groups as well as enhanced proper storage for surplus produce, and risk management and resilience through social and economic cushioning during shocks. However, some researchers have reported no change of food security status among household who have participated in the Village Savings and Loans Association.

The role of women farming activities and household food security was adequately explored. It was found that women play a very significant role and this can be strengthened by improving the economic resources and creation a social cushion for the women. A lot of positive impact has been reported on women's involvement in the Village Savings and Loans Association. Nonetheless, some researchers have cited negative impact of women involvement in the Village Savings and Loans Associations noting that in some instances it has disempowered women; exploitation, unchanged poverty levels, increased income inequality, increased workloads, high interest rates and loan repayment, creating dependencies, and creating barriers to sustainable local economic and social development.

The researcher did not come about any study which had looked at the role of Village Saving and Loans in empowering women towards food security using the four pillar

approach by the World Bank and Mercy Corps. Most studies had looked at food security in general which may not give a clear indication of the situation, quite a number of studies looked at the access, utilization and nutrition components to food security which is inadequate. It is this gap that this study sought to fill.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter discusses a comprehensive depiction of how the essential data was sourced, processed, analyzed interpreted and presented to fulfill the research objectives. The methodology elements considered in this chapter include: the research design, the target population, the sample size and sampling procedures used, data collection instruments, measures taken to maintain validity and reliability of the instruments, data collection and processing methods, analysis and presentation of research findings.

#### **3.2 Research design**

Both quantitative and qualitative approaches to data collection were used. Quantitative approach was used since it is a formal, objective, systematic process to describe and test relationships and examines cause and effect interactions among variables of the study. While qualitative approach enabled the researcher to focus on the examination of characteristic traits or properties of certain activities, groups and situations, not dwelling in the frequency of appearance but on the underlying factors behind the figures.

A descriptive research design was used. This research design was used for effective and accurate gathering of data that describe events, organizes, tabulates, depicts, and describes the data collected. Descriptive design enabled the researcher obtain pertinent and precise information concerning the topic of study i.e. the influence of VSLAs in empowering women towards household food security in Bondo District. A descriptive



design was also suitable for the study since information gathering on a population was done at a single point in time.

### **3.3 Target population**

This study was conducted in Bondo, an administrative District in Siaya County, Kenya. According to the Kenya National Bureau of Statistics (2009), the District covers 587.2 sq. km with an approximate population of 148,335 people. The District has three administrative divisions: Maranda, Nyang'oma, and Usigu. According to records at the District Gender and Social Development Office in Bondo (2013), there were about 248 registered Village Savings and Loans Associations, each with approximate membership of 30. The target population therefore comprised all the 248 registered VSLAs in Bondo District.

### **3.4 Sample size and sampling procedures**

According to Gay (2003) sampling is a process in which a number of individuals are selected for a study in such a way that the larger group from which these individuals were selected to represent them.

#### **3.4.1 Sample Size**

The 248 registered VSLAs in Bondo district are homogenous and have an average membership of 30. Statistics from the District Gender and Social Services offices in Bondo indicated that the population of women in the groups was 7068 while that of men was 372. This comes to a total membership of 7440. Sample size for quantitative data collection was determined using the standard formula by Fisher et al., (2003) as shown below;

$$n = \frac{z^2 pq}{d^2}$$

Where: n = Desired sample size (If the population is >10,000)

P = The proportion of the target population estimated as women participating in VSLAs estimated at 95%.

z = Standard normal deviation which is 1.96 at 95 % level of confidence.

q = 1 – p = 1-0.95 = 0.05

d = Degree of accuracy desired is 0.05

$$nf = \frac{n}{1 + \left(\frac{n}{N}\right)} \text{ (Mugenda \& Mugenda, 2003)}$$

Where: nf = desired sample size (If the target population is <10,000)

n = the desired sample size (when the target population is >10,000)

N = the population of women participating in VSLAs in Bondo District is 7068.

$$n = \frac{1.96^2 \times 0.95 \times 0.05}{0.05^2} = 72.992$$

$$nf = \frac{72.992}{1 + \left(\frac{72.992}{7068}\right)} = 72.28 \approx 72 \text{ women members of VSLAs.}$$

A randomized list of names of the all the 7068 women members in the 248 VSLAs in Bondo District was obtained. Based on the World Bank preposition that 30 clusters of 10 members were adequate for homogenous clusters, 30 VSLAs were selected randomly for the group capacity assessment.

Sample size for qualitative data collection comprised: 5 CBO official,5 Community Based Trainers and 2 Divisional Development officers.

### **3.4.2 Sampling procedures**

Sampling technique is the actual procedure that was followed to obtain the individual members of the sample to represent the population. This study employed both probability and non-probability sampling techniques. For quantitative data collection, probability sampling technique of systematic random sampling was used. A randomized list of names of the 7068 women members of the 248 VSLAs was obtained. The sample frame was obtained from the CARE Officers in direct contact with the VSLAs (Community Based Trainers) in Bondo District who keep the list of all the participating women. A systematic random sampling technique was therefore used picking  $\binom{7068}{72}^{\text{th}} = n^{\text{th}}$ , where n= every 98<sup>th</sup> woman in the list. The group assessment tool was administered to 30 VSLAs, targeting their officials.

To obtain the sample size for qualitative data collection, purposive sampling method was used to select 5 CBO officials,5 Community Based Trainers(CBTs),District Gender and Social Development Officer(DGSDO) and 3 Divisional Development Officers(DDO) for Key Informant Interviews. 4 VSLAs produced 8 members each for focused group discussions. This kind of sample, selections was made based on pre-determined criteria

which was the researcher's judgment. Purposive sampling was used because it allows the researcher to home in on people, who have good grounds in what they know and believe. For this study, this was critical since it enabled the researcher to concentrate on respondents and instances which produced rich and most valuable data and directed focus on extreme cases of improvement or decline in status to illuminate the research questions at hand. In this respect, CBO officials, the CBTs, for the VSLAs were purposively sampled together DGSO and the DDO.

### **3.5 Research Instruments**

The study applied three sets of data collection instruments: a household questionnaires for women participating in VSLAs, capacity assessment tool for the VSLA groups and Key informant guides for the CBOs, CBTs, DGSDO and DDOs. A questionnaire was used because it is a printed self-report form and elicited information through written responses by the subjects. Questionnaire was also decided upon because of the following: they ensured a high response rate since all the questionnaires were distributed to respondents to complete and were collected personally by the researcher, they required less time to administer and offered the possibility of anonymity because subjects' names were not required to complete the questionnaire, there was less opportunity for bias as they were presented in a consistent manner.

The same questionnaires were distributed to all sampled respondents. The questionnaire comprised closed-ended questions and a few open ended questions. Closed-ended questions were included because they are easier to administer and analyze. Open ended questions were included because they allowed the subjects to respond to questions in their own words and provide more detail.

The questionnaire was divided into sections A, B, C, D and E. Section A aimed at gaining demographic data, this information would help the researcher when interpreting the findings. Section B examined the influence of VSLAs in empowering women towards availability of food at households in Bondo District. Section C investigated the influence of VSLAs in empowering women towards accessibility of food at the household in Bondo District. Section D explored influence of VSLAs in empowering women towards nutrition and utilization of food at the households in Bondo District and section E scrutinized the influence of VSLAs in empowering women towards risk management and resilience at the household in Bondo District.

Used as a tool to explore related issues and problems associated with a given topic, the Key Informant Interview (KII) involved talking to CBO officials, CBTs, DGSDO and DDO for their knowledge on the topic of research. KII was used because it enabled the researcher to get information from individuals who were considered particularly knowledgeable on the topic of the study. It also allowed a face to face interaction which permitted the researcher to seek new insights, ask questions, and assess phenomena in different perspectives.

The group capacity assessment tool was applied because it provided a method for generating quantitative as well as qualitative data to support the development of a capacity development action plan and increased the opportunity for the group members to share experiences. The capacity assessment tool was used to generate more information on the VSLAs which informed and helped to connect issues and responses from the individual questionnaire of group members.

### **3.5.1 Pilot testing**

A pilot study can be used as a “small scale version or trial run in preparation for a major” (Polit, Beck, & Hingler, 1993). Baker (1994) noted that “a pilot study is often used to pre-test or try out a research instrument. Baker found that a sample size of 10-20% of the sample size for the actual study is a reasonable number of participants to consider enrolment in a pilot. The researcher therefore pre-tested the tools on 14 randomly selected women participating in VSLAs; this comprised 20% of the sample size. The group capacity assessment tool was administered to one VSLA while the KII tool was pre-tested with 1 CBO official and 1 CBT. Completed pilot test tools were checked and trial data entry conducted and improvements made on the tools and processes of data collection.

The pilot test addressed a number of logistical issues. As part of the research strategy the following factors were resolved prior to the actual study: checked that instructions were comprehensive, checked the wording of the survey tools and eliminate any ambiguity, checked the reliability and validity of the instruments, checked the statistical and analytical process to determine if they are efficacious.

### **3.5.2 Validity of the research instruments**

According to Mugenda (2008), reliability and validity refers to the quality and trustworthiness of data. Dooley (1996) further defines validity as the extent to which the study instruments captured what they purport to measure. The validity of the instruments was ascertained by the pilot test. This ensured that the instructions are clear and all possible responses to a question are captured. Content validity of a measuring instrument is the extent to which it provides adequate coverage of the investigative questions guiding the study (Mugenda, 2008). In this study, content validity was determined by consulting the

judgment of research supervisors within the university. The Researcher reviewed the instruments and sought opinions of the University supervisors to recommend for improvements and verify whether the instruments adequately addressed the objectives of the study and answer the research questions.

### **3.5.3 Reliability of the instruments**

Polit & Hungler (1993:445) refer to reliability as the degree of consistency with which an instrument measures the attribute it is designed to measure. It therefore means the measure of degree to which research instruments yields consistent results or data after repeated trials. The test re-test method was used to assess the reliability of the instruments. This involved administering the same questionnaires twice to household respondents in Nyang'oma Division at a period interval of one month and correlating their responses independently. After administering the questionnaires, a correlation co-efficient was calculated using appropriate formula to establish the relationship between the two set of scores. Spearman's Brown Prophecy formula was applied as shown below:

$$\text{Reliability of the entire test} = \frac{(\text{Reliability of 0.5 test}) (r)}{1 + (\text{Reliability of 0.5 test}) (r)}$$

$$1 + (\text{Reliability of 0.5 test}) (r)$$

*Where r, is Coefficient of correlation*

A correlation test was run on responses to the four major study variables questions and an average coefficient of correlation of  $r = 0.81$  was obtained. This indicated that there was a strong and positive correlation on the two sets of data from Nyang'oma division and a confirmation of the reliability of the research instruments.

### **3.6 Data collection procedures**

The respondents were reached during their weekly and fortnightly meetings; the preselected respondents were singled out and the questionnaires personally distributed by the researcher to the VSLA members to complete. The researcher completed questionnaires through interviews for those who were not be able to read or write. Self-administration and interviews. All the questionnaires were completed in the presence of the researcher and collected the same day after their completion. On-spot checks were done for completeness, omissions and commission errors. The errors found were corrected there and then. The respondent also got an opportunity to seek for clarification on responses that were not clear. The capacity assessment tools were administered to the selected groups through interview by the researcher. The KII were also done personally through in-depth face to face questioning sessions.

### **3.7 Data Analysis techniques**

After completion of the data collection exercise, all the questionnaires were adequately checked for data quality, edited for completeness and consistency, organized and analyzed. For analysis of closed-ended questions, Statistical Package for social sciences (SPSS) was used. Data was analyzed by descriptive statistics. Frequency tables were generated; findings were presented in pie diagrams and bar graphs. The open ended questions were analyzed through content analysis by the researcher with the aim of quantifying emerging characteristics and concepts.

### **3.8 Ethical considerations**

The researcher demonstrated not only expertise and diligence, but also honesty and integrity. This was done to recognize and protect the rights of human subjects. To render the



study ethical, the rights to self-determination, anonymity, confidentiality and informed consent were observed.

The researcher also ensured that all the necessary permits are obtained from the university, the DGSDO and the provincial administrators especially the local chiefs in the sampled locations.

## CHAPTER 4

### DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

#### 4.1 Introduction

This chapter presents the data, analyzes the data and interprets the findings of the study. This chapter also discusses the findings in light with the earlier findings. The presentation, analyses interpretation and discussions of the findings are in accordance with the four major objectives of the study.

#### 4.2 Questionnaire response rate

The response rate for the questionnaire was worked out and results were as shown in table 4.1.

*Table 4.1: Questionnaire response rate*

<b>Sample size</b>	<b>Respondents reached</b>	<b>Percentage</b>
72	70	97.2%

Out of the 72 respondents in the main sample, 70 were reached and their questionnaires completed for analysis. This represented a response rate of 97.2%. A response rate of 50% is considered adequate for analysis and reporting, 60% is good and that of 70% and above is very good (Mugenda and Mugenda, 2003).

### **4.3 Demographic characteristics of the respondents**

During the survey, the demographic characteristics considered during the study were age, marital status, education, occupation and household members.

#### 4.3.1 Age of the respondent in completed years

The respondents were required to indicate their age and the results were as follows in table 4.2.

*Table 4.2: Age of the respondents*

	<b>Frequency</b>	<b>Percent</b>
18-28	12	17.1
28-38	21	30.0
38-48	25	35.7
Over 48	12	17.1
<b>Total</b>	<b>70</b>	<b>100.0</b>

Majority of the respondents at 35.7% were women between 38 and 48 years of age. These were women who are married or were at some point married and have had a lot of experience in Savings and Loans Association and ensuring food security for their households for a considerably long period of time. They were well informed, ready and exuded familiarity by giving very useful information for the study. Of the respondents 30% were women between 28 and 38 years old, they experience a lot of challenges of meeting the household nutritional needs of the teenagers because of their physiological changes and needs, and their views enriched the study. Of the respondents 17.1% were women of over 48 years old. These were women who have been in the role of ensuring household food security for a considerably long period considering that they were the oldest age category; they gave rich experience and insight into the influence of Savings and Loans Association in empowering women towards household food security. Another 17.1% were women between 18 and 28 years, they were fresh into marriage and in managing of the households in terms

of enhancing food security, their views were very useful since they were still energetic and often worked very hard to ensure food availability and enthusiastic about the potentials of Savings and Loans Associations. None of the respondents was below the age of age of 18 years. This findings complements the VSLA impact evaluation in Bondo by CARE (2011) that the largest proportion of the respondents were aged 31 to 35 years (15.2%) and that the smallest portion were aged 22 to 25 years at 7.1%.However, the other age brackets did not conform since CARE (2011) indicated that 51 to 55 years (13.6%), 41 to 45 years (13.4%), 36 to 40 years, 26 to 30 years and 56 to 60 years (10.4% each), 60 year and older (8.6%).

#### 4.3.2 Marital status of the respondents

The respondents were asked to indicate their marital status and the results were show in table 4.3.

*Table 4.3: Marital status of the respondents*

	Frequency	Percent
Married	44	62.9
Divorced	1	1.4
Widowed	25	35.7
<b>Total</b>	<b>70</b>	<b>100.0</b>

Out of the respondents interviewed, 62.9% were married and living with their husbands. This was very important in portraying the role of women in ensuring food security in households where men are the bread winners. Out of the respondents 35.7% of the women interviewed indicated they were widows and therefore the duty of ensuring food security solely rest on them. They provided a basis for comparison for the influence of Village

Savings and Loans in empowering widows and those who were living with their husbands. Of the respondents, 1.4% indicated that they were divorced at the time of the interview and were as well the sole providers for their households. It was noted that Village Savings and Loans was common among the widows because it is seen as a means of empowering them to be able to take up the role of ensuring household food security on their own. Neither of the respondents was single nor divorced. This findings closely relates to that of CARE(2011) which show that 76% of the interviewed GS&L members were married, while slightly over one fifth 21% were widowed, with 3% either divorced, single or separated.

#### 4.3.3 Education attainment of the respondents

The respondents were required to give their education attainment and the results were as shown in table 4.4.

*Table 4.4: Education attainment of respondents*

	<b>Frequency</b>	<b>Percent</b>
Never attended school	3	4.3
Primary school	27	38.6
Secondary school	36	51.4
University/college	4	5.7
<b>Total</b>	<b>70</b>	<b>100.0</b>

Majority of the women respondents at 51.4% had obtained secondary school level of education. They had a very good background of financial management and could relate the VSLA intervention with the changes in the status of their household food security. Out of the respondents, 38.6% of the respondents had obtained primary school education. They had

an understanding of the basic accounting of debit and credit and could respond on how VSLAs had impacted on their household food security. Of the respondents 5.7% of the respondents had college education; they were very cooperative and gave invaluable and detailed responses towards addressing the research questions. The results showed that 4.3% of the respondents had never attended school; caution was taken to explain the questions to them without changing their meaning.

#### 4.3.4 Main Occupation of the respondent

The respondents were required to indicate their main occupation and the results were as shown in table 4.5.

*Table 4.5: Main occupation of the respondents*

	Frequency	Percent
Farming	23	32.9
Small business	30	42.9
Formal employment	10	14.3
Housewife	7	10.0
<b>Total</b>	<b>70</b>	<b>100.0</b>

Majority of the respondents at 42.9% of the respondent engaged in small business; they have used their savings and loans to expand their businesses. Of the respondents, 32.9% of the respondents were engaged in farming; they have used their savings and loans to increase crop and animal production. Formal employment was indicated by 14.3% of the respondents; they could use their savings and loans to improve nutrition at the household level. It was noted however that all the respondents were doing some sort of farming. Of the

respondents, 10% indicated they were housewives, they used their savings and loans to directly purchase foodstuff at the household. This findings showed a departure from those of Central Bureau of Statistics (2002), a study done in Bondo indicated that unemployed women constituted 4%, women who worked for pay were 9%. Women who were doing unpaid work but engaging in family business were 24%, while those doing unpaid work but engaging in family farm were the majority at 63%. This study indicated that majority of the women engage in small businesses as opposed to family farming.

#### 4.3.5 Number of household members

The respondents were asked to indicate the number of their household members and the results are shown in table 4.7.

*Table 4.6: Number of household members*

	<b>Frequency</b>	<b>Percent</b>
Less than 3	8	11.4
3-6	32	45.7
6-9	25	35.7
Over 9	5	7.1
<b>Total</b>	<b>70</b>	<b>100.0</b>

Majority of the respondents at 45.7% they had 3 to 6 members of household. Of the respondents, 35% of the respondents had 6-9 household members, 11.4% of the respondents had less than 3 members of the household and a minority at 7.1% had over 9 household members. The number of household members is often a determinant of household food security. Households which have many household members are more likely to suffer food



insecurity. By the majority of the respondents having a medium household size; it is possible for them to reap the benefits of Village Savings and Loans in realizing household food security.

#### **4.4 Influence of VSLAs in empowering women towards food availability**

This section examines the how VSLAs influence the ability to scale up production, the ability to buy farm inputs and implements and how this empowers women towards ensuring household food security. The results of the study were as presented as follows:

##### **4.4.1 Access to credit enhancing the ability to produce more food**

The respondents were asked if access to credit had enhanced their ability to produce more food, the result were as shown in table 4.7.

*Table 4.7: Access to credit enhancing the ability to produce more food*

	<b>Frequency</b>	<b>Percent</b>
Yes	55	78.6
No	15	21.4
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked whether credit has enhanced their ability to produce more food, majority of the respondents at 78.6% stated yes while 21.4% of the respondents stated no. This is in agreement with Lastarria-Cornhiel (2009), that access to credit had significantly improved the ability of women participating in VSLA to produce food. This is a strong indication that the credit facility available in the VSLAs had empowered women to expand food production, increasing their chances of having food secure households.

#### 4.4.2 Margin by which food production had improved

The respondents were able to show the margin by which food production had improved; the results were as shown in table 4.8.

*Table 4.8: Margin by which food production had improved*

	<b>Frequency</b>	<b>Percent</b>
Less than twofold	21	30.0
Twofold	18	25.7
Threefold	7	10.0
More than threefold	9	12.9
N/A	15	21.4
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked by how much their production had improved as a result of credit facility, majority of the respondents at 30% mentioned by less than twofold, 25.7% indicated that it had improved by two folds while 12.9% responded that their food production had improved by more than threefold. A minority at 10% of the respondent mentioned that their food production had improved by threefold. Hugh (2009) in an impact study in Tanzania found out that participant stores of maize are double that of non-participants, despite owning less land, this is to some extent in agreement to the finding of this study. It can therefore be inferred that credit facility has very strong potentials of making households food secure.

#### 4.4.3 Savings and loans enabling stockpile of food through purchase

The respondents were able to indicate if savings and loans enabled them to stockpile foodstuff in their households through purchase, the results were as shown in table 4.9.

*Table 4.9: Savings and loans enabling stockpile of food through purchase*

	<b>Frequency</b>	<b>Percent</b>
Yes	59	84.3
No	11	15.7
<b>Total</b>	<b>70</b>	<b>100.0</b>

Majority of the respondents at 84.3% mentioned that VSLAs had enabled them to stockpile foodstuff in their households through purchase. On the other hand, 15.7% of the respondents said VSLAs had not enabled them to stockpile foodstuff. This is in agreement with Hugh (2009) who found that in Tanzania, food stocks of participants are higher than for non-participants across all the major staples. It can therefore be deduced from this findings that savings and loans has enabled the participating women in increasing their food stockpile hence making them more food secure.

#### 4.4.4 Margin by which household food stockpiles improved

The respondents were able to indicate by how much VSLAs had enabled them to improve their household food stockpiles, the results were as shown in table 4.10.

*Table 4.10: Margin by which household food stockpiles improved*

	<b>Frequency</b>	<b>Percent</b>
Less than twofold	18	25.7
Twofold	24	34.3
Threefold	11	15.7
More than threefold	6	8.6
N/A	11	15.7
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked to indicate by how many time VSLAs had enabled them to improve their food stockpiles, majority of the respondents at 34.3% indicated by twofold, 25.7% of the respondents indicated that their stockpiles had improved but by less than twofold. A minority 15.7% of the respondents indicated that their stockpiles had improved by threefold, only 8.6% of the respondents indicated that their food stockpiles had improved by more than threefold. This finding closely supported by an evaluation of VSLA project in Bondo by CARE (2010) that 33.0% of the interviewed GS&L group members indicated that there was great improvement in food supplies, while 25.0% of the respondents reported that there was moderate change in food supplies. The remaining said that food supply improved slightly 32.0%, no change (6.0%) and that the supply of food worsened (4.0%).

#### 4.4.5 VSLAs enhancing the ability of members to purchase farm inputs

The respondents were able to indicate if VSLAs had enhanced the ability of members to purchase farm inputs, the results were as shown in table 4.11.

*Table 4.11: VSLAs enhancing the ability of members to purchase farm inputs*

	<b>Frequency</b>	<b>Percent</b>
Yes	55	78.6
No	15	21.4
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if VSLAs had enhanced the ability of members to purchase farm inputs, majority of the respondents at 78.6% stated yes, 21.4% of the respondents stated no. This is in agreement with Dean and Chris (2012) for the findings that households in participating in VSLAs in Malawi spend slightly more on agricultural inputs. However, there no other impacts on investments and wealth in Malawi and Uganda. The ability to purchase farm inputs is a determinant of the amount and quality of outputs that come from the farm. It can therefore be inferred that VSLA enhanced the ability of member to purchase farm inputs.

#### 4.4.6 VSLAs enhancing the ability of members to purchase farm implements

The respondents were able to indicate if VSLAs had enhanced the ability of members to purchase farm implements; the results were as shown in table 4.12.

*Table 4.12: VSLAs enhancing the ability of members to purchase farm implements*

	<b>Frequency</b>	<b>Percent</b>
Yes	41	58.6
No	29	41.4
<b>Total</b>	<b>70</b>	<b>100.0</b>

VSLAs had enhanced the ability of 58.6% of the respondents to purchase farm implements. On the other hand, the ability to purchase farm implements for 41.4% of the respondents had not been enhanced. This findings departs from that of Hugh (2009) for a study in Tanzania which revealed that heir productive asset base (linked mainly to agriculture) was roughly the same as non-participants at the start of the programme and has not changed very much .Enhanced ability to buy farm implements as a result of participation in the VSLAs is likely to translate into better crop harvest hence more food secure households.

#### 4.4.7 Participation in VSLAs enabling members to engage more in decisions making relating to food production

The respondents were able to indicate if participation in VSLA had enabled members to engage more in decision making relating to food production, the results were as shown in table 4.13.

*Table 4.13: VSLAs enabling members to engage more in decision making relating to food production*

	Frequency	Percent
I agree	32	45.7
I strongly agree	24	34.3
I disagree	14	20.0
<b>Total</b>	<b>70</b>	<b>100.0</b>

Giving their opinions on whether their participation in the VSLA has enabled them to engage more in decisions relating to food production, majority of the respondents at 45.7% agreed, 34.3% of the respondents strongly agreed. A small proportion of the respondents at 20% disagreed. Cumulatively, 80% agreed that they engage more in decisions relating to food production. This finding concurs with that of Hugh (2009) that women’s decision-making in the household and in IGAs has increased both for participants and non-participants, but is far more pronounced amongst participants .Women’s engagement in decision making relating to food production is a very key step towards household food security.

#### 4.4.8 Areas of VSLA significant enabled contribution and decisions making relating to food production

The respondents were able to indicate areas in which VSLAs have enabled contribution and decisions making relating to food production, the results were as shown in table 4.14.

*Table 4.14: Areas of significant enabled contribution and decision making on food production*

	<b>Frequency</b>	<b>Percent</b>
Preparation of the firm	7	10.0
Deciding what crops to plant	27	38.6
Deciding on when to plant	9	12.9
Deciding on the scale/acreage	7	10.0
Purchasing firm inputs	6	8.6
N/A	14	20.0
<b>Total</b>	<b>70</b>	<b>100.0</b>

Mentioning the areas where they have significantly contributed in decision making towards food production, majority of the respondents at 38.6% mentioned deciding what crops to plant. 12.9% of the respondents engage significantly on deciding when to plant. Respondents indicating that they engage significantly on deciding on preparation of the firm were 10.0%, another 10.0% engage significantly on deciding the scale/acreage. A minority of the respondents at 8.6% engage noticeably in deciding on the purchase of firm



inputs. This is supported by some data from Uganda which suggest that micro-credit contributes to a women’s decision-making power; however, the author notes that this is a symptom of status within the household and control in their farming businesses as much as an impact of micro-credit (Wakoko 2004).Each of these decision areas are key and can result into better harvesting outcomes with the involvement of women in decision making.

**4.5 Influence of VSLAs in empowering women towards food accessibility**

The food accessibility variables looked at in this section are: capability to economic purchase for food stuff, enhanced purchasing power, ability to transport/import food and affordability of food stuff. The study examines how VSLAs influence the above mentioned variables to empower women towards household food security. The results of the study were as presented as follows:

**4.5.1 VSLAs enhancing the ability to purchase foodstuff**

The respondents were able to indicate whether VSLAs has enhanced their ability to purchase foodstuff, the results were as shown in table 4.15.

*Table 4.15: VSLAs enhancing the ability to purchase foodstuff*

	<b>Frequency</b>	<b>Percent</b>
Yes	62	88.6
No	8	11.4
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if VSLAs had enhanced their ability to purchase foodstuff, majority of the respondents at 88.6% stated yes, 11.4% of the respondents mentioned stated no.This finding concurs with the views of Helmore (2009) that when women earn more money, they

invariably invest their earnings in better food. It can therefore be deduced that VSLAs has empowered women purchasing power for foodstuff at their households hence enhancing household food security.

#### 4.5.2 Food purchasing ability before joining VSLAs

The respondents were able to indicate their food purchasing ability before joining VSLA; the results were as shown in table 4.16.

*Table 4.16: Food purchasing ability before joining VSLAs*

	<b>Frequency</b>	<b>Percent</b>
Less than Ksh.100	14	20.0
100-200	43	61.4
200-300	10	14.3
Over 300	3	4.3
<b>Total</b>	<b>70</b>	<b>100.0</b>

The respondents were asked to indicate their daily food expenditures before joining VSLAs, majority of the respondents at 61.4% indicated Ksh. 100-200.20% of the respondents indicated a daily food expenditure of less than Ksh.100.14.3% of the respondents indicated a daily food expenditure of Ksh.200-300 while only 4.3% indicated a daily expenditure of over Ksh.300.Comparing this results to purchasing ability after joining VSLAs,it is clear that the finding supports the views of an evaluation of VSLA project in Bondo District by CARE (2011) that Members, especially women, acknowledged that the project contributed to their ability to put food on the table.

### 4.5.3 Food purchasing ability after joining VSLAs

The respondents were able to indicate their food purchasing ability after joining VSLAs; the results were as shown in table 4.17.

*Table 4.17: Food purchasing ability after joining VSLAs*

	<b>Frequency</b>	<b>Percent</b>
Less than Ksh 100	5	7.1
Ksh.100-Ksh.200	6	8.6
Ksh 200-Ksh.300	18	25.7
Ksh 300-Ksh. 400	34	48.6
Over Ksh. 400	7	10.0
<b>Total</b>	<b>70</b>	<b>100.0</b>

The respondents were asked to indicate their daily food expenditures after joining VSLA, majority of the respondents at 48.6% indicated Ksh.300-Ksh.400, 25.7% of the respondents indicated a daily food expenditure Ksh.200-Ksh.300. Respondents within a daily food expenditure of over Ksh.400 were 10% while 8.6% of the respondents indicated Ksh.100-Ksh.200. A minority of the respondents at 7.1% of the respondents mentioned an expenditure of less than Ksh.100. This finding conforms to the results of an evaluation by CARE (2011) that although more money went to putting food on the table during bad times, the GS&L approach supported group members with alternative means of earning income and providing food for the families.

#### 4.5.4 Cross tabulation of the food purchasing ability before and after joining VSLAs.

A cross tabulation was done on between food purchasing ability before and after joining VSLA; the results were as shown in table 4.18.

Table 4.18: Cross tabulation of the food purchasing ability before and after joining VSLAs

		Purchasing ability after joining the VSLA in Ksh.					Total
		Less than 100	100-200	200-300	300-400	Over 400	
Purchasing ability before joining the VSLA	Less than Ksh.100	5	2	2	5	0	14
	100-200	0	4	15	23	1	43
	200-300	0	0	1	6	3	10
	Over 300	0	0	0	0	3	3
<b>Total</b>		<b>5</b>	<b>6</b>	<b>18</b>	<b>34</b>	<b>7</b>	<b>70</b>

Among the respondents who before joining VSLAs had a purchasing ability of less than Ksh.100, after joining VSLA 35.7% remained at the same expenditure level, another 35.7% respondents moved to Ksh.300-Ksh.400 expenditure level, 14.3% moved to Ksh.100-Ksh.200 expenditure level while another 14.3% respondents moved to Ksh.300-Ksh.400 expenditure levels. Among the respondents who before joining VSLAs had a purchasing ability of Ksh.100-Ksh.200, after joining VSLAs, majority of them at 53.5% to moved Ksh.300-Ksh.400 food expenditure levels, 34.9% moved to Ksh.200-Ksh.300, 9.3% remained at the same food expenditure level of Ksh.100-Ksh.200, while only 2.3% respondent moved to over Ksh.400 food expenditure levels. Before joining VSLAs, there were a total of 3 respondents who were at the expenditure level of over Ksh.300, after joining VSLA, there

were 41 respondents who had moved to this expenditure bracket, representing an increase of 92.7%. A few studies, however, have failed to find positive impacts on income from microfinance participation. Masanjala and Tsoka (1997) find little impact of FINCA-Malawi on living standards and expenditure patterns. Ssendi and Anderson (2009) also find little long-term effect, as measured by increases in household assets. However, both studies use a much less robust methodology and make little attempt to control for selection bias.

#### **4.5.5 Effect of participation in VSLAs on decision making on expenditures towards food purchase.**

The respondents were able to indicate their opinion on the effect of participation in VSLAs on decision making on expenditures towards food purchase, the results were as shown in table 4.19.

*Table 4.19: Effect of participation in VSLAs on decision making on expenditures towards food purchase*

	<b>Frequency</b>	<b>Percent</b>
I agree	33	47.1
I strongly agree	28	40.0
I disagree	8	11.4
I strongly disagree	1	1.4
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if their participation in the VSLAs had an effect on decision making towards food purchase, 47.1% of the respondents agreed, 40% strongly agreed, 11.4% disagreed while 1.4% strongly disagreed. Cumulatively, 87.1% agreed. This is in agreement with the

findings of Dean&Chris (2012) for a study done in Uganda and Malawi, where women expressed increased influence over household decisions as well as more frequent engagement with others in their communities. This is an indication that women were having more voice on food expenditures at the household because they are able to borrow money from the VSLAs hence able to decide on what, how much, and when to buy. This has notably enhanced household food security.

#### **4.5.6 Significant areas in which VSLA has enhanced my decision making for food accessibility.**

The respondents indicated the significant area in which VSLAs has enhanced their decision making for food accessibility, the results were as shown in table 4.20.

*Table 4.20: Areas VSLAs has enhanced decision making for food accessibility*

	<b>Frequency</b>	<b>Percent</b>
Deciding when to buy	14	20.0
Deciding what to buy	18	25.7
Deciding how much to buy	25	35.7
Deciding on how much to spend	4	5.7
N/A	9	12.9
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked to mention the significant areas in which their participation in VSLAs had enhanced their decision making ability for food accessibility, majority of the respondents at 35% mentioned deciding on how much food to buy, furthermore 25.7% of the respondents mentioned deciding on what to buy, 20.0% mentioned deciding when to buy, while a minority at 5.7% of the respondents mentioned deciding on how much food to buy. This

finding conforms to the views of Helmore (2009) who noted that participation of women in microfinance empowers by enhance their decision making ability. From the findings of this study, VSLA has considerably empowered women to be able to be a critical component of decision making so far as food accessibility at the household level is concerned.VSLAs have therefore enhanced food security at the household level.

**4.5.7 VSLAs have enhanced my ability to provide for my family according to their nutritional needs.**

The respondents were able to indicate their opinion on whether VSLAs have enhanced their ability to provide for their families according to their nutritional needs; the results were as shown in table 4.21.

*Table 4.21: VSLAs enhancing ability to provide for family according to nutritional needs*

	<b>Frequency</b>	<b>Percent</b>
I agree	35	50.0
I strongly agree	26	37.1
I disagree	8	11.4
I strongly disagree	1	1.4
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked to give their opinions on whether VSLAs have enhanced their ability to provide for their family according to their nutritional needs, majority of the respondents at 50% agreed, 37.1% of the respondents strongly agreed. On the other hand, 11.4% of the respondents disagreed while 1.4% of the respondents strongly disagreed. Again, this finding conforms to the views of Helmore (2009) that participation of women in microfinance

empowers by enhance their decision making ability. Cumulatively, 87.1% of the respondents agreed. It can therefore be inferred that VSLAs have enabled member to provide food to their household members according to their nutritional needs hence strengthening food security.

#### 4.5.8 Affordability of food since joining of VSLAs

The respondents were required to indicate if foodstuff had become affordable as a result of joining VSLAs; the results are as shown in table 4.22.

*Table 4.22: Affordability of food since the joining of VSLAs*

	Frequency	Percent
Yes	57	81.4
No	13	18.6
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked to give their opinion on the affordability of food since they joined VSLAs, majority of the respondents at 81.4% stated yes. On the contrary, 18.6% stated no. The food items have become affordable for majority of the VSLAs members because of the credit facilities which some often use to purchase food. Some members have also used the credit to venture into income generating activities which brings returns easing their previous financial constraints. The savings also act as reserves and given to members during the annual or biannual share-outs. The savings smooth out the food expenditures for the members making the food affordable. This finding closely relates to the result of an evaluation of VSLAs in Bondo by CARE (2011) that 87.9% of the interviewed GS&L group members reported that wages and income improved, it was also implied that this made food more affordable.



## 4.6 Influence of VSLAs in empowering women towards nutrition and utilization of food

In this section, the study assessed how VSLAs influences knowledge of food and nutritional health, ability for food variety at the household, ability to secure clean water and ability to for good and safe food storage. The study further links the variables to women's ability to ensure food security at the household.

### 4.6.1 Participation in the VSLAs enhancing food variety taken at the household

The respondents were required to indicate participation in the VSLAs has enhanced food variety taken in their household, the results are as shown in table 4.23

*Table 4.23: VSLAs enhancing food variety at the household*

	<b>Frequency</b>	<b>Percent</b>
Yes	58	82.9
No	12	17.1
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if VSLAs had enhanced the food varieties taken at their households, majority of the respondents at 82.9% said yes while only 17.1 % said no. It can therefore be deduced from these findings that VSLA has enhanced the women's ability to provide food variety at the household. The provision of food variety is one of the indicators that a household is food secure. Explaining their answers, the respondents indicated that VSLAs had increased their incomes enabling them to purchase various food items achieving balanced diet at their households. Some respondents also mentioned that VSLAs had enabled them to buy seed varieties for planting and as a result they were able to produce ample food varieties at the

household for family consumption. This findings conforms with the result of a study on the Zambuko Trust in Zimbabwe by programme (Barnes et al. 2001b) that access to credit had a positive impact on consumption of nutritious food (meat, chicken or fish, milk) in extremely poor client households compared to non-clients and those who had left the programme.

#### **4.6.2 Knowledge gain on food and nutritional health from trainings and interactions with members**

The respondents were able to indicate whether through VSLA trainings and interaction with members they have gained knowledge of food and nutritional health, the results were as shown in table 4.24.

*Table 4.24: Knowledge gain food and nutritional health from training and interaction on with members.*

	<b>Frequency</b>	<b>Percent</b>
I agree	40	57.1
I strongly agree	17	24.3
I disagree	13	18.6
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if through VSLA trainings and interaction with the members have helped them to gain knowledge of food and nutritional health, majority at 57.1% agreed, 24.3% strongly agreed ,on the other hand ,18% disagreed. Cumulatively, 81.4% gave an approval that they had gained knowledge of food and nutritional health. The women explained that they were taught on how to grow and utilize the highly nutritional local food crops for better family health. This finding confers with CARE (2010) results for an evaluation of VSLA

project in Bondo District that 80.8% of the interviewed GS&L group members reported improved access to specialized training enabling them to improve their overall welfare.

#### 4.6.3 Ability to better make decisions on the nutritional variety at the household

The respondents were able to indicate whether their ability to make decisions on nutritional variety at the household was better before or after joining VSLAs, the results were as shown in table 4.25.

*Table 4.25: Ability to better make decisions on nutritional variety at the household*

	<b>Frequency</b>	<b>Percent</b>
Before joining VSLAs	3	4.3
After joining VSLAs	54	77.1
No significant difference	13	18.6
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked about their ability to make decisions on nutritional variety at the household, majority of the respondents at 77.1% mentioned that their decision making ability had gotten better after they had joined VSLAs, 18.6% of the respondents mentioned that their decision ability on nutritional variety had not changed significantly since they joined VSLAs, 4.3% of the respondents mentioned that they better made decisions on nutritional variety before joining VSLAs.

#### 4.6.4 Ability to better make decisions on the food safety at the household

The respondents were able to indicate whether their ability to make decisions on food safety at the household was better before or after joining VSLAs, the results were as shown in table 4.26.

*Table 4.26: Ability to better make decisions on food safety at the household*

	<b>Frequency</b>	<b>Percent</b>
Before joining VSLAs	1	1.4
After joining VSLAs	43	61.4
No significant difference	26	37.1
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked about their ability to make decisions on the food safety at the household, majority of the respondents at 61.4% mentioned that their decision making ability became better after they joined VSLAs. Out of the respondents 37.1%, mentioned that they have not noted any significant difference on their ability to make decisions on food safety while 1.4% of the respondents mentioned that their decision making ability on food safety was better before they joined the VSLAs.

#### 4.6.5 Ability to better make decisions on the food quality at the household

The respondents were able to indicate whether their ability to make decisions on food quality at the household was better before or after joining VSLAs, the results were as shown in table 4.27.

*Table 4.27: Ability to better make decisions on the food quality at the household*

	<b>Frequency</b>	<b>Percent</b>
Before joining VSLA	3	4.3
After joining VSLA	48	68.6
No significant difference	19	27.1
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked about their ability make decisions on food quality at the household, 68.6% of the respondents mentioned that this ability has been enhanced since they joined the VSLAs, 27.1% mentioned that there was no significant difference, 4.3% of the respondent mentioned that they were better able making decisions on food quality at the household before they joined VSLAs.

#### **4.6.6 Ability to better make decisions on clean water and sanitation at the household**

The respondents were able to indicate whether their ability to make decisions on clean water and sanitation at the household was better before or after joining VSLAs, the results were as shown in table 4.28.

*Table 4.28: Ability to better make decisions on clean water and sanitation at the household*

	Frequency	Percent
Before joining VSLAs	4	5.7
After joining VSLAs	39	55.7
No significance difference	27	38.6

<b>Total</b>	<b>70</b>	<b>100.0</b>
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Asked about their ability to make decisions on the food quality at the household, majority of the respondents at 55.7% indicated that their decision making ability towards clean water and sanitation have been enhanced since they joined VSLA.38.6% of the respondents mentioned that they had not experienced any significant change in their ability to make decisions on clean water and sanitation at the household. A minority at 5.7% of the respondents mentioned that their decision making ability was better before they joined VSLA.

#### **4.6.7 Participation in VSLAs enhancing financial ability towards nutritional variety.**

The respondents were able to indicate whether their participation in VSLAs had enhanced their financial ability towards nutritional variety, the results were as shown in table 4.29.

*Table 4.29: Participation in VSLAs enhancing financial ability towards nutritional variety*

	<b>Frequency</b>	<b>Percent</b>
Yes	59	84.3
No	11	15.7
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if participation in the VSLA has enhanced their financial ability towards nutritional variety, majority of the respondents at 84.3% indicated yes, 15.7% indicated no. This is supported in part by data from Malawi, which show that access to credit of adult female household members improves 0–6 year old girls’ (but not boys’) long-term nutrition as measured by height for age (Shimamura and Lastarria-Cornhiel 2009).This is an

indication that members of the VSLA have been able to use the credit facility to obtain money to buy variety of food items for their household. Since nutritional variety is a critical component of food security, it can be deduced that VSLA has empowered women towards household food security.

#### 4.6.8 Participation in VSLAs enhancing financial ability towards food safety

The respondents were able to indicate whether their participation in VSLAs had enhanced their financial ability towards food safety, the results were as shown in table 4.30.

*Table 4.30: Effect of participation in VSLAs on financial ability towards food security*

	<b>Frequency</b>	<b>Percent</b>
Yes	50	71.4
No	20	28.6
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if their participation in the VSLAs had enhanced their ability towards food safety, majority of the respondents at 71.4% indicated yes, while 28.6% indicated no. This finding greatly departs from Dean & Chris (2012) who found that in Ghana participation on VSLA had no impact on food security. It can be deduced that VSLAs has empowered its members to ensure food safety hence food security at the household.

#### 4.6.9 Participation in VSLAs enhancing financial ability towards food quality

The respondents were able to indicate whether their participation in VSLAs had enhanced their financial ability towards food quality, the results were as shown in table 4.31.

*Table 4.31: Participation in VSLAs enhancing financial ability towards food quality*

	<b>Frequency</b>	<b>Percent</b>
Yes	53	75.7
No	17	24.3
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if their participation in the VSLAs had enhanced their ability to ensure food quality at the household, majority of the respondents at 75.7% indicated yes, while 24.3% indicated no. The findings shows that majority of the women in the VSLA attributes their ability ensure food quality at the households to their participation in the association. This is in agreement with evidence from Tanzania (Brannen 2010) and Rwanda (Lacalle et al. 2008) which suggest that participation in the Village Savings and Credit Association and the Red Cross credit programme respectively is associated with a significant positive increase in meal quality as a result of enhanced financial ability.



#### **4.6.10 Participation in VSLAs enhancing financial ability towards clean water and sanitation.**

The respondents were able to indicate whether their participation in VSLAs had enhanced their financial ability towards clean water and sanitation, the results were as shown in table 4.32.

*Table 4.32: Participation in the VSLAs enhancing financial ability towards clean water and sanitation*

	<b>Frequency</b>	<b>Percent</b>
Yes	49	70.0
No	21	30.0
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if their participation in the VSLAs had enhanced their financial ability towards clean water and sanitation at the household, majority of the respondents at 70% indicated yes,30% of the respondents said no. This finding support the view of Holme,(2009) that because of microfinance, the poor can invest in income-generating activities that increase their economic security; and, increasingly, provide sanitation and clean drinking water for their homes. It can be deduced that VSLAs have enabled the members to obtain clean water and ensure sanitation in their homes. Some members had bought water containers for safe keeping of harvested water, they have also been able to purchase chemicals to treat the water making it clean and safe for consumption.

**4.6.11 Participation in VSLAs enhancing food portion and quality for every member of my household.**

The respondents were able to indicate whether their participation in VSLAs had enhanced their food portion and quality for every member of their household, the results was as shown in table 4.33.

*Table 4.33: Participation in VSLAs enhancing food portion and quality for every member of the household*

	<b>Frequency</b>	<b>Percent</b>
To a small extent	27	38.6
To a large extent	35	50.0
To no extent/has not enhanced	8	11.4
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if their participation in the VSLAs had enhanced the food portion and quality for every member of their household, 38.6% of the respondents answered to a small extent, 50% of the respondents said to a large extent while 11.4% of the respondents said to no extent. Cumulatively, 88.6% of the respondents had their food portion and quality enhanced, this confirms the findings by Corner (2010), that participation in VSLAs had a substantial positive impact on meal quality. It can therefore be deduced that participation in VSLAs have empowered women towards household food security in the household.

#### 4.6.12 Comparison on food consumption quantities before and after joining VSLAs

The respondents were able to compare their food consumption quantities before and after joining VSLAs, the results were as shown in table 4.34.

*Table 4.34: Comparison on food consumption quantities before and after joining VSLAs*

Variety of food consumed	More		Same		Less	
	frequency	Percent	frequency	Percent	frequency	Percent
<b>Tea</b>	46	65.7	24	34.3	0	0
<b>Meat</b>	42	60.0	26	37.1	2	2.9
<b>Vegetables</b>	41	58.6	29	41.4	0	0
<b>Fruits</b>	46	65.7	24	34.3	0	0
<b>Milk/dairy</b>	47	67.1	22	31.4	1	1.4
<b>Cassava</b>	40	57.1	29	41.4	1	1.4
<b>Maize</b>	42	60.0	26	37.1	2	2.9
<b>Beans</b>	47	67.1	23	32.9	0	0
<b>Yams</b>	36	51.4	33	47.1	1	1.4
<b>Eggs</b>	45	64.3	24	34.3	1	1.4
<b>Sugar/Salt</b>	41	58.6	29	41.4	0	0
<b>Millet</b>	40	57.1	30	42.9	0	0
<b>Sweet potatoes</b>	39	55.7	31	44.3	0	0
<b>Groundnuts</b>	48	68.6	21	30	1	1.4
<b>Rice</b>	43	61.4	26	37.1	1	1.4

<b>Averages</b>	<b>42.86</b>	<b>61.22</b>	<b>26.46</b>	<b>37.8</b>	<b>0.66</b>	<b>0.97</b>
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Asked if they consumed the above listed foods in greater, similar or lesser amounts now than before they joined the VSLAs, on average majority of the respondents at 61.22% mentioned that they are consuming greater amounts. An average of 37.8% of the respondents mentioned that they that they are consuming the same amounts .Averagely, 0.97% of the respondent mentioned that they are consuming lesser quantities of the food. These findings differed with those of a study by Conner (2010) in Tanzania which revealed that quantitative data suggests that participation in VSLAs have little effect on meal quantity. This confirms otherwise and this is an indication that food security has been enhanced at the households where the members of the VSLAs come from.

#### **4.7 Influence of VSLAs in enhancing risk management and resilience for food stability.**

This section of the study sought to assess the influence of VSLAs in empowering women towards risk management and resilience for food stability. Two aspects risk management and resilience for food stability were assessed. These were: Ability of household to cope with and withstand stress and cushion from financial, environmental and market shocks.

#### **4.7.1 VSLAs offering cushion from the financial risk at the household and enhancing nutritional stability.**

The respondents were able to indicate if VSLAs had offered them cushion from the financial risks at the household and enhancing nutritional stability, the results were as shown in table 4.35.

*Table 4.35: VSLAs offering cushion from the financial risks at the household and enhancing nutritional stability.*

	<b>Frequency</b>	<b>Percent</b>
Yes	60	85.7
No	10	14.3
<b>Total</b>	<b>70</b>	<b>100.0</b>

Majority of the respondents at 85.7% acknowledged that VSLAs had cushioned them from the financial risks at the household hence enhancing their nutritional stability, on the other hand 14.3 % of the respondents had not received cushioning from financial risk despite their participation in the VSLAs. This finding concurs with the view of Hugh (2005), that social fund can incorporate a number of purposes: emergency assistance, educational costs for orphans, funeral expenses etc. Social Fund is set up to cover expenses that cannot be exactly predicted. Explaining how VSLAs had cushioned them from financial risk, the respondents said that despite low returns from business or agribusiness resulting to reduced incomes, they were able to borrow money from their VSLAs to buy adequate food for the household members. The borrowing, they said has enhanced their nutritional stability.

#### 4.7.2 VSLAs offering members’ resilience in terms of nutritional security in cases of drought and crop failure.

The respondents were able to indicate if credit facility in VSLAs had offered members’ resilience in terms of nutritional security in cases of drought and crop failure, the results were as shown in table 4.36.

*Table 4.36: VSLAs offering members resilience in term of nutritional security in cases of drought and crop failure*

	<b>Frequency</b>	<b>Percent</b>
Yes	52	74.3
No	18	25.7
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if the credit facility in the VSLAs had enabled members to be resilient in terms of nutritional security in cases of drought and crop failure, majority of the respondents at 74.3% indicated yes while 25.7% indicated no. This finding seriously departs from that of Gulvan (2012), for a study in Bangladesh which he established that floods have adverse effect on the savings patterns and offers little resilience in terms of nutritional security. Explaining how their resilience in terms of nutritional security had been enhanced in cases of crop failure, the respondents said that they are able to access credit from the VSLAs to buy nutritious food for their household members.

**4.7.3 VSLAs’ social fund has often been used to salvage the unexpected circumstances that compromise their household food security.**

The respondents were able to indicate whether the social fund kitty in the VSLAs have often been used to salvage the unexpected circumstances that compromise their household food security, the results were as shown in table 4.37.

*Table 4.37: VSLAs’ social fund has often been used to salvage the unexpected circumstances that compromise household food security*

	<b>Frequency</b>	<b>Percent</b>
I agree	40	57.1
I strongly agree	21	30.0
I disagree	9	12.9
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if the social fund kitty in the VSLAs has often been used to address unexpected circumstances that compromise their household food security, cumulatively 87.1% agreed while 12.9% disagreed. This greatly departs from Dean and Chris (2012) who find no impact on how VSLA households react to shocks on the duration of the economic recovery. However in Uganda and Malawi, households were more likely to take out a loan from a savings group in response to a shock. It can be deduced from the findings that VSLAs have enhanced household food security of its members since it has addressed unexpected circumstances that compromise their household food security.

#### **4.7.4 Learning (in your VSLAs) how to manage entrepreneurial risks for the IGAS that members engage in.**

The respondents were able to indicate whether they had learnt how to manage entrepreneurial risk for the IGAs that members engage in, the results were as shown in table 4.38.

*Table 4.38: Learning how to manage entrepreneurial risks for the IGAs members engage in*

	<b>Frequency</b>	<b>Percent</b>
Yes	56	80.0
No	14	20.0
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked if they had learnt (in their VSLAs) how to manage entrepreneurial risks for the IGAs that they engage in, majority of the respondents at 80.0% answered yes, while 20.0% answered no. Although this finding agrees with view advanced by Holme, (2009) that VSLA members do receive a year of intensive training from CARE in group dynamics and governance and in money management, it does not lay specific emphasis on risk management. It is evident from the results that most members of VSLAs have skills on how to manage risks for the IGAs that they have and as a result they would attain high returns, either getting more produce from farming activities or having more money to purchase and stockpile foodstuff.



#### 4.7.5 Learning on entrepreneurial risk management enhancing nutritional stability and security at the household.

The respondents were able to indicate whether learning on entrepreneurial risk management enhanced their nutritional stability and security at the household, the results was as shown in table 4.39.

*Table 4.39: Learning on entrepreneurial risk management enhancing nutritional stability and security at the household*

	<b>Frequency</b>	<b>Percent</b>
Yes	49	70.0
No	7	10.0
N/A	14	20.0
<b>Total</b>	<b>70</b>	<b>100.0</b>

Asked to indicate if their ability to manage entrepreneurial risks for the IGAs had enhanced their nutritional stability and security at the household, majority of the respondents at 70% indicated that indeed it had while 10% indicated it had not. These finding concurs with Dean & Chris (2012) that participating women in Uganda are more likely to own business and have higher profits, this was because of the risk management skills. However, for the study in Uganda the women's business ability and higher profits were not linked to nutritional stability and security at the household. It can be deduced that VSLAs have enhanced nutritional stability and security at the household by enabling members to acquire entrepreneurial skills.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of the findings of the main study, conclusions recommendations arrived at and contribution to knowledge base. It also gives suggestions for further studies.

#### **5.2 Summary of Findings**

The main sample comprised 72 respondents, 70 respondents were reached and their questionnaires completed for analysis. This gave a response rate of 97.2%. Among the 12 respondents targeted for the Key Informant Interviews (KIIs), 11 were reached and data sourced from them for analysis. This represented a response rate of 91.67%.

Out of the respondents interviewed, 35.7% were women between 38 and 48 years of age. 30% of the respondents were women between 28 and 38 years old, 17.1% of the respondents were women of over 48 years old while another 17.1% were women between 18 and 28 years. Among the respondents, 62.9% indicated that they were married and living with their husbands, 35.7% of the women interviewed indicated that they were widowed and therefore the duty of ensuring food security solely rest on them, 1.4% of the respondents indicated that they were divorced at the time of the interview.

Majority of the women respondents at 51.4% had obtained secondary school level of education, 38.6% of the respondents had obtained primary school education, and 5.7% of the

respondents had college education, while only 4.3% of the respondents had never attended school. According to the findings, majority of the respondents at 42.9% were in small business, 32.9% of the respondents did farming, 14.3% were in formal employment, and 10% were housewife. A large proportion of the respondents at 45.7% had 3 to 6 household members, 35% had 6 to 9 household members, 11.4% of the respondents had less than 3 members of the household and a minority at 7.1% indicated had over 9 household members

The study established that credit has enhanced their ability of 78.6% of the respondents to produce more food, while the ability of 21.4% of the respondents had not been enhanced. VSLAs had enabled food production of 30% of the respondents to improve by less than twofold, food production for 25.7% of the respondents had increased two folds, food production of 12.9% of the respondents improved more than threefold and that of 10% of the respondent had improved threefold.

VSLAs had enabled 84.3% members to stockpile foodstuff in their households through purchase while 15.7% of the members had not been enabled to stockpile foodstuff. Majority of the respondents at 34.3% indicated that their stockpiles had improved twofold, 25.7% of the respondents indicated that their stockpiles had improved but by less than twofold, 15.7% of the respondents indicated that their stockpiles had improved threefold, only 8.6% of the respondents indicated that their food stockpiles had improved by more than threefold.

The study established that VSLAs had enabled 78.6% of the respondents to purchase farm inputs, 21.4% of the respondents had not been enabled to purchase farm inputs. On the other hand, majority of the respondents at 58.6% had been enabled to purchase farm

implements, 41.4% of the respondents had not been enabled to purchase farm implements. The ability to buy farm inputs and implements as a result of participation in the VSLAs is likely to translate into better crop harvest hence more food secure households.

The study findings showed that participation in the VSLAs had enabled 80% of the respondents to engage more in decisions relating to food production, conversely 20% had not participated in decision making relating to food production as a result of their participation in VSLAs. On the areas where they have significantly contributed in decision making towards food production, majority of the respondents at 38.6% mentioned deciding what crops to plant.

VSLAs had enhanced the ability of 88.6% of the respondents to purchase foodstuff. Among the respondents who before joining VSLAs had a purchasing ability of less than Ksh.100, after joining VSLAs 35.7% remained at the same expenditure level, another 35.7% respondents moved to Ksh.300-Ksh.400 expenditure level, 14.3% moved to Ksh.100-Ksh.200 expenditure level while another 14.3% respondents moved to Ksh.300-Ksh.400 expenditure levels. Among the respondents who before joining VSLA had a purchasing ability of Ksh.100-Ksh.200, after joining VSLAs, majority of them at 53.5% to moved Ksh.300-Ksh.400 food expenditure levels, 34.9% moved to Ksh.200-Ksh.300, 9.3% remained at the same food expenditure level of Ksh.100-Ksh.200, while only 2.3% respondent moved to over Ksh.400 food expenditure levels. Before joining VSLAs, there were a total of 3 respondents who were at the expenditure level of over Ksh.300, after joining VSLAs, there were 41 respondents who had moved to this expenditure bracket, representing an increase of 92.7%.

Participation in the VSLAs had an effect on decision making towards food purchase .Cumulatively, 87.1% of the respondents had been influenced to engage more in decision making towards food purchase. A large proportion 35% of the respondents engage more on deciding how much food to buy, 25.7% of the respondents engage more on deciding on what to buy, 20.0% of the respondents engage more in deciding when to buy, while 5.7% of the respondents engage more in deciding on how much food to buy.

The study established that VSLAs have enhanced the ability of its members to provide for their family according to their nutritional needs, majority of the respondents at 50% agreed, 37.1% of the respondents strongly agreed, 11.4% of the respondents disagreed while 1.4% of the respondents strongly disagreed. Engagement in VSLAs had made foodstuff more affordability for 81.4% of the respondents.

VSLAs have enhanced the food varieties taken at the households of 82.9% of the respondents. They explained that VSLAs had increased their incomes enabling them to purchase various food items making their meals balanced diet.VSLAs trainings and interaction with the members had helped them to gain more knowledge of food and nutritional health, majority at 57.1% agreed, 24.3% strongly agreed to this. Majority of the respondents at 77.1% mentioned that their decision making ability towards nutritional variety had gotten better after they had joined VSLAs, 18.6% of the respondents mentioned that their decision ability on nutritional variety had not changed significantly since they joined VSLAs.Out of the respondents 61.4% mentioned that their decision making ability towards food safety became better after they joined VSLAs, 68.6% of the respondents mentioned that decision making ability towards food quality has been enhanced since their joined the VSLAs.

The study established that participation in the VSLA has enhanced their financial ability of 84.3% of the respondents towards nutritional variety. Through their participation in the VSLAs 71.4% of the respondents had their financial ability towards food safety enhanced. Out of the respondents, 75.7% had their financial ability towards food quality enhanced. Participation in the VSLAs enhanced financial ability of 70% of the respondents towards clean water and sanitation at the household.

VSLA has enhanced the food portion and quality for every member of their household to a small extent for 38.6% of the respondents, to a large extent for 50% of the respondents while 11.4% of the respondents had food portion and quality of their household members remain the same. Asked if they consumed the above listed foods in greater, similar or lesser amounts now than before they joined the VSLAs, on average majority of the respondents at 61.22% mentioned that they are consuming greater amounts, on average 37.8% of the respondents mentioned that they that they are consuming the same amounts while an average of 0.97% of the respondent mentioned that they are consuming lesser quantities of the food.

Majority of the respondents at 85.7% agreed that VSLAs had cushioned them from the financial risks at the household hence enhancing their nutritional stability, 14.3% of the respondents had not received cushioning from financial risk despite their participation in the VSLAs. Explaining how VSLAs had cushioned them from financial risk, the respondents said that despite low returns from business or farming resulting to reduced incomes, they were able to borrow money from their VSLAs to buy adequate food for the household members. For 87.1% of the respondents the social fund kitty in the VSLAs has often been used to address unexpected circumstances that compromise their household food security.

The study established that 80.0% of the respondents had learnt (in their VSLAs) how to manage entrepreneurial risks for the IGAs that they engage in. Majority of the respondents at 70% indicated that their ability to manage entrepreneurial risks for the IGAs had enhanced their nutritional stability and security at the household.

### **5.3 Conclusion**

Based on the findings of the study as summarized above, it can be concluded the VSLA methodology is a worthy initiative as it empowers women towards household food security in Bondo district. The study established that more household become food secure because of the participation of women from those households in the VSLAs.

The first objective was to investigate how savings and loans associations empower women towards enhancing food availability for households in Bondo District. From the findings, it was noted that VSLAs had empowered women towards enhancing food availability at the household through increased production, purchase, and enhanced related decision making. For example, majority of the respondents to produce more food. Moreover, majority of the respondents had improved their stockpile for foodstuff in their households through purchase

The second objective was to assess how savings and loans associations empower women towards enhancing food accessibility for households in Bondo District. The findings established that VSLAs had empowered women towards enhancing food accessibility through improving their incomes, augmenting their food purchasing power, enabling them to take into cognizance the varying needs of household members and giving them voice to engage more actively in decision making pertaining to food accessibility. VSLAs had enhanced the ability of a large of the respondents to purchase foodstuff. Participation in the

VSLAs has enhanced women's ability to provide for their family according to their nutritional needs. Engagement in VSLAs had made foodstuff more affordable for the respondents since they joined VSLAs.

The third objective was to analyze how savings and loans association empower women towards enhancing nutrition and utilization of food for households in Bondo District. The enhanced food varieties taken at the households can be attributed to the participation of the women in VSLAs. VSLA trainings and interaction with the other members had enabled majority of the respondents to gain knowledge of food and nutritional health. Women had been empowered to engage more in decision making. Nonetheless, their ability towards nutritional variety got better after they joined VSLAs. Participation in the VSLAs enhanced the financial ability of majority of the respondents towards nutritional variety as well as enhancing the food portion and quality for every member of their.

The fourth objective was to examine how savings and loans associations empower women towards enhancing risk management and resilience for households in Bondo District. The study found out that VSLAs have empowered women towards risk management and resilience at the households through cushioning for financial risks and shocks, risk management literacy and credit and savings which enable members to bounce back to original position. This is corroborated by the findings that majority of the respondents agreed that VSLAs had cushioned them from the financial risks at the household hence enhancing their nutritional stability. Explaining how VSLAs had cushioned them from financial risk, the respondents said that despite low returns from business or farming resulting to reduced incomes, they were able to lend money from their VSLAs to buy adequate food for the household members. Moreover, participation in VSLAs enabled



the women to address unexpected circumstances that compromise their household food security by among other things building their capacity to manage entrepreneurial risk for IGAs. As a result, nutritional stability and security at the household has been enhanced.

#### **5.4 Recommendations**

Based on the finding of the study, the researcher wishes to make the following recommendations;

There is need for Plan international and CARE-Kenya to recognize that poor people need a range of financial services not just savings and credit, given that their incomes are 'low, unpredictable and irregular'. They need to enhance linkages of the established VSLAs to financial and agricultural institutions.

The government should invest in time-saving infrastructure, such as basic energy and water infrastructure or the organized provision of childcare services, to reduce the time and effort women dedicate to providing household services so women can have more productive hours.

The government should enhance women's ability to access input and output markets. This can be accomplished by investing in infrastructure and transportation services that enable women to travel safely, in a reasonably priced and culturally appropriate way; sharpening their negotiating skills; and by facilitating women's participation in associations or cooperatives.

To maximize that positive effect that VSLAs is having in empowering women towards household food and nutritional security, Plan International and CARE Kenya should make efforts to increase women's ability to generate and control income.

The government should enhance women's ability to fulfill their roles as food producers by improving women's access to resources, technology and information. More efforts should be put to safeguard women's right to land ownership.

### 5.5 Contribution to Knowledge base

Objective of the study	Contribution to the body of knowledge
<p>1 To investigate how savings and loans associations empower women towards enhancing food availability for households in Bondo District.</p>	<p>It was found out that through credit facility, VSLAs have enabled members to produce more food and stockpile more food through purchase. It was established that production of more food was linked to the ability of members to purchase more farm inputs and implements. Women's participation in decision making relating to food production was also found to enhance food availability at the household.</p>
<p>2 To assess how savings and loans associations empower women towards enhancing food accessibility for households in Bondo District.</p>	<p>It was established that VSLAs enhanced the ability to ensure food accessibility by improving the purchasing power of the members. They deemed food more affordable resulting into increased purchase according to household needs. It was also found out that the ability to make decisions relating to food accessibility was boosted hence making food more accessible.</p>

- 3 To analyze how savings and loans association empower women towards enhancing nutrition and utilization of food for households in Bondo District. Participation in VSLAs enhanced nutritional variety, food safety, food quality and access to clean water and sanitation in the households. This was through: strengthening the financial ability, imparting knowledge on nutritional health and enabling the women to engage more in decision making relating to nutrition and food utilization.
  
- 4 To examine how savings and loans associations empower women towards enhancing risk management and resilience for households in Bondo District. VSLAs enhanced risk management and resilience at the household. This through: cushioning from financial risks, offering sort of insurance on crop failure, taking care of unexpected circumstances. Members gained knowledge of risk management in IGAs hence more returns.

## **5.6 Suggestions for further research**

The researcher suggests that;

- i. A study should be conducted on the influence of VSLA in empowering men towards household economic and social stability in Bondo district.
  
- ii. A study should be conducted on the effect of VSLA on the retention and transition of secondary school girls in Bondo district.

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**APPENDICES**

**APPENDIX I: LETTER OF TRANSMITTAL**

UNIVERSITY OF NAIROBI,  
P.O. BOX 30197-00100,  
NAIROBI, KENYA.  
07<sup>TH</sup> /05/2013.

TO.....

Dear Sir/Madam,

RE: INFLUENCE OF VILLAGE SAVINGS AND LOANS ASSOCIATION IN  
EMPOWERING WOMEN TOWARDS HOUSEHOLD FOOD SECURITY

I am a student of the University of Nairobi undertaking Master of Arts degree in project planning and management. I am doing a research on Influence of Village Savings and Loans Association in empowering women towards household food security.

It is my humble request that you assist me by filling the questionnaire and responding to the interview questions as honestly and accurately as possible. Be assured that your identity and responses were treated with **UTMOST CONFIDENTIALITY** and shall only be used for the purpose of this study. I take this opportunity to thank you in advance for your willingness to participate in this important exercise.

Yours Faithfully,

LEON HONGO AWITI

## **APPENDIX II: KEY INFORMANT INTERVIEW GUIDE.**

Hallo, my name is **Leon Awiti** .I am a student from The University of Nairobi. I am conducting a survey on Influence of Savings and Loans Associations in empowering women towards ensuring household food security. Despite the recording of the interview responses, the information you give will be kept strictly confidential and will not be disclosed to anyone else. You are under no obligation to answer any question that you feel uncomfortable to answer and I would urge that you provide as honest answers as possible:

1. How does nutrition and food status of households participating in VSLA compare to those that don't participate in Bondo District?
2. Compare the decision making role with regard to household food security for women who participate in VSLA and those who don't.
3. How has VSLAs empowered women in ensuring food availability in the Bondo District?
4. Explain how VSLAs have empowered women towards food accessibility in Bondo District?
5. Elaborate how the participation of women has informed nutrition and food utilization at the households in Bondo District.
6. What role has GSLA played towards cushioning women and ensuring they are resilient to adverse conditions that seek to compromise their responsibility of ensuring household food security?

### APPENDIX III: CAPACITY ASSESSMENT GUIDE.

Hallo, my name is **Leon Awiti** .I am a student from The University of Nairobi. I am conducting a survey on Influence of Savings and Loans Associations in empowering women towards ensuring household food security. Despite the recording of the interview responses, the information you give will be kept strictly confidential and will not be disclosed to anyone else. You are under no obligation to answer any question that you feel uncomfortable to answer and I would urge that you provide as honest answers as possible:

1. When did you start your VSLA?
2. What was the reason for starting the Village Savings and Loans Association?
3. How many were/are you in the VSLA?

Gender	At start	Currently
Men		
Women		
Total		

4. Do all group members have training on VSLA Methodology?
5. How often do you meet for VSLA transactions?
6. What are the transaction volumes for the past one year?

Transactions	Volumes/Amount	Monthly Average
Savings		

Loan		
Social funds		

7. In your VSLA, for what reason do people take loans?
8. What is the average attendance per meeting?(give as a fraction of the total)
9. How often do you hold elections for the group?
10. Do your leaders play their roles effectively?
11. Do you have the following in your group?
  - a) Safe Box
  - b) Pass books
  - c) Ledger book
12. Is your constitutional operational?
13. What joint Income Generating Activities do you have as a group?
14. What are the group benefits from the VSLAs?
15. What are the individual benefits from the VSLAs?
16. How have you group contributed towards the following aspects of enhancing food security at the household?
  - a) Promoting food availability?
  - b) Promoting food accessibility?

c) Promoting nutrition and Utilization?

d) Promoting resilience to adverse conditions?

**APPENDIX IV: INDIVIDUAL QUESTIONNAIRE.**

Hallo, my name is **Leon Awiti** .I am a student from The University of Nairobi. I am conducting a survey on Village Savings and Loans Associations and their influence in empowering women towards ensuring household food security. Despite the recording of the interview responses, the information you give will be kept strictly confidential and will not be disclosed to anyone else. You are under no obligation to answer any question that you feel uncomfortable to answer and I would urge that you provide as honest answers as possible.

**Questionnaire ID.....Date of Interview.....**

A.	DEMOGRAPHIC INFORMATION	
1.	What is your name(Optional)	.....
2.	What is the name of your savings and Loans Association?	.....
3.	What is your age in completed years?	a) Under 18 b) 18-28 c) 28-38 d) 38-48 e) Over 48
4.	What is your marital status?	a) Single b) Married c) Divorced d) Widowed
5.	What is your highest level of education?	a) Never attended school b) Primary c) Secondary d) University/college
6.	What is your occupation?	a) Farming b) Small business c) Formal employment d) Housewife
7.	How many members compose your household?	a) Less than 3 b) 3-6

		c) 6-9 d) Over 9.	
<b>B.</b>	<b>INFLUENCE OF VSLA IN ENHANCING FOOD AVAILABILITY</b>		
1.	Has credit enhanced your ability to produce more food?	a) Yes b) No	
2.	If Yes in 1 above by how much has your production improved?	a) Less than twofold b) Twofold c) Threefold d) More than threefold	
3.	Has savings and loans enabled you to stockpile food stuff in your home through purchase?	a) Yes b) No	
4.	If Yes in 3 above, by how much has your stocks improved?	a) Less than twofold b) Twofold c) Threefold d) More than threefold	
5.	Has village saving and loans enabled you to purchase more farm inputs and implements?		
		Yes	No
	1 Farm Inputs		
	2 Farm Implements		
6.	Participation in the VSLA has enabled me to engage more in decisions relating to food production at the household level.	a) I agree b) I strongly Agree c) I disagree	



		d) I strongly disagree
7.	If agree/strongly agree in one above, which are the areas where you have made significant contribution and decisions at your household?  (Multiple answers allowed)	a) Preparation of the farm b) Deciding what crops to plant c) Deciding on when to plant d) Deciding on the scale/acreage under each crop. e) Purchasing firm inputs
C.	<b>INFLUENCE OF VSLA IN ENHANCING FOOD ACCESSIBILITY</b>	
1.	Has participation in VSLA enhanced your ability to purchase foodstuff?	a) Yes b) No
2.	How significantly has your purchasing ability improved?	
	<b>Membership</b>	<b>Expenditure per day</b>
	Before joining VSLA	
	After joining VSLA	
3.	My participation in VSLA has enabled me to actively make decision on expenditures towards food purchase in the household.	a) I agree b) I strongly Agree c) I disagree d) I strongly disagree
4.	If you agree/strongly agree, in which areas have you have been able to take decisions so far as food accessibility is concerned.	a) Deciding when to buy b) Deciding what to buy c) Deciding how much to buy d) Deciding on how much

		to spend			
5.	Due to the savings and credit facility, my ability to provide food for my family according to the need has been enhanced.	a) I agree b) I strongly Agree c) I disagree d) I strongly disagree			
6.	Has foodstuff become more affordable since you joined the VSLA?	a) Yes b) No			
7.	Explain your answer above .....				
D.	<b>INFLUENCE OF VSLA IN ENHANCING NUTRITION AND UTILIZATION OF FOOD</b>				
1.	Has your participation in the VSLA enhanced the food variety taken in your household?	a) Yes b) No			
2.	If yes in 1,explain your answer .....				
3.	Through the VSLA trainings and the interaction with the members, I have I have gained knowledge of food and nutritional health.	a) I agree b) I strongly Agree c) I disagree d) I strongly disagree			
4.	I am better able to make decisions on the following aspects of nutrition at the household				
		Nutritional variety	Food safety	Food Quality	Clean water and sanitation.

	Before joining VSLA								
	After Joining VSLA								
5.	My participation in the VSLA has enhanced my financial ability to ensure the following:								
		Nutritional variety		Food safety		Food Quality		Clean water and sanitation.	
		Yes	No	Yes	No	Yes	No	Yes	No
	Enhanced financial ability								
6.	My participation in the VSLA has enhanced the food portion and quality for every member of my household.				a) To a small extent b) To a large extent c) To no extent/has not enhanced				
7.	Do you eat the following foods in greater, similar or lesser amounts now than before you joined the VSLA?								
	Variety of food consumed	More		Same		Less			
	Tea								
	Meat								
	Vegetables								
	Fruits								
	Milk/dairy								

	Cassava				
	Maize				
	Beans				
	Yams				
	Eggs				
	Sugar/Salt				
	Millet				
	Sweet potatoes				
	Groundnuts				
	Rice				
<b>E.</b>	<b>INFLUENCE OF VSLA IN ENHANCING RISK MANAGEMENT AND RESILIENCE FOR FOOD STABILITY.</b>				
1.	Has VSLA offered you a cushion from the financial risk at the household enhancing my nutritional stability	a) Yes b) No			
2.	Explain your answer in 1 above .....				
3.	Through the credit in the VSLA, our members are resilient in terms of nutritional security in cases of drought leading to crop failure.	a) Yes b) No			

4.	If YES in Question 3 above explain .....	
5.	The social fund Kitty in the VSLA has often been used to enhance the unexpected circumstances that compromise their household food security.	a) I agree b) I strongly agree c) I disagree d) I strongly disagree
6.	Have you learnt (in your VSLA) how to manage entrepreneurial risks for the Income Generating Activities that you engage in?	a) Yes b) No
7.	If YES in 6 above, has this enhanced your nutritional stability and security at the household?	a) Yes b) No
8.	Explain your answer in 7 above .....	

## APPENDIX V: RESEARCH AUTHORIZATION LETTER

REPUBLIC OF KENYA



### NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673550  
Mobile: 0713 788 787, 0735 404 245  
Fax: 254-020-2213215  
When replying please quote  
secretary@ncst.go.ke

P.O. Box 30623-00100  
NAIROBI-KENYA  
Website: www.ncst.go.ke

Our Ref: **NCST/RCD/14/013/737**

Date: **7th May, 2013**

Leon Hongo Awiti  
University of Nairobi  
P.O BOX 825-40100  
Kisumu

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on **“Influence of savings and loans associations in empowering women towards household food security in Bondo District, Kenya.”** I am pleased to inform you that you have been authorized to undertake research in **Nyanza Province** for a period ending **30<sup>th</sup> June, 2013**.

You are advised to report to **the District Commissioner and the District Education Officer, Bondo District** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.


**DR.M.K.RUGUTT, PhD, HSC**  
**DEPUTY COUNCIL SECRETARY**

Copy to:

The District Commissioner  
The District Education Officer  
Bondo District

*“The National Council for Science and Technology is Committed to the Promotion of Science and Technology for National Development”.*

## APPENDIX VI: RESEARCH PERMIT

  
**REPUBLIC OF KENYA**  
**RESEARCH CLEARANCE PERMIT**

**CONDITIONS**

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed with-out prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

**GPK60553mt10/2011 (CONDITIONS—see back page)**

PAGE 3

PAGE 2

Research Permit No. **NCST/RCD/14/013/737**

Date of issue **7<sup>th</sup> May 2013**

Fee received **KSH.1000**

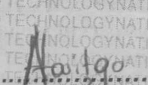
**THIS IS TO CERTIFY THAT:**

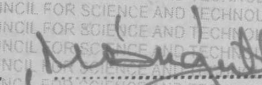
**Prof./Dr./Mr./Mrs./Miss/Institution**  
**Leon Hongo Awiti**  
 Of (Address) **University of Nairobi**  
**P.O BOX 825-40100**  
**KISUMU**

**Has been permitted to conduct research in**

**Location**  
**Bondo District**  
**Nyanza Province**

**On the topic: Influence of savings and loans associations in empowering women towards household food security in Bondo District.**

  
**Applicant's Signature**

  
**Secretary**  
**National Council for Science and Technology**

**For a period ending: 30<sup>th</sup> June 2013**